



Full Schedule

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Friday, November 8, 2024

8:00 AM – 5:00 PM MST
CAMTech IAB Meeting Day 1 (Invitation Only)
Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton

Organizer: Kathryn Grace Crummer – University of Florida
Organizer: Bryony C. Bonning (she/her/hers) – University of Florida

Functions/Events/Meetings

3:00 PM – 6:00 PM MST
Executive Committee Meeting
Location: Sheraton Phoenix Downtown, Presidential Suite

Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District
Organizer: Chris J. Stelzig, CAE – Entomological Society of America

Functions/Events/Meetings Committee Meeting

Saturday, November 9, 2024

7:00 AM – 3:30 PM MST
Governing Board and Certification Corporation Meeting
Location: Sheraton Phoenix Downtown, Paradise Valley, Sheraton

Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District
Organizer: Chris J. Stelzig, CAE – Entomological Society of America

Functions/Events/Meetings Committee Meeting Certification

7:30 AM – 12:00 PM MST
CAMTech IAB Meeting Day 2 (Invitation Only)
Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton

Organizer: Kathryn Grace Crummer – University of Florida
Organizer: Bryony C. Bonning (she/her/hers) – University of Florida

Functions/Events/Meetings

8:00 AM – 5:00 PM MST
Assessing the Conservation Status of U.S. Native Bees

Location: Sheraton Phoenix Downtown, Encanto A

Organizer: Ross C. Winton – Washington Department of Fish and Wildlife
Organizer: Hollis Woodard – University of California
Organizer: Sarina Jepsen – Xerces Society for Invertebrate Conservation
Organizer: Saff Killingsworth – Xerces Society for Invertebrate Conservation

Functions/Events/Meetings

8:00 AM – 6:00 PM MST
Entomological Collections Network Annual Meeting (Day 1)
Location: Sheraton Phoenix Downtown, Phoenix Ballroom DE

Organizer: M. Andrew Johnston – Purdue University

Functions/Events/Meetings

9:00 AM – 5:00 PM MST
Project Directors Meeting: USDA-NIFA's Pollinator Health: Research and Application (Invitation Only)
Location: Sheraton Phoenix Downtown, Camelback

Organizer: Erica Jean Kistner-Thomas – USDA-NIFA
Organizer: Christopher Philips – USDA-NIFA

Functions/Events/Meetings

9:30 AM – 6:00 PM MST
S1070: The Working Group on Improving Microbial Control of Arthropod Pests
Location: Sheraton Phoenix Downtown, Alhamabra, Sheraton

Organizer: Anamika Sharma (she/her/hers) – Florida A&M University
Organizer: Shaohui Wu – The Ohio State University
Organizer: Pasco B. Avery – University of Florida
Organizer: Eric Clifton (he/him/his) – BioWorks Inc.
Organizer: Lorenzo Rossi – University of Florida

Functions/Events/Meetings

2:00 PM – 6:00 PM MST
Registration and Information Center
Location: Phoenix Convention Center, North Ballroom Foyer

General Registration and Information Center

3:00 PM – 6:00 PM MST
Presentation Preview Room (PPR)
Location: Phoenix Convention Center, 121 A

General Presentation Preview Room (PPR)

3:00 PM – 6:00 PM MST

Speaker Practice Room Location: Phoenix Convention Center, 121 B GeneralSpeaker Practice Room
4:00 PM – 4:30 PM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America GeneralModerator Training
4:30 PM – 6:30 PM MST Council for Entomology Department Administrators (CEDA) Annual Meeting Location: Sheraton Phoenix Downtown, Paradise Valley Organizer: David Held – Auburn University Functions/Events/Meetings
5:00 PM – 5:30 PM MST Student and ECP Volunteer Training Location: Phoenix Convention Center, North Ballroom Foyer Organizer: Danielle Tempesta – Entomological Society of America Functions/Events/MeetingsGeneralEarly CareerStudent
7:30 PM – 9:00 PM MST Entomological Collections Network Reception Location: Sheraton Phoenix Downtown, Phoenix Ballroom AB Organizer: M. Andrew Johnston – Purdue University Functions/Events/Meetings
Sunday, November 10, 2024
7:00 AM – 7:30 AM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America GeneralModerator Training
7:00 AM – 5:00 PM MST Presentation Preview Room (PPR) Location: Phoenix Convention Center, 121 A GeneralPresentation Preview Room (PPR)
7:00 AM – 8:00 PM MST

Registration and Information Center Location: Phoenix Convention Center, North Ballroom Foyer GeneralRegistration and Information Center
7:00 AM – 9:00 PM MST Lactation Room Location: Phoenix Convention Center, Green Room General
7:00 AM – 9:00 PM MST Relaxation Retreat Location: Phoenix Convention Center, Patio 3 GeneralRelaxation Retreat
7:00 AM – 10:00 PM MST Coat and Bag Check Location: Phoenix Convention Center, Exhibit Hall Foyer General
8:00 AM – 10:00 AM MST Emerging Professionals in Integrated Pest and Pollinator Management Organizer: Ryan Kuesel, Ph.D. (he/him/his) – Washington State University Organizer: Taylor Reams, Ph.D., M.S. (she/her/hers) – Washington State University Organizer: Ge Zhang, Ph.D., M.S. (he/him/his) – Washington State University Section SymposiumPlant-Insect EcosystemsEarly Career
8:00 AM – 8:04 AM MST Introductory remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Ryan Kuesel, Ph.D. (he/him/his) – Washington State University
8:04 AM – 8:23 AM MST Mitigating effects of monoculture on honey bees with the use of supplemental feedings Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Taylor Reams, Ph.D., M.S. (she/her/hers) – Washington State University Co-Author: Brandon Kingsley Hopkins, Ph.D., M.S. – Washington State University Section SymposiumPlant-Insect EcosystemsEarly Career
8:23 AM – 8:42 AM MST

Effects of phytochemicals and mycobiome from different botanical sources on the health of western honey bee (<i>Apis mellifera</i>)  Location: Phoenix Convention Center, 126 A Presenting Author: Ling-Hsiu Liao – University of Illinois Co-Author: Wen-Yen Wu (he/him/his) – University of Illinois Co-Author: May R. Berenbaum, Ph.D. (she/her/hers) – University of Illinois Section Symposium Plant-Insect Ecosystems Early Career
8:42 AM – 9:01 AM MST Determining how long a viral pathogen remains infectious within honey bee hive products  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Alexandria N. Payne, Ph.D. (she/her/hers) – USDA-ARS Honey Bee Breeding, Genetics, and Physiology Research Unit Co-Author: Lincoln Nian Taylor (he/him/his) – University of Colorado Boulder Co-Author: Madeleine Shapiro – University of Illinois Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Section Symposium Plant-Insect Ecosystems Early Career
9:01 AM – 9:20 AM MST The dual facets of a honey bee gut symbiont <i>Frischella perrara</i>  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Yulin Song, Ph.D. – The University of Texas at Austin Co-Author: Tyler De Jong – University of Texas Co-Author: Jayaditya Maganti – University of Texas Co-Author: J. Elijah Powell – University of Texas Co-Author: Patrick J. Lariviere – University of Texas Co-Author: Nancy A. A. Moran – University of Texas Section Symposium Plant-Insect Ecosystems Early Career
9:20 AM – 9:39 AM MST Multidrug resistance ABC transporter ortholog expression pattern across honey bee castes  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Angela Encerrado, MSc (she/her/hers) – University of California Co-Author: Zeke Spooner (he/him/his) – University of California Co-Author: Sascha Nicklisch, Ph.D., M.S. (he/him/his) – University of California Co-Author: Julia Fine, Ph.D. – USDA-ARS Section Symposium Plant-Insect Ecosystems Early Career
9:39 AM – 9:58 AM MST

Pesticide exposures in honey bees in the northwestern U.S. and a preliminary study of enzymes for pesticide detoxification  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Ge Zhang, Ph.D., M.S. (he/him/his) – Washington State University Co-Author: Ryan Kuesel, Ph.D. (he/him/his) – Washington State University Co-Author: Rae Olsson, Ph.D. (they/them/theirs) – Washington State University Co-Author: Brandon Kingsley Hopkins, Ph.D., M.S. – Washington State University Section Symposium Plant-Insect Ecosystems Early Career
9:58 AM – 10:00 AM MST Closing remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Ryan Kuesel, Ph.D. (he/him/his) – Washington State University
8:00 AM – 10:00 AM MST CAMTech: Empowering Pest Management Options Through a Decade of Public-private Partnership Organizer: Bryony C. Bonning (she/her/hers) – University of Florida Organizer: Subba Reddy Palli (he/him/his) – University of Kentucky Organizer: Daniel Swale – University of Florida Section Symposium Physiology, Biochemistry, and Toxicology
8:00 AM – 8:15 AM MST The Center for Arthropod Management Technologies: An industry perspective  Location: Phoenix Convention Center, 122 B Presenting Author: Dror Avisar – FuturaGene Israel Ltd. Section Symposium Physiology, Biochemistry, and Toxicology
8:15 AM – 8:30 AM MST Midgut surface proteomes of <i>Bemisia tabaci</i> and <i>Myzus persicae</i>, two major hemipteran vectors of plant viruses  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Ruchir Mishra – University of Florida Co-Author: Jaime Jiménez – University of Florida Co-Author: Bryony C. Bonning (she/her/hers) – University of Florida Section Symposium Physiology, Biochemistry, and Toxicology
8:30 AM – 8:45 AM MST Single cell sequencing of stink bug salivary glands  Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Daniel Swale – University of Florida Co-Author: Flinn Martin O'Hara – University of Florida Co-Author: Surjeet Arya – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Co-Author: Bryony C. Bonning (she/her/hers) – University of Florida Co-Author: Douglas Harrison – University of Kentucky	
Section Symposium Physiology, Biochemistry, and Toxicology	
8:45 AM – 9:00 AM MST Single cell sequencing of the fall armyworm nervous system  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Nishtha Nayyar – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Co-Author: Douglas Harrison – University of Kentucky	
Section Symposium Physiology, Biochemistry, and Toxicology	
9:00 AM – 9:15 AM MST Environmental- and caste-dependent expression of pest ant odorant receptors  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Kayli R. Sieber (she/her/hers) – University of Florida Co-Author: Hua Yan – University of Florida	
Section Symposium Physiology, Biochemistry, and Toxicology	
9:15 AM – 9:30 AM MST Fern-derived proteins: An innovative solution to combat lepidopteran and coleopteran pests  Location: Phoenix Convention Center, 122 B Presenting Author: Amit Sethi – Corteva Agriscience Co-Author: Jun-Zhi Wei – Corteva Agriscience	
Section Symposium Physiology, Biochemistry, and Toxicology	
9:30 AM – 9:45 AM MST The rise of "-omics" technologies for mode of action studies  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Sven Geibel (he/him/his) – Bayer Crop Science	
Section Symposium Physiology, Biochemistry, and Toxicology	

9:45 AM – 10:00 AM MST Networking Location: Phoenix Convention Center, 122 B	
8:00 AM – 10:00 AM MST 10-min: P-IE, Behavior Moderator: Olivia Marie Bernauer, Ph.D. (she/her/hers) – University of Wisconsin-Eau Claire Moderator: Neema John – Arizona State University	
10-Minute Presentation Plant-Insect Ecosystems	
8:00 AM – 8:12 AM MST Acoustic behavior of the adult soybean weevil, <i>Rhyssomatus nigerrimus</i> (Coleoptera: Curculionidae)  Location: Phoenix Convention Center, 223 Presenting Author: Andrea L. Joyce, Ph.D. – University of California Co-Author: Isabel Delgado – University of California Co-Author: Guillermo Lopez-Guillen, Ph.D. – Instituto Nacional de Investigaciones Forestales	
10-Minute Presentation Plant-Insect Ecosystems	
8:12 AM – 8:24 AM MST Do thermal microhabitats influence pollinator foraging behavior? Quantifying flower visitors with automated camera traps  Location: Phoenix Convention Center, 223 Presenting Author: Olivia Marie Bernauer, Ph.D. (she/her/hers) – University of Wisconsin-Eau Claire Co-Author: Rafael Salas – University of Wisconsin Co-Author: Taylor Wartell – University of Wisconsin Co-Author: Acacia Tang – University of Wisconsin Co-Author: Matt A. Smith – University of Wisconsin Co-Author: Jeremy Hemberger – University of California Co-Author: Claudio Gratton – University of Wisconsin Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin Co-Author: James D. Crall – University of Wisconsin	
10-Minute Presentation Plant-Insect Ecosystems	
8:24 AM – 8:36 AM MST Entomopathogenic nematodes avoid the scent of predatory mites  Location: Phoenix Convention Center, 223 Presenting Author: Shokoofeh Kamali (she/her/hers) – University of Florida Co-Author: David O. Olabiyi (he/him/his) – University of Florida Co-Author: Lukasz L. Stelinski – University of Florida	

Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida Co-Author: Larry Wayne Duncan – University of Florida	10-Minute Presentation Plant-Insect Ecosystems
8:36 AM – 8:48 AM MST Examining intraspecies variation in <i>Aureobasidium pullulans</i> effects on pollinator feeding behavior  Location: Phoenix Convention Center, 223, PCC Presenting Author: Amber C. Crowley-Gall (she/her/hers) – Iowa State University Co-Author: Ashley Reuter – Iowa State University	10-Minute Presentation Plant-Insect Ecosystems
8:48 AM – 9:00 AM MST Experimental study of air pollution from biomass burning impact on the flight behaviour of <i>Vanessa Cardui</i> L. (painted lady butterfly)  Location: Phoenix Convention Center, 223 Presenting Author: Yanan Liu, Ph.D. – King's College London Co-Author: Martin J. Wooster – King's College London Co-Author: Mark J. Grosvenor – King's College London Co-Author: Ka S. Lim – Rothamsted Research Co-Author: Robert A. Francis – King's College London	10-Minute Presentation Plant-Insect Ecosystems
9:00 AM – 9:12 AM MST Factors influencing mate attraction and mating behavior in a social yellowjacket wasp  Location: Phoenix Convention Center, 223 Presenting Author: Erin Rankin – University of California Co-Author: David T. Rankin – University of California Co-Author: Jocelyn Millar – University of California	10-Minute Presentation Plant-Insect Ecosystems
9:12 AM – 9:24 AM MST Harmonic radar tracking of tephritid fruit flies: Individual fly observations, movement parameterization, and modeling  Location: Phoenix Convention Center, 223, PCC Presenting Author: Matthew S. Siderhurst – USDA-ARS Co-Author: Stefano De Faveri – Queensland Government Co-Author: James Yoder – Eastern Mennonite University Co-Author: Nicholas C. Manoukis – USDA-ARS	

10-Minute Presentation Plant-Insect Ecosystems	
9:24 AM – 9:36 AM MST How does marching affect locust carbohydrate and protein consumption?  Location: Phoenix Convention Center, 223, PCC Presenting Author: Neema John – Arizona State University Co-Author: Arianne Cease – Arizona State University Co-Author: Rick Overson – Arizona State University	
10-Minute Presentation Plant-Insect Ecosystems	
9:36 AM – 9:48 AM MST Trials of a new compound to control Varroa destructor, an ectoparasite of honey bees (<i>Apis mellifera</i>)  Location: Phoenix Convention Center, 223, PCC Presenting Author: Stephen F. Pernal – Agriculture and Agri-Food Canada Co-Author: Erika Plettner – Simon Fraser University Co-Author: Olav Rueppell – University of Alberta Co-Author: Robert Xinzhi Lu – University of Alberta	
10-Minute Presentation Plant-Insect Ecosystems	
8:00 AM – 10:00 AM MST 10-min: SysEB, Ecology and Behavior Moderator: Janice Edgerly-Rooks (she/her/hers) – Santa Clara University Moderator: Terrence P. McGlynn, Ph.D. – California State University	
10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:00 AM – 8:12 AM MST Host specificity and dispersal behavior in acacia orb-web spiders  Location: Phoenix Convention Center, 222 C Presenting Author: Dumas Galvez – Coiba Scientific Station Co-Author: Roderick Valdés – Universidad Autónoma de Chiriquí Co-Author: Daniel Murcia – Coiba Scientific Station Co-Author: Thomas Hesselberg – Oxford University Co-Author: John D. Styrsky – University of Lynchburg	
10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:12 AM – 8:24 AM MST A history of susceptibility to parasites and divergence in solitary, gregarious and agonistic behaviors of embiopterans 	

Location: Phoenix Convention Center, 222 C Presenting Author: Janice Edgerly-Rooks (she/her/hers) – Santa Clara University Co-Author: Emily Arias – Santa Clara University Co-Author: Andrew Schatz – Santa Clara University Co-Author: Lauren Fuller – Santa Clara University Co-Author: Leilani Miller – Santa Clara University 10-Minute Presentation Systematics, Evolution, and Biodiversity
8:24 AM – 8:36 AM MST The outcome of total sexual selection in the leaf-footed cactus bug  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: James Boothroyd – University of Florida Co-Author: Michael Forthman – California Department of Food and Agriculture Co-Author: Christine Miller – University of Cambridge 10-Minute Presentation Systematics, Evolution, and Biodiversity
8:36 AM – 8:48 AM MST Effect of leaf litter diversity in ponds on adult insect colonizers (primarily Coleoptera: Dytiscidae)  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Julia E. Earl (she/her/hers) – Louisiana Tech University Co-Author: Shelby A. Medlock – Louisiana Tech University Co-Author: Joseph Aubert – Texas State University Co-Author: Daniel Edwards – Iowa State University 10-Minute Presentation Systematics, Evolution, and Biodiversity
8:48 AM – 9:00 AM MST Functional traits in bees predict landscape genetic patterns: A meta-analysis of population differentiation  Location: Phoenix Convention Center, 222 C Presenting Author: Scarlet Sellers – New Mexico State University Co-Author: Brook Milligan – New Mexico State University 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:00 AM – 9:12 AM MST Infrared thermal reflectivity is a critical element of insect thermal ecology and physiology  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Terrence P. McGlynn, Ph.D. – California State University Co-Author: Marivi Angel – California State University Co-Author: Meghan Barrett (she/her/hers) – Indiana University Indianapolis

Co-Author: Shultz Allison – Natural History Museum of Los Angeles County 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:12 AM – 9:24 AM MST Strain- and temperature-dependent outcomes in the environmentally acquired bug-<i>Caballeronia</i> symbiosis  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Alison Ravenscraft (she/her/hers) – University of Texas Co-Author: Patrick Thomas Stillson (he/him/his) – Emory University Co-Author: Martha S. Hunter – University of Arizona 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:24 AM – 9:36 AM MST Termite communities in the Republic of the Congo: Drivers of diversity and ecological impacts  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Katherine Angier – Harvard University 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:36 AM – 9:48 AM MST Down but not out: Tracking the transgenerational effects of thermal stress on <i>Wolbachia</i>-induced feminization in an agricultural spider  Location: Phoenix Convention Center, 222 C Presenting Author: Matthew R. Doremus – University of Kentucky Co-Author: Ellen Elizabeth Williams – University of Kentucky Co-Author: Jen A. White (she/her/hers) – University of Kentucky 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:48 AM – 10:00 AM MST Isopods and ants: Novel ant associations and new records from Puerto Rico  Location: Phoenix Convention Center, 222 C Presenting Author: Clayton H. Ziemke – University of Southern Mississippi Co-Author: Nathan T. Jones – American Isopod and Myriapod Group Co-Author: Jackson Means – Virginia Museum of Natural History Co-Author: Kaloyan Ivanov – Virginia Museum National History 10-Minute Presentation Systematics, Evolution, and Biodiversity
8:00 AM – 11:00 AM MST Building an Entomology Workforce Through Experiential Learning

Organizer: Holley Hooks (she/her/hers) – CDC Division of Vector-Borne Diseases Organizer: Susanna Visser, DrPH, MS (she/her/hers) – Centers for Disease Control and Prevention Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	
8:00 AM – 8:07 AM MST Introductory remarks Location: Phoenix Convention Center, 221 A Presenting Author: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America	
8:07 AM – 8:17 AM MST Addressing a critical public health workforce gap: Training the next generation of public health entomologists  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Susanna Visser, DrPH, MS (she/her/hers) – Centers for Disease Control and Prevention Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	
8:17 AM – 8:27 AM MST Unveiling the path: The transition from agriculture entomologist to PHEFA fellow  Location: Phoenix Convention Center, 221 A Presenting Author: Sri Jyosthna Kancharlapalli – Texas Tech University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	
8:27 AM – 8:37 AM MST Bridging academia and public health entomology through experiential learning  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Kristen Joy Adkins – Centers for Disease Control and Prevention / Entomological Society of America Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	
8:37 AM – 8:45 AM MST Q&A Location: Phoenix Convention Center, 221 A	
8:45 AM – 8:55 AM MST Training the next generation of vector biologists, through experiential learning and partnerships  Location: Phoenix Convention Center, 221 A Presenting Author: Laura Harrington – Cornell University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	

8:55 AM – 9:05 AM MST How undergraduate research experiences in vector biology led me to pursue more after graduation  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Natalie Bailey (she/her/hers) – Connecticut Agricultural Experiment Station Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
9:05 AM – 9:15 AM MST How the unique training and experiential learning of NEVBDs MS program led me to my career at CDC  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Nicole Foley (she/her/hers) – Centers for Disease Control and Prevention Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
9:15 AM – 9:23 AM MST Q&A Location: Phoenix Convention Center, 221 A
9:23 AM – 9:34 AM MST Break Location: Phoenix Convention Center, 221 A
9:34 AM – 9:44 AM MST Finding a passion for insect science: A journey from undergraduate to state vector-borne disease entomologist  Location: Phoenix Convention Center, 221 A Presenting Author: Xia Lee – University of Wisconsin Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
9:44 AM – 9:54 AM MST Creating a pipeline for public health entomologists by linking global health programs and experiential summer fellowships in vector biology  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Susan M. Paskewitz (she/her/hers) – University of Wisconsin Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
9:54 AM – 10:04 AM MST Integrating a Master's of Public Health curriculum with training in vector-borne disease through the MCE-VBD 

Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Rosemary Philip (she/her/hers) – University of Wisconsin Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:12 AM – 10:22 AM MST Advancing public health entomology training in the Pacific Southwest  Location: Phoenix Convention Center, 221 A Presenting Author: Olivia Winokur – University of California Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:22 AM – 10:32 AM MST Enhancing undergraduate experiences in public-health entomology as a collaboration between universities and vector control partners  Location: Phoenix Convention Center, 221 A Presenting Author: Mahmood Nikbahtzadeh, Ph.D. (he/him/his) – California State University San Bernardino Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:32 AM – 10:42 AM MST Tick-talker: Discovering the joy of science communication through education on disease prevention  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Kacie Ring (she/her/hers) – University of California, Santa Barbara Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:42 AM – 10:50 AM MST Q&A Location: Phoenix Convention Center, 221 A
10:50 AM – 11:00 AM MST Closing remarks Location: Phoenix Convention Center, 221 A Presenting Author: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America
8:00 AM – 11:00 AM MST Genetic and Insect-based Control: Technologies, Policy, and Roll-Out Organizer: Andrew Hammond (he/him/his) – Biocentis Organizer: Gerard Terradas (he/him/his) – Biocentis Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems

8:00 AM – 8:20 AM MST 20 years of genetic control: Where are we and what's around the corner?  Location: Phoenix Convention Center, 129 B Presenting Author: Dickson Lwetoijera – Ifakara Health Institute Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
8:20 AM – 8:35 AM MST <i>Wolbachia</i>-modified insects to boost the sterile insect technique in vector control  Location: Phoenix Convention Center, 129 B Presenting Author: Zhiyong Xi – Michigan State University Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
8:35 AM – 8:50 AM MST Using CRISPR-based gene editing for improving the sterile Insect technique in agriculture  Location: Phoenix Convention Center, 129 B Presenting Author: Stephanie Gamez – Agragene Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
8:50 AM – 9:05 AM MST Self-limited genetic control for harmful insect pests  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Gerard Terradas (he/him/his) – Biocentis Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
9:05 AM – 9:15 AM MST Break Location: Phoenix Convention Center, 129 B
9:15 AM – 9:30 AM MST Towards the first field release of gene drive technology  Location: Phoenix Convention Center, 129 B Presenting Author: Abdoulaye Diabate – Institut de Recherche en Science de la Sante Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
9:30 AM – 9:45 AM MST Insect-based control at scale: Lessons from the World Mosquito Program  Location: Phoenix Convention Center, 129 B

Presenting Author: Nelson Grisales – World Mosquito Program
Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
9:45 AM – 10:00 AM MST Regulatory considerations for genetically modified insects in agriculture  Location: Phoenix Convention Center, 129 B Presenting Author: Lisa Knolhoff – USDA-APHIS Biotechnology Regulatory Services
Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:00 AM – 10:15 AM MST Environmental risk assessment for gene drives in vector control  Location: Phoenix Convention Center, 129 B Presenting Author: Brinda Dass – Foundation for the National Institutes of Health
Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:15 AM – 10:30 AM MST Modelling novel genetic control elements for localised population suppression  Location: Phoenix Convention Center, 129 B Presenting Author: Kate Willis – Imperial College
Program Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:30 AM – 10:40 AM MST Break Location: Phoenix Convention Center, 129 B
10:40 AM – 10:55 AM MST Discussion Location: Phoenix Convention Center, 129 B
10:55 AM – 11:00 AM MST Closing remarks Location: Phoenix Convention Center, 129 B Presenting Author: Andrew Hammond (he/him/his) – Biocentis
8:00 AM – 11:00 AM MST Navel Orangeworm Integrated Pest Management for Today and Tomorrow Organizer: Michael A. Garvey (he/him/his) – USDA
Member Symposium Plant-Insect Ecosystems
8:00 AM – 8:05 AM MST

Introductory remarks Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Michael A. Garvey (he/him/his) – USDA
8:05 AM – 8:25 AM MST Overview of the navel orangeworm program in West Fresno County, California  Location: Phoenix Convention Center, 222 A Presenting Author: Michelle Dennis – California Department of Food and Agriculture
Member Symposium Plant-Insect Ecosystems
8:25 AM – 8:45 AM MST Navel orangeworm mass-rearing development for sterile insect technique  Location: Phoenix Convention Center, 222 A Presenting Author: Andrea Walton – USDA-APHIS Co-Author: Earl Andress – USDA-APHIS Co-Author: Michael A. Garvey (he/him/his) – USDA
Member Symposium Plant-Insect Ecosystems
8:45 AM – 9:00 AM MST Use of smart traps for monitoring navel orangeworm populations  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Camila Oliveira Santos (she/her/hers) – University of California, Riverside Co-Author: Charles S. Burks – USDA-ARS Co-Author: Houston Wilson (he/him/his) – University of California
Member Symposium Plant-Insect Ecosystems
9:00 AM – 9:20 AM MST Lipid reserves and the response of navel orangeworm to phenyl propionate  Location: Phoenix Convention Center, 222 A Presenting Author: Charles S. Burks – USDA-ARS Co-Author: Matthew Hicks – USDA-ARS
Member Symposium Plant-Insect Ecosystems
9:20 AM – 9:30 AM MST Break Location: Phoenix Convention Center, 222 A
9:30 AM – 9:50 AM MST

Alternatives to gamme irradiation for sterilization of navel orangeworm used in sterile insect technique



Location: Phoenix Convention Center, 222 A

Presenting Author: Lars Laber – University of California

Co-Author: Dylan Alexander Tussey (he/him/his) – USDA-APHIS

Co-Author: Charles S. Burks – USDA-ARS

Co-Author: Houston Wilson (he/him/his) – University of California

Member Symposium Plant-Insect Ecosystems

9:50 AM – 10:05 AM MST

Evaluation of a novel fluorophore for navel orangeworm mark-release-recapture research



Location: Phoenix Convention Center, 222 A

Presenting Author: Jean (Tzu-Chin) Liu – University of California

Co-Author: Charles S. Burks – USDA-ARS

Co-Author: Houston Wilson (he/him/his) – University of California

Member Symposium Plant-Insect Ecosystems

10:05 AM – 10:25 AM MST

Developing tools to support sterile insect technique & integrated pest management of navel orangeworm in California orchards



Location: Phoenix Convention Center, 222 A

Presenting Author: Houston Wilson (he/him/his) – University of California

Co-Author: Charles S. Burks – USDA-ARS

Member Symposium Plant-Insect Ecosystems

10:25 AM – 10:45 AM MST

Integration of IPM techniques for an areawide approach for navel orangeworm management



Location: Phoenix Convention Center, 222 A

Presenting Author: Joel Siegel – USDA-ARS

Member Symposium Plant-Insect Ecosystems

10:45 AM – 10:55 AM MST

Discussion

Location: Phoenix Convention Center, 222 A

10:55 AM – 11:00 AM MST

Closing remarks

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Michael A. Garvey (he/him/his) – USDA

8:00 AM – 11:00 AM MST

10-min: P-IE, Pollinators 1

Moderator: Maureen L. Page (she/her/hers) – Cornell University

Moderator: Jarrad R. Prasifka – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

8:00 AM – 8:12 AM MST

Attempting to capture the full complexity of an urban pollination system



Location: Phoenix Convention Center, 221 B

Presenting Author: Sheryl C. Hosler (she/her/hers) – The Pennsylvania State University

Co-Author: Megan Garfinkel – Chicago State University

Co-Author: Michael Roberts – University of Illinois

Co-Author: Christopher J. Whelan – University of Illinois

Co-Author: Emily S. Minor – University of Illinois

10-Minute Presentation Plant-Insect Ecosystems

8:12 AM – 8:24 AM MST

Bee hotels don't "save" native bees: Disparate outcomes of nesting success among native and introduced cavity-nesting bee species



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Kate LeCroy (she/her/hers) – Rhodes College

Co-Author: Grace Gutierrez – University of Massachusetts

Co-Author: Jeremy Gutierrez – North Carolina State University

Co-Author: Willow Lovecky – University of Virginia

Co-Author: Scott McArt – Cornell University

Co-Author: T'ai Roulston (he/him/his) – University of Virginia

10-Minute Presentation Plant-Insect Ecosystems

8:24 AM – 8:36 AM MST

Diversity and composition of pollen collected by the sunflower specialists *Melissodes agilis* and *M. trinodis*



Location: Phoenix Convention Center, 221 B

Presenting Author: Jarrad R. Prasifka – USDA-ARS

Co-Author: Beth E. Ferguson (she/her/hers) – Rutgers University

Co-Author: Pamela Puppo – Marshall University

10-Minute Presentation Plant-Insect Ecosystems

8:36 AM – 8:48 AM MST

Documenting the common insect floral visitors of Chinese tallow tree (*Triadica sebifera*: Euphorbiaceae)



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Anthony P. Abbate (he/him/his) – Auburn University

Co-Author: Joshua W. Campbell – USDA-ARS

Co-Author: Liza Garcia-Jimenez – University of Florida

Co-Author: Lauren Baugus – Mississippi State University

Co-Author: Alexander Gaffke – USDA-ARS

Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University

Co-Author: Gregory Wheeler – USDA-ARS

Co-Author: Rebecca Nestle – USDA-ARS

Co-Author: Frank D. Rinkevich, Jr. – USDA-ARS

Co-Author: Geoffrey Williams – Auburn University

10-Minute Presentation Plant-Insect Ecosystems

8:48 AM – 9:00 AM MST

Effect of changes in the timing of floral abundance on a bumble bee (*Bombus impatiens*) parasite transmission



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Mario Simon Pinilla-Gallego – University of Massachusetts, Amherst

Co-Author: Lynn S. Adler – University of Massachusetts

10-Minute Presentation Plant-Insect Ecosystems

9:00 AM – 9:12 AM MST

Impact of adjacent land use of bumblebee (*Bombus* spp.) abundance and diversity within small, manicured pollinator gardens



Location: Phoenix Convention Center, 221 B

Presenting Author: Kelsey E. Fisher – Connecticut Agricultural Experiment Station

Co-Author: Breahna Morgan Gillespie – Connecticut Agricultural Experiment Station

10-Minute Presentation Plant-Insect Ecosystems

9:12 AM – 9:24 AM MST

Break

Location: Phoenix Convention Center, 221 B

9:24 AM – 9:36 AM MST

Floral resource use of native bees in mature deciduous forests



Location: Phoenix Convention Center, 221 B

Presenting Author: Lucia R. Weinman – University of California

Co-Author: Trent Ress – Rutgers University

Co-Author: Joel Gardner – Washington State University

Co-Author: Rachael Winfree – Rutgers University

10-Minute Presentation Plant-Insect Ecosystems

9:36 AM – 9:48 AM MST

Floral resources enhance erosion mitigation and wild bee conservation



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: S. Kristine Braman – University of Georgia

Co-Author: Jennifer Berry – University of Georgia

Co-Author: Conor G. Fair (he/him/his) – University of Georgia

10-Minute Presentation Plant-Insect Ecosystems

9:48 AM – 10:00 AM MST

Flower-visiting insects differentially respond to grassland habitat features



Location: Phoenix Convention Center, 221 B

Presenting Author: Elinor M. Lichtenberg – University of North Texas

Co-Author: Shannon Collins (she/her/hers) – University of North Texas

Co-Author: Avery Pearson (she/her/hers) – University of North Texas

Co-Author: UNT Insect and Plant ID Consortium – University of North Texas

10-Minute Presentation Plant-Insect Ecosystems

10:00 AM – 10:12 AM MST

Fencing and fertilizers influence floral resources and floral visitation



Location: Phoenix Convention Center, 221 B

Presenting Author: Holly Martinson – McDaniel College

Co-Author: Frances S. Sivakoff – The Ohio State University

10-Minute Presentation Plant-Insect Ecosystems

10:12 AM – 10:24 AM MST

Impact of honey bee competition on wild bee fitness



Location: Phoenix Convention Center, 221 B

Presenting Author: Maureen L. Page (she/her/hers) – Cornell University

Co-Author: Scott McArt – Cornell University

10-Minute Presentation Plant-Insect Ecosystems

10:24 AM – 10:36 AM MST

Native bees and plant-pollinator interactions along powerline rights-of-way in New York state



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Paige R. Chesshire (she/her/hers) – State University of New York Co-Author: Molly Jacobson (she/her/hers) – SUNY College of Environmental Science and Forestry (ESF) Co-Author: Michael Schummer (he/him/his) – State University of New York Co-Author: Donald Leopold – State University of New York Co-Author: Chris Cotroneo – Consolidated Edison Company of New York (CECONY) Co-Author: Chris Peterson – Consolidated Edison Company of New York (CECONY) 10-Minute Presentation Plant-Insect Ecosystems	
10:36 AM – 10:48 AM MST The effects of floral resource phenology and farm management practices on pollinator populations on row crop farms  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Jess Gambel (she/her/hers) – USDA-ARS Co-Author: Alison Duff – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
10:48 AM – 11:00 AM MST Impact of land use cover on honeybee foraging: Nutritional landscape and value of communication  Location: Phoenix Convention Center, 221 B Presenting Author: Rajbir Kaur – University of Bristol Co-Author: Yongqiang Wu – University of Bristol Co-Author: Christoph Grueter – University of Bristol 10-Minute Presentation Plant-Insect Ecosystems	
8:00 AM – 11:00 AM MST 10-min: SysEB, Behavior - Social Insects Moderator: Christina L. Kwapich, Ph.D. – University of Central Florida Moderator: Nobuaki Mizumoto (he/him/his) – Auburn University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:00 AM – 8:12 AM MST Ant chain mail: Investigating bivouac construction in two dimensions  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Isabella B. Muratore (she/her/hers) – United States Naval Academy Co-Author: Megan Black – Northwestern University Co-Author: Mario Salah – New Jersey Institute of Technology Co-Author: Michael Rubenstein – Northwestern University Co-Author: Simon Garnier – New Jersey Institute of Technology	

10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:12 AM – 8:24 AM MST Fire ant water bridge: Multimodal self-assembly of foraging structures  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Horace Zeng – University of Georgia Co-Author: Noah Egan – Georgia Institute of Technology Co-Author: Hosain Bagheri – Georgia Institute of Technology Co-Author: Ram Avinery – Georgia Institute of Technology Co-Author: Daniel Goldman – Georgia Institute of Technology Co-Author: Takao Sasaki – University of Georgia 10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:24 AM – 8:36 AM MST Impact of social isolation duration on digestion and behavior in <i>Camponotus floridanus</i>  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Victoria Dowling – University of Scranton Co-Author: Victoria Dowling – University of Scranton Co-Author: Marc Seid – University of Scranton 10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:36 AM – 8:48 AM MST <i>Pheidole</i> in the far north: How ants with tropical ancestors overcame the perils of winter  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Christina L. Kwapich, Ph.D. – University of Central Florida Co-Author: Hoon Kang – University of Massachusetts Co-Author: Roman Meneghini – University of Massachusetts 10-Minute Presentation Systematics, Evolution, and Biodiversity	
8:48 AM – 9:00 AM MST Mechanisms of army ant bivouac thermoregulation  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Karen Y. Robles Lopez – University of Southern Mississippi Co-Author: Kaitlin M. Baudier, Ph.D. – University of Southern Mississippi 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:00 AM – 9:12 AM MST	

An investment model identifies the risk factors that predict the evolution of family units and societies of family units within and across phyla  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Deby L. Cassill, Ph.D. – University of South Florida 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:12 AM – 9:24 AM MST Break Location: Phoenix Convention Center, 222 B, PCC
9:24 AM – 9:36 AM MST Fossil and living termites reveal the evolution of termite tandem running  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Nobuaki Mizumoto (he/him/his) – Auburn University Co-Author: Simon Hellemans – Okinawa Institute of Science and Technology Co-Author: Michael Engel – American Museum of Natural History Co-Author: Thomas Bourguignon – Okinawa Institute of Science and Technology Co-Author: Aleš Buček – Czech Academy of Sciences 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:36 AM – 9:48 AM MST Nesting biology drives the stability of tandem movement coordination in mating termites  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Elijah Paul Carroll – Auburn University Co-Author: Taisuke Kanao – Yamagata University Co-Author: Nathan Lo – University of Sydney Co-Author: Nobuaki Mizumoto (he/him/his) – Auburn University 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:48 AM – 10:00 AM MST Exploring positive feedback in the waggle dance and its effect on collective behavior  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Zachary Joseph Shaffer – Arizona State University Co-Author: Showmik Alam, M.S. – Arizona State University Co-Author: Cahit Ozturk – Arizona State University Co-Author: Stephen Pratt – Arizona State University 10-Minute Presentation Systematics, Evolution, and Biodiversity
10:00 AM – 10:12 AM MST

From dance to distress: Dopamine dynamics in honey bees  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: James C. Nieh, Ph.D. – University of California Co-Author: Shihao Dong – Chinese Academy of Sciences Co-Author: Tao Lin – Chinese Academy of Sciences Co-Author: Ziqi Wang – Chinese Academy of Sciences Co-Author: Jianjun Li – Chinese Academy of Sciences Co-Author: Tan Ken – Chinese Academy of Sciences 10-Minute Presentation Systematics, Evolution, and Biodiversity
10:12 AM – 10:24 AM MST Social networks drive collective thermoregulation in honey bees  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Chelsea N. Cook – Marquette University Co-Author: Casey E. Lambert – Marquette University Co-Author: Zachary Nelson – Marquette University Co-Author: Kyara Vazquez – Marquette University 10-Minute Presentation Systematics, Evolution, and Biodiversity
10:24 AM – 10:36 AM MST Ferromagnetic nanoparticles are ubiquitous across a wide range of bee species  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Anne F. Murray – University of Tennessee Co-Author: Cameron Jorgensen – University of Tennessee Co-Author: Charlotte Buchanan – University of Tennessee Co-Author: WLNC Liyanage – University of Tennessee Co-Author: Laurence Packer (he/him/his) – York University Co-Author: Micheal Winkhofer – University of Oldenburg Co-Author: Laura Russo – University of Tennessee Co-Author: Dustin Gilbert – University of Tennessee 10-Minute Presentation Systematics, Evolution, and Biodiversity
10:36 AM – 10:48 AM MST The nocturnal sweat bees <i>Megalopta genalis</i> and <i>M. amoena</i> have endogenous bimodal circadian rhythms  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Adam Smith, Ph.D. – George Washington University Co-Author: Geraldine Barragán – Smithsonian Institution Co-Author: William Wcislo – Smithsonian Institution

10-Minute Presentation	Systematics, Evolution, and Biodiversity	
8:00 AM – 12:00 PM MST	Advancing Women's Empowerment and Leadership in Extension Entomology: Challenges and Prospects	
Organizer: Md Tafsir Nur Nabi Rashed – University of Florida		⬆
Organizer: Sriyanka Lahiri (she/her/hers) – University of Florida		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
8:00 AM – 8:05 AM MST	Introductory remarks	
Location: Phoenix Convention Center, 224 B		
Presenting Author: Md Tafsir Nur Nabi Rashed – University of Florida		
8:05 AM – 8:20 AM MST	Fake it until you find it: Empowering confidence in extension	🎤
Location: Phoenix Convention Center, 224 B, PCC		
Presenting Author: Erin W. Hodgson (she/her/hers) – Iowa State University		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
8:20 AM – 8:35 AM MST	From outreach to extension: Connecting your passion to stakeholder needs	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Amanda C. Hodges – University of Florida		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
8:35 AM – 8:50 AM MST	Making difficult choices: Can we do it all?	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Silvia Rondon – Oregon State University		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
8:50 AM – 9:05 AM MST	Journey into extension as a woman: Walking a fine line	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Christelle Guedot – University of Wisconsin		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion

9:05 AM – 9:20 AM MST	How to become part of someone else's survival guide	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Faith M. Oi – University of Florida		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
9:20 AM – 9:25 AM MST	Break	
Location: Phoenix Convention Center, 224 B		
9:25 AM – 9:40 AM MST	One woman show in the great state of Texas but not alone – the changes and challenges to being a statewide entomologist	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Sonja L. Swiger – Texas A&M University		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
9:40 AM – 9:55 AM MST	Forty years of extension experience: The challenges, rewards and some words of advice	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Lynnae Jess (she/her/hers) – Michigan State University		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
9:55 AM – 10:10 AM MST	You don't look like an entomologist	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Jody Gangloff-Kaufmann – Cornell University		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
10:10 AM – 10:25 AM MST	Bee-coming a leader: The story of finding my way in apiculture extension	🎤
Location: Phoenix Convention Center, 224 B		
Presenting Author: Elina Niño – University of California		
Section Symposium	Formal and Informal Teaching	Diversity, Equity, and Inclusion
10:25 AM – 10:40 AM MST	I learned something new today!	🎤

Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Sriyanka Lahiri (she/her/hers) – University of Florida Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:40 AM – 10:55 AM MST My journey as an extension entomologist: Challenges and rewards  Location: Phoenix Convention Center, 224 B Presenting Author: Paula Shrewsbury – University of Maryland Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
10:55 AM – 11:00 AM MST Closing remarks Location: Phoenix Convention Center, 224 B Presenting Author: Md Tafsir Nur Nabi Rashed – University of Florida
11:00 AM – 12:00 PM MST Extension networking session Location: Phoenix Convention Center, 224 B
8:00 AM – 12:00 PM MST Mating Disruption for Control of Insect Pests Organizer: Rangaswamy N. Muniappan (he/him/his) – Virginia Tech Organizer: Rolando Alegria (he/him/his) – ATGC Biotech Pvt. Ltd. Member Symposium Plant-Insect Ecosystems
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Rolando Alegria (he/him/his) – ATGC Biotech Pvt. Ltd.
8:05 AM – 8:25 AM MST Efficacy of mating disruption treatment against spongy moth, <i>Lymantria dispar dispar</i>, applied using an unmanned aerial vehicle equipped with an AKSATA (formerly Agridrones) OAS precise applicator payload  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Ksenia Onufrieva (she/her/hers) – Virginia Tech Co-Author: Andrea Hickman (she/her/hers) – Virginia Tech Co-Author: Tom Coleman (he/him/his) – USDA-Forest Service Member Symposium Plant-Insect Ecosystems
8:25 AM – 8:45 AM MST

Database management of spongy moth mating disruption activity  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Mannin Dodd (he/him/his) – Virginia Tech Member Symposium Plant-Insect Ecosystems
8:45 AM – 9:05 AM MST Advances in mating disruption of fall armyworm and rice stem borer  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Pedro Coelho (he/him/his) – Provivi Inc. Member Symposium Plant-Insect Ecosystems
9:05 AM – 9:25 AM MST Mating disruption of pink bollworm of cotton in India  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Markandeya Gorantla (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Sashidhar Burla (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Senthooor Raja (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Vishal Patil (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Mukesh Mukul (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: B Venkata Ramana Reddy (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Nageshwar Rao (he/him/his) – ATGC Biotech Pvt. Ltd. Co-Author: Subaharan Kesavan (he/him/his) – Indian Council of Agricultural Research Co-Author: A G Sreenivas (he/him/his) – University of Agricultural Sciences Co-Author: Chinna Babu (he/him/his) – Agricultural Entomology Co-Author: YG Prasad (he/him/his) – Central Institute for Cotton Research Co-Author: V B Reddy Lachagari (he/him/his) – ATGC Biotech Pvt. Ltd. Member Symposium Plant-Insect Ecosystems

9:25 AM – 9:45 AM MST

Diamondback moth management with mating disruption



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Taylore Sydnor – Virginia Tech

Co-Author: Thomas P. Kuhar – Virginia Tech

Co-Author: Alejandro Del-Pozo – Virginia Tech

Co-Author: Tom Bilbo – Clemson University

Co-Author: Jim Walenbach – North Carolina State University

Co-Author: George Kennedy – North Carolina State University

Co-Author: Ashley Edwards – Virginia Cooperative Extension

Member Symposium Plant-Insect Ecosystems

9:45 AM – 9:55 AM MST

Break

Location: Phoenix Convention Center, 127 C, PCC

9:55 AM – 10:15 AM MST

Eggplant shoot and fruit borer management with mating disruption in Bangladesh



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Rangaswamy N. Muniappan (he/him/his) – Virginia Tech

Co-Author: Madhab Das (he/him/his) – Virginia Tech

Co-Author: Md Shaef Ullah (he/him/his) – Bangladesh Agricultural University

Co-Author: Markandeya Gorantla (he/him/his) – ATGC Biotech Pvt. Ltd.

Co-Author: Subaharan Kesavan (he/him/his) – Indian Council of Agricultural Research

Co-Author: Nur Jahan (she/her/hers)

Co-Author: Ibrahim Khalil (he/him/his) – Ispahani Agro Limited

Co-Author: Hedyiet Ullah (he/him/his) – Virginia Tech

Co-Author: Masudur Rahman (he/him/his) – Virginia Tech

Member Symposium Plant-Insect Ecosystems

10:15 AM – 10:35 AM MST

Nano carbon matrix for delivery of fall armyworm pheromone for mating disruption



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Subaharan Kesavan (he/him/his) – Indian Council of Agricultural Research

Co-Author: Muthusamy Eswaramoorthy (he/him/his) – Jawaharlal Nehru Center for Advanced Scientific Research

Co-Author: Vinay Kumar (he/him/his) – National Bureau of Agricultural Insect Resources

Co-Author: Markandeya Gorantla (he/him/his) – ATGC Biotech Pvt. Ltd.

Co-Author: S.N. Sushil (he/him/his) – National Bureau of Agricultural Insect Resources

Member Symposium Plant-Insect Ecosystems

10:35 AM – 10:55 AM MST

Combining kairomones and pheromones in monitoring lures and mating disruption



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Rodrigo da Silva (he/him/his) – BedoukianBio

Member Symposium Plant-Insect Ecosystems

10:55 AM – 11:15 AM MST

Competitive or noncompetitive pheromone mating disruption: What's up with very low-density point-sources?



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Peter McGhee – Pacific Biocontrol

Co-Author: Christopher Hedstrom – Pacific Biocontrol

Member Symposium Plant-Insect Ecosystems

11:15 AM – 11:35 AM MST

Altering insect behavior for enhanced crop protection



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Jesse Saroli – ISCA Technologies, Inc.

Co-Author: Agenor Mafra-Neto – ISCA Technologies, Inc.

Co-Author: Carmem Bernardi – ISCA Technologies, Inc.

Co-Author: Dick Pederson – ISCA Technologies, Inc.

Co-Author: Vanessa Soria – ISCA Technologies, Inc.

Co-Author: Max Lasiter – ISCA Technologies, Inc.

Member Symposium Plant-Insect Ecosystems

11:35 AM – 11:40 AM MST

Closing remarks

Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Rolando Alegria (he/him/his) – ATGC Biotech Pvt. Ltd.

8:00 AM – 12:00 PM MST

Insects as Food, Feed, and Fertilizer: Bridging Research Efforts to Advance Sustainable Agriculture

Organizer: Lisa G. Neven (she/her/hers) – USDA-ARS

Organizer: Kelsy Robinson (she/her/hers) – USDA-ARS

Organizer: Annie Donoghue – USDA-ARS

Organizer: Kristin Duffield – USDA-ARS

Organizer: Komala Arsi – USDA-ARS

Organizer: Tawni Crippen – USDA-ARS

Organizer: Jeffery Tomberlin – Texas A&M University

Organizer: Heather Jordan – Mississippi State University



Organizer: Aaron Hobbs – North American Coalition for Insect Agriculture Organizer: Ian J. Banks (he/him/his) – EnviroFlight, LLC Organizer: Elida Espinoza – EnviroFlight, LLC
Member Symposium
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 127 B Presenting Author: Lisa G. Neven (she/her/hers) – USDA-ARS
8:05 AM – 8:35 AM MST The economics of and supply chain design for black soldier fly products  Location: Phoenix Convention Center, 127 B Presenting Author: David Zilberman (he/him/his) – University of California
Member Symposium
8:35 AM – 8:55 AM MST Turning inconsistent fruit and vegetable surpluses into a consistent insect feed  Location: Phoenix Convention Center, 127 B Presenting Author: Goggy Davidowitz (he/him/his) – University of Arizona
Member Symposium
8:55 AM – 9:15 AM MST Selective breeding in insect farming  Location: Phoenix Convention Center, 127 B Presenting Author: John Hunt (he/him/his) – University of New South Wales
Member Symposium
9:15 AM – 9:25 AM MST Break Location: Phoenix Convention Center, 127 B
9:25 AM – 9:45 AM MST Microbial influences on mass produced insects  Location: Phoenix Convention Center, 127 B Presenting Author: Heather Jordan – Mississippi State University
Member Symposium
9:45 AM – 10:05 AM MST

Is extrusion one remedy for the edible insect 'yuck factor?' 
Location: Phoenix Convention Center, 127 B
Presenting Author: Florence Dunkel (she/her/hers) – Montana State University
Member Symposium
10:05 AM – 10:25 AM MST 21st century livestock: Regulatory clarity, capital investment, and infrastructure building trends in insect agriculture 
Location: Phoenix Convention Center, 127 B, PCC
Presenting Author: Robert N. Allen – Little Herds
Member Symposium
10:25 AM – 10:40 AM MST Break Location: Phoenix Convention Center, 127 B
10:40 AM – 11:00 AM MST Buzzworthy best practices: Guiding principles for North American insect agriculture 
Location: Phoenix Convention Center, 127 B, PCC
Presenting Author: Ian J. Banks (he/him/his) – EnviroFlight, LLC
Member Symposium
11:00 AM – 12:00 PM MST Panel discussion Location: Phoenix Convention Center, 127 B
8:00 AM – 12:00 PM MST Responses to a Changing Climate: Integrating Physiology, Ecology, and Evolution
Organizer: Angela M. Smilanich (she/her/hers) – University of Nevada Organizer: Anngely Leeds – Georgetown University Organizer: Lorrie He – University of North Carolina Organizer: Brendan Graham – University of Alaska Organizer: Katherine Malinski – University of North Carolina
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:00 AM – 8:10 AM MST Introductory remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Angela M. Smilanich (she/her/hers) – University of Nevada

8:10 AM – 8:25 AM MST Effects of variant springs on a wetland community  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Mariel Dunn – Smith College Co-Author: Mariana Abarca – Smith College Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:25 AM – 8:40 AM MST Chronic elevated temperatures intensify viral infection and reduce survival following winter diapause in a North American caterpillar  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Nadya Muchoney – Emory University Co-Author: Victoria Peechatt – University of Nevada Co-Author: Mike Teglas – University of Nevada Co-Author: Angela M. Smilanich (she/her/hers) – University of Nevada Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:40 AM – 8:55 AM MST Host plants and experimental warming impact fitness and infection outcomes in a migratory butterfly  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Isabella G. Ragonese – University of Georgia Co-Author: Christopher Brandon – University of Georgia Co-Author: Joselyne Chavez – Brown University Co-Author: Jacobus de Roode – Emory University Co-Author: Richard Hall – University of Georgia Co-Author: Sonia M. Altizer – University of Georgia Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:55 AM – 9:10 AM MST Thermal breakdown in host-parasitoid interactions is driven by a viral symbiont  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Joel Kingsolver (he/him/his) – University of North Carolina Co-Author: Katherine Malinski – University of North Carolina Co-Author: Christopher Willett – University of North Carolina Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:10 AM – 10:10 AM MST Poster session

Location: Phoenix Convention Center, 131 B, PCC
9:10 AM – 10:10 AM MST SD15: Assessing the impact of parental thermal stress on offspring performance in Baltimore checkerspots  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Ruzhuo Chen (she/her/hers) – Smith College Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
9:10 AM – 10:10 AM MST SD16: Can lower nighttime temperatures facilitate recovery from daytime heat stress in <i>Manduca sexta</i> larvae?  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Lorrie He – University of North Carolina Co-Author: Joel Kingsolver (he/him/his) – University of North Carolina Co-Author: Christopher Willett – University of North Carolina Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
9:10 AM – 10:10 AM MST SD17: Comparing thermal reaction norms of two buckeye butterfly populations  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Tyler Pereira – University of North Carolina Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
9:10 AM – 10:10 AM MST SD18: Elevated temperatures have a greater effect on herbivore survival than a viral pathogen  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Victoria Peechatt – University of Nevada Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
9:10 AM – 10:10 AM MST SD19: Monitoring caterpillars and adults to improve our understanding of climate change impacts on Lepidoptera  Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Christian Connors – University of Nevada Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display	
10:10 AM – 10:25 AM MST Thermal plasticity of gene expression in response to chronic versus acute temperature exposure in <i>Pieris rapae</i>  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Samantha Sturiale – Georgetown University Co-Author: Lorrie He – University of North Carolina Co-Author: Katherine Malinski – University of North Carolina Co-Author: Christopher Willett – University of North Carolina Co-Author: Joel Kingsolver (he/him/his) – University of North Carolina Co-Author: Leslie Ries – Georgetown University Co-Author: Peter Armbruster – Georgetown University Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
10:25 AM – 10:40 AM MST Exploring thermal ecology in the field  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Louie H. Yang (he/him/his) – University of California Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
10:55 AM – 11:10 AM MST Five decades of butterflies and climate across northern California  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Matthew Forister – University of Nevada Co-Author: Chris Halsch – State University of New York Co-Author: Clare M. Dittmore – Montana State Comparative Bio Risk Lab Co-Author: Lee Dyer – University of Nevada Co-Author: Zachariah Gompert – Utah State University Co-Author: Angela M. Smilanich (she/her/hers) – University of Nevada Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
10:55 AM – 11:10 AM MST Using genomic data to inform genetic rescue of endangered butterflies  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Zachary MacDonald – University of California Co-author: Julian Dupuis – University of Kentucky	

Co-author: James Glasier – Calgary Zoo Co-author: Robert Sissions – Waterton Lakes National Park Co-author: Axel Moehrenschrager – Calgary Zoo Co-author: H. Bradley Shaffer – University of California Co-author: Felix Sperling – University of Alberta Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
11:10 AM – 11:25 AM MST Montane grasshopper fitness constraints in changing environments  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Monica Sheffer – University of California Co-Author: Caroline Williams – University of California Co-Author: Lauren Buckley – University of Washington Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
8:00 AM – 12:00 PM MST A Menagerie of Arthropod Symbioses Organizer: Molly S. Hunter (she/her/hers) – University of Arizona Organizer: Alison Ravenscraft (she/her/hers) – University of Texas Organizer: Einat Zchori-Fein (she/her/hers) – Agricultural Research Organization Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
8:00 AM – 8:20 AM MST Host or symbiont? Who determines the cytoplasmic incompatibility phenotype in a parasitoid?  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Yuval Gottlieb (she/her/hers) – The Hebrew University Co-Author: Marie Pollmann – The Hebrew University Co-Author: Lea von Berg – University of Hohenheim Co-Author: Ronja Reinisch – University of Hohenheim Co-Author: Molly Avidan-King – The Hebrew University Co-Author: Johannes Steidle – University of Hohenheim Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
8:20 AM – 8:40 AM MST Complex patterns of symbiont infection and reproductive incompatibility in unintentionally introduced populations of the samurai wasp, <i>Trissolcus japonicus</i> (Hymenoptera: Scelionidae)  Location: Phoenix Convention Center, 226 A Presenting Author: Steve Perlman (he/him/his) – University of Victoria Co-Author: Lucas Silva – University of Victoria	

Co-Author: Vika Makovetski – University of Victoria Co-Author: Paul K. Abram – AAFC Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
8:40 AM – 9:00 AM MST <i>Wolbachia</i> modulates mitosis and sex determination to induce parthenogenesis  Location: Phoenix Convention Center, 226 A Presenting Author: Amelia Lindsey – University of Minnesota Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
9:00 AM – 9:20 AM MST It's getting hot in here: Temperature as a driver of symbiotic polymorphisms in an agricultural spider  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Jen A. White (she/her/hers) – University of Kentucky Co-Author: Laura Rosenwald – University of Kentucky Co-Author: Jordyn Dawn Proctor – University of Kentucky Co-Author: Matthew R. Doremus – University of Kentucky Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
9:20 AM – 9:30 AM MST Break Location: Phoenix Convention Center, 226 A
9:30 AM – 9:50 AM MST Impacts of phase, environment, and species on the microbiota in <i>Schistocerca</i> locusts from the Americas  Location: Phoenix Convention Center, 226 A Presenting Author: Brittany Peterson (she/her/hers) – Southern Illinois University Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
9:50 AM – 10:10 AM MST Diversity and evolutionary history of <i>Reticulitermes</i> hindgut symbiotic protists  Location: Phoenix Convention Center, 226 A Presenting Author: Gillian Gile (she/her/hers) – Arizona State University Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
10:10 AM – 10:30 AM MST

Fireflies in a new light: The diverse bacterial associations of northeastern American lampyrids  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Ben Bechade (he/him/his) – University of Texas Co-Author: Sarah Lower – Bucknell University Co-Author: Sierra Nichols – University of Texas Co-Author: Susan Deering – Bucknell University Co-Author: Natalie Dyer – Bucknell University Co-Author: Moira Chambers – Bucknell University Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
10:30 AM – 10:50 AM MST Microbial symbiosis in solitary bees: Variation in structure and assembly  Location: Phoenix Convention Center, 226 A Presenting Author: Rachel Vannette (she/her/hers) – University of California Co-Author: Lexie Martin – University of California Co-Author: Shawn Christensen (he/him/his) – University of California Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
10:50 AM – 11:00 AM MST Break Location: Phoenix Convention Center, 226 A
11:00 AM – 11:20 AM MST <i>Sodalis</i> transmission via the venom and sperm of the parasitoid wasp <i>Spalangia cameroni</i>  Location: Phoenix Convention Center, 226 A Presenting Author: Elad Chiel (he/him/his) – University of Haifa-Oranim Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
11:20 AM – 11:40 AM MST <i>Caballeronia</i> strain identity and not host-derived origin determines the fitness outcomes in coreid bugs  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Bibek Singh Parajuli – University of Texas Co-Author: Zoe Zimmerman – Emory University Co-Author: Kayla Stoy – Emory University Co-Author: Nicole Gerardo – Emory University Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

11:40 AM – 12:00 PM MST The missing link to viral symbiogenesis: Genomic clues from a young parasitoid-virus mutualism  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Kelsey Coffmann (she/her/hers) – University of Tennessee Co-Author: Sheina B. Sim (she/her/hers) – USDA-ARS Co-Author: Renee Corpuz – USDA-ARS Co-Author: Tyler Simmonds – USDA-ARS Co-Author: Jeremy Schrader – USDA-ARS Co-Author: Scott M. Geib (he/him/his) – USDA-ARS Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
8:00 AM – 12:00 PM MST Refining the Blueprint for an Impactful Career in the Dynamic World of Insect Science Organizer: Adekunle Adesanya (he/him/his) – Corteva Agriscience Organizer: Travis McClure – Corteva Agriscience Member Symposium
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Adekunle Adesanya (he/him/his) – Corteva Agriscience
8:05 AM – 8:17 AM MST An entomologist briefcase for an impactful career in the discovery and development of crop protection technologies  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Thomas Sparks – Agrilucent Co-Author: Keith Wing – Keith D Wing Consulting LLC Member Symposium
8:17 AM – 8:29 AM MST Ecotoxicology for a sustainable future: An opportunity for an entomologist to positive make a difference  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Nicholas Storer – American Sugarbeet Growers Association Member Symposium
8:29 AM – 8:41 AM MST

(Re)designing the transdisciplinary approach to urban pest management  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Changlu Wang – Rutgers University Member Symposium
8:41 AM – 8:53 AM MST Entomological opportunities and challenges for environmental protection  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Kara Welch – Environmental Protection Agency Member Symposium
8:53 AM – 8:58 AM MST Break Location: Phoenix Convention Center, 121 C, PCC
8:58 AM – 9:10 AM MST Strategies for a complete 360-degree experience for successful career in entomological science  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Joanna Chiu – University of California Member Symposium
9:10 AM – 9:22 AM MST From east to west: The commonalities and differentiating attributes for an impactful career in entomology  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: David Held – Auburn University Member Symposium
9:22 AM – 9:34 AM MST What does it take to make an impact in entomology? Ideas for a future vision for entomologists  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Laura Lavine – Washington State University Member Symposium
9:34 AM – 9:54 AM MST Panel discussion Location: Phoenix Convention Center, 121 C, PCC

9:54 AM – 10:06 AM MST The making of an entomopreneur  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Robert Clark – EcoData Technology Member Symposium
10:06 AM – 10:18 AM MST Mentoring entomology students for their career journeys  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Rufus Isaacs – Michigan State University Member Symposium
10:18 AM – 10:30 AM MST The future of insect science in crop protection  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: James Walgenbach – North Carolina State University Member Symposium
10:30 AM – 10:42 AM MST Consulting for compliance: A career guide for entomologist  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Ashlea Frank – Compliance Services International Member Symposium
10:42 AM – 10:54 AM MST Adaptive on the fly: Leveraging your entomological experience for a career maximum  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Henry Fadamiro – Texas A&M University Member Symposium
10:54 AM – 11:00 AM MST Break Location: Phoenix Convention Center, 121 C, PCC
11:00 AM – 11:20 AM MST Panel discussion Location: Phoenix Convention Center, 121 C, PCC Panelist: Pamela Bachman – Bayer Crop Science

Panelist: Bill Hendrix – Valent Biosciences Corporation Panelist: Jayme Williams – BASF Panelist: Hannah Joy Burrack – Michigan State University Panelist: Christopher T. McCullough (he/him/his) – Washington State Department of Agriculture Panelist: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS Panelist: Amanda Jacobson – Corteva Agriscience Panelist: Adam Gasper – Corteva Agriscience Panelist: Floyd Shockley – Smithsonian Institution Panelist: Leah Buchman – Bio.org
11:20 AM – 11:25 AM MST Closing remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Adekunle Adesanya (he/him/his) – Corteva Agriscience
8:00 AM – 12:00 PM MST Shifts in Soybean Pest Populations and Management in the Americas Organizer: Fikru J. Haile – Corteva Agriscience Organizer: Cesar Santos – Corteva Agriscience Member Symposium Plant-Insect Ecosystems
8:00 AM – 8:10 AM MST Introductory remarks Location: Phoenix Convention Center, 224 A Presenting Author: Fikru J. Haile – Corteva Agriscience
8:10 AM – 8:50 AM MST Shift in soybean lepidopteran and stink bug population and management challenges in Latin America  Location: Phoenix Convention Center, 224 A Presenting Author: Cesar Santos – Corteva Agriscience Co-Author: Jerson Guedes – Santa Maria University Member Symposium Plant-Insect Ecosystems
8:50 AM – 9:15 AM MST Shift in soybean pest population and management in southern US  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Fred R. Musser (he/him/his) – Mississippi State University Member Symposium Plant-Insect Ecosystems
9:15 AM – 9:30 AM MST

Break Location: Phoenix Convention Center, 224 A
9:30 AM – 9:55 AM MST Shifts in soybean pests in midwestern US  Location: Phoenix Convention Center, 224 A Presenting Author: Robert Koch – University of Minnesota Member Symposium Plant-Insect Ecosystems
9:55 AM – 10:20 AM MST Current pest status of <i>H. armigera</i>, <i>H. zea</i>, and other main pests in soybeans  Location: Phoenix Convention Center, 224 A Presenting Author: Renato Horikoshi – Bayer Crop Science Member Symposium Plant-Insect Ecosystems
10:20 AM – 10:35 AM MST Break Location: Phoenix Convention Center, 224 A
10:35 AM – 11:00 AM MST Changes and updates of crop protection and biologicals for soybean pest management in Latin America  Location: Phoenix Convention Center, 224 A Presenting Author: Fikru J. Haile – Corteva Agriscience Co-Author: Cristiane Muller – Corteva Agriscience Member Symposium Plant-Insect Ecosystems
11:00 AM – 11:25 AM MST Changes and current pest status of soybean nematodes and their management in LA  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Michael McCarville – BASF Member Symposium Plant-Insect Ecosystems
11:25 AM – 11:55 AM MST Panel discussion Location: Phoenix Convention Center, 224 A
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 224 A

Presenting Author: Fikru J. Haile – Corteva Agriscience
8:00 AM – 12:00 PM MST Current Advances in Acarology Organizer: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Organizer: Orlando Combata-Heredia (he/him/his) – The Ohio State University Member Symposium
8:00 AM – 8:04 AM MST Introductory remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida
8:04 AM – 8:16 AM MST The <i>Ruellia</i> erinose Mite (Eriophyidae: <i>Acalitus simplex</i>): A pest of the Mexican petunia (Acanthaceae: <i>Ruellia simplex</i>)  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Marcello De Giosa – University of Florida Co-Author: Livia Ataide – University of Florida Co-Author: Xingbo Wu (he/him/his) – University of Florida Co-Author: Ronald Ochoa – USDA-ARS Co-Author: Samuel Bolton – Florida Department of Agriculture and Consumer Services Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Member Symposium
8:16 AM – 8:28 AM MST Moulting mouthparts, imbibing blood: How does mouthpart musculature change across <i>Ixodes scapularis</i> life stages?  Location: Phoenix Convention Center, 226 C Presenting Author: Kaylin Chong – Harvard University Co-Author: Isobel Ronai – Harvard University Co-Author: Adrian Richter (he/him/his) – Okinawa Institute of Science and Technology Co-Author: Alexandre Casadei Ferreira – Okinawa Institute of Science and Technology Co-Author: Evan P. Economo – Okinawa Institute of Science and Technology Co-Author: Brian Farrell – Harvard University Member Symposium
8:28 AM – 8:40 AM MST Phoretic mites associated with ambrosia beetles in Florida avocados and their potential use in IPM  Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Marielle de Moraes Berto – University of Florida Co-Author: Terri Lynn Price-Baker – University of Florida Co-Author: Pasco B. Avery – University of Florida Co-Author: Christopher Dunlap – USDA Co-Author: Daniel Carrillo – University of Florida Member Symposium
8:40 AM – 8:52 AM MST The role of kinin neuropeptides in tick midgut: A fluorescently labeled kinin maps the cognate receptor to muscles and triggers peristalsis  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Jonathan Hernandez – Texas A&M University Co-Author: Caixing Xiong – Texas A&M University Co-Author: Patricia Pietrantonio – Texas A&M University Member Symposium
8:52 AM – 9:04 AM MST Potential of essential oils against the two-spotted spider mite, <i>Tetranychus urticae</i> Koch (Acari: Tetranychidae)  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Paola Villamarin – University of Florida Co-Author: Nurhayat Tabanca – USDA-ARS Co-Author: Maria Canon – University of Florida Co-Author: Isamar Sofia Reyes-Arauz (she/her/hers) – University of Florida Co-Author: Marcello De Giosa – University of Florida Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Member Symposium
9:04 AM – 9:14 AM MST Break Location: Phoenix Convention Center, 226 C
9:14 AM – 9:26 AM MST But what do they really eat? Adding DNA metabarcoding to stable isotope analysis to assess microarthropod diet  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Robin Andrews – University of Alaska Co-Author: Diana Wolf – University of Alaska Member Symposium

9:26 AM – 9:38 AM MST Spatial distribution of twospotted spider mites in cucumber high tunnels  Location: Phoenix Convention Center, 226 C Presenting Author: Leslie A. Aviles Lopez – Purdue University Co-Author: Laura L. Ingwell – Purdue University Member Symposium
9:38 AM – 9:50 AM MST Identification and mitigation of acarine pests of hemp (<i>Cannabis sativa</i>)  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Maria Canon – University of Florida Co-Author: Paola Villamarin – University of Florida Co-Author: Livia Ataide – University of Florida Co-Author: Marcello De Giosa – University of Florida Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Member Symposium
9:50 AM – 10:02 AM MST A survey of soil oribatid diversity and community structure in a Madrean sky island in southeastern Arizona, US  Location: Phoenix Convention Center, 226 C Presenting Author: Sofia Gonzalez Salazar – Arizona State University Co-Author: Jay E. Taylor – Arizona State University Member Symposium
10:02 AM – 10:14 AM MST Mitogenomics of the Uropodina  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Jeremy CB Naredo (he/him/his) – The Ohio State University Co-Author: Charlotte Benedict – The Ohio State University Co-Author: Isabel Pen – The Ohio State University Co-Author: Hans Klompen – The Ohio State University Member Symposium
10:14 AM – 10:24 AM MST Break Location: Phoenix Convention Center, 226 C
10:24 AM – 10:36 AM MST

Assessment of <i>Amblyseius swirskii</i> and <i>Neoseiulus cucumeris</i> for managing the invasive pest <i>Megalurothrips usitatus</i> in <i>Phaseolus vulgaris</i>  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Mariana Monteiro de Souza Barros – University of Florida Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Co-Author: Hugh Smith – University of Florida Member Symposium
10:36 AM – 10:48 AM MST Residual effect of commonly used fungicides in strawberries on <i>Amblyseius swirskii</i>, <i>Neoseiulus cucumeris</i>, and <i>Neoseiulus californicus</i> (Mesostigmata: Phytoseiidae)  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Allan Busuulwa – University of Florida Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Co-Author: Oscar E. Liburd – University of Florida Co-Author: Sriyanka Lahiri (she/her/hers) – University of Florida Member Symposium
10:48 AM – 11:00 AM MST Diversity and ecology of intertidal soil mites on the coast of Sonora, Mexico  Location: Phoenix Convention Center, 226 C Presenting Author: Daysi Yamileth Lopez Baltazar – Universidad de Sonora Member Symposium
11:00 AM – 11:15 AM MST First determination of a <i>Blunervirus</i> vector, a model study with blueberry necrotic ring blotch virus  Location: Phoenix Convention Center, 226 C Presenting Author: Aline Tassi – University of Florida Member Symposium
11:15 AM – 11:30 AM MST <i>Macrocheles muscaedomesticae</i> as vectors for entomopathogenic bacteria in <i>Drosophila</i>  Location: Phoenix Convention Center, 226 C Presenting Author: Emily Durkin – University of Tampa Member Symposium
11:30 AM – 11:45 AM MST

Revision of the <i>Brevipalpus californicus</i> complex  Location: Phoenix Convention Center, 226 C Presenting Author: Ronald Ochoa – USDA-ARS Member Symposium
11:45 AM – 11:50 AM MST Closing remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida
8:00 AM – 12:00 PM MST Enhancing Arthropod Mediated Ecosystem Services: Celebrating the Career of Doug Landis Organizer: Matthew E. O'Neal – Iowa State University Organizer: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Organizer: Jana C. Lee – USDA-ARS Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:00 AM – 8:15 AM MST Insect conservation in agricultural landscapes: From basic science to redesign of agricultural systems  Location: Phoenix Convention Center, 130 Presenting Author: Claudio Gratton – University of Wisconsin Co-Author: Randall Jackson – University of Wisconsin Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:15 AM – 8:30 AM MST Management systems, weeds, and pollinators in highly simplified agricultural landscapes  Location: Phoenix Convention Center, 130 Presenting Author: Fabian Menalled – Montana State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:30 AM – 8:45 AM MST Landscape effects on pest and natural enemies in prairie agroecosystems  Location: Phoenix Convention Center, 130 Presenting Author: Alejandro Costamagna – University of Manitoba Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:45 AM – 9:00 AM MST

CANCELLED: Evade or perish: Exploring the influence of predation on insect behavior  Location: Phoenix Convention Center, 130, PCC Presenting Author: Sara Hermann – The Pennsylvania State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:00 AM – 9:10 AM MST Break Location: Phoenix Convention Center, 130
9:10 AM – 9:25 AM MST Unravelling biodiversity trends in a changing world  Location: Phoenix Convention Center, 130 Presenting Author: Christie Bahlai – Kent State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:25 AM – 9:40 AM MST Applying ecology to the intersection of agriculture and renewable energy  Location: Phoenix Convention Center, 130 Presenting Author: Matthew E. O'Neal – Iowa State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:40 AM – 9:55 AM MST Landscape-scale design for ecosystem services: What do we know about decomposers?  Location: Phoenix Convention Center, 130 Presenting Author: Nathan Haan – University of Kentucky Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:55 AM – 10:10 AM MST Teaching the process of science through authentic practice  Location: Phoenix Convention Center, 130 Presenting Author: Megan Woltz – Lindenwood University Co-Author: Alison Albee – Lindenwood University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:10 AM – 10:20 AM MST Break Location: Phoenix Convention Center, 130

10:20 AM – 10:35 AM MST Community engaged research as an extension tool to yield urban greening benefits  Location: Phoenix Convention Center, 130 Presenting Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:35 AM – 10:50 AM MST The USDA Agricultural Research Service's (ARS) role in implementing biological control  Location: Phoenix Convention Center, 130, PCC Presenting Author: Jana C. Lee – USDA-ARS Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:50 AM – 11:05 AM MST Restoring functional farmland biodiversity with local and landscape management  Location: Phoenix Convention Center, 130 Presenting Author: Teja Tschamtko – Georg-August-University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
11:05 AM – 11:15 AM MST Closing remarks  Location: Phoenix Convention Center, 130 Presenting Author: Doug A. Landis – Michigan State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
11:15 AM – 11:45 AM MST Poster session Location: Phoenix Convention Center, 130
11:15 AM – 11:45 AM MST SD01: Adapting to changing methodology in a long-term experiment  Location: Phoenix Convention Center, 130, PCC Presenting Author: Stephanie Petrycki – Kent State University Co-Author: Katherine Manning – Kent State University Co-Author: Julia Perrone – Kent State University Co-Author: Doug A. Landis – Michigan State University Co-Author: Christie Bahlai – Kent State University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD02: Community preferences for vacant lot greening



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Caralee Shepard – The Ohio State University

Co-Author: Mary Rodriguez – The Ohio State University

Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD03: Double trouble: Fungicide consumption and parasite infection negatively affect bumble bees



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Emily Nadine Runnion (she/her/hers) – The Ohio State University

Co-Author: James P. Strange (he/him/his) – The Ohio State University

Co-Author: Ellen Klinger – The Ohio State University

Co-Author: Frances S. Sivakoff – The Ohio State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD04: Evaluation of ecosystem services provided by different flowering plant mixtures



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Cecil Montemayor Aizpurua – University of Manitoba

Co-Author: Yvonne Lawley – University of Manitoba

Co-Author: Jason Gibbs – University of Manitoba

Co-Author: Alejandro Costamagna – University of Manitoba

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD05: Family specific patterns of seasonal abundance and behavior in butterfly communities



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Grace E. Hirzel (she/her/hers) – North Dakota State University

Co-Author: Ashlyn Anderson – University of Arkansas

Co-Author: Erica L. Westerman, Ph.D. – University of Arkansas

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD06: From twigs to trees: How irrigation frequency impacts tree seedling survival in municipal parks



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Erika Wright (she/her/hers) – The Ohio State University

Co-Author: Chris Riley – Bartlett Tree Experts

Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD07: Functional diversity of Diptera in agroecosystems



Location: Phoenix Convention Center, 130, PCC

Presenting Author: DeShae Dillard (he/him/his) – Michigan State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD08: Honey bee apiary presence on plant-bee interactions and body conditions in prairie strips



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Katherine Borchardt – Iowa State University

Co-Author: Morgan Moore (she/her/hers) – Iowa State University

Co-Author: Randall Paul Cass (he/him/his) – Iowa State University

Co-Author: Matthew O'Neal – Iowa State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD09: How do cover crops affect agricultural insects? Insights from 30 years of research



Location: Phoenix Convention Center, 130

Presenting Author: Benjamin Iuliano – University of Wisconsin

Co-Author: Eugene Ohba – University of Wisconsin

Co-Author: Claudio Gratton – University of Wisconsin

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD10: Leveraging a public-private partnership to address technical and socioeconomic factors of an agrivoltaics system



Location: Phoenix Convention Center, 130

Presenting Author: Carl D. Bowling – Iowa State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD11: *Pardosa milvina* spiders from urban and rural origins exhibit similar responses to soil lead pollution



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Lucy Guarnieri – The Ohio State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD12: CANCELLED: Potential for livestock parasiticides to impact insects via plant uptake in pasture agroecosystems



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Holly E. Myers (she/her/hers) – University of Kentucky

Co-Author: Nathan Haan – University of Kentucky

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD13: Prairie strips and pest suppression: The curious case of ground-dwelling arthropods



Location: Phoenix Convention Center, 130

Presenting Author: Cynthia Fiser – Michigan State University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

11:15 AM – 11:45 AM MST

SD14: Using floral enhancements adjacent to Manitoba rotational farmland to support beneficial insects



Location: Phoenix Convention Center, 130

Presenting Author: Michael Killewald – University of Manitoba

Co-author: Alejandro Costamagna – University of Manitoba

Co-author: Yvonne Lawley – University of Manitoba

Co-author: Rob Gulden – University of Manitoba

Co-author: Jason Gibbs – University of Manitoba

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display

8:00 AM – 12:00 PM MST

Adapting to Endangered Species Act Pesticide Label Changes and Mitigations

Organizer: Christopher T. McCullough (he/him/his) – Washington State Department of Agriculture

Organizer: Downen Jocson (she/her/hers) – Washington State University

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

Science Policy



8:00 AM – 8:13 AM MST

FIFRA and the Endangered Species Act (ESA): ESA meet the other ESA



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Annie Krueger – Compliance Services International

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

Science Policy

8:13 AM – 8:26 AM MST

EPA insecticide strategy updates



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Kelly Tindall – Environmental Protection Agency

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

Science Policy

8:26 AM – 8:39 AM MST

Successful implementation of the ESA strategies: The role of the state lead pesticide agency



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Steven Dwinell, BCE – Vermont Agency of Agriculture, Food, and Markets

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

Science Policy

8:39 AM – 8:52 AM MST

Preparing for the challenges with outreach, compliance, and enforcement of ESA labels



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Neal Kittelson – Minnesota Department of Agriculture

Co-Author: Theresa Cira (she/her/hers) – Minnesota Department of Agriculture

Co-Author: Jamison Scholer – Minnesota Department of Agriculture

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

Science Policy

8:52 AM – 9:04 AM MST

Pesticide Stewardship Program, filling a void of uncertainty



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Christopher T. McCullough (he/him/his) – Washington State Department of Agriculture

Co-Author: Margaret Drennan – Washington State Department of Agriculture

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

9:04 AM – 9:16 AM MST

Registrant perspectives on ESA: Finding solutions for a complex issue



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Frank Wong – Bayer Crop Science

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

9:16 AM – 9:21 AM MST

Break

Location: Phoenix Convention Center, 122 A, PCC

9:21 AM – 10:01 AM MST

Panel discussion

Location: Phoenix Convention Center, 122 A, PCC

10:01 AM – 10:14 AM MST

USDA input and perspectives on ESA mitigation: Where we've been and where it's headed



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Elyssa Arnold – USDA

Co-author: Clayton Meyers – USDA

Co-author: Kimberly Nesci (she/her/hers) – USDA

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

10:14 AM – 10:27 AM MST

Challenges and complications implementing ESA mitigations in the mid-South: An independent crop consultant's perspective



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Hank Jones – C & J Ag Consulting

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

10:27 AM – 10:40 AM MST

Implementation of ESA mitigations: Developing localized solutions for diverse cropping systems in the Pacific Northwest



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Danielle Lightle – Oregon State University

Co-Author: Annie Krueger – Compliance Services International

Co-Author: Kathryn Rifenburg – Oregon Department of Agriculture

Co-Author: Gary Bahr – Washington State Department of Agriculture

Co-Author: Ryan DeWitt – National Marine Fisheries Service

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

10:40 AM – 10:53 AM MST

Local challenges and knowledge of pesticides and endangered species regulations from the Maryland

Pesticide Safety Education Program



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Michael Zhao – University of Maryland

Co-Author: Niranjana Krishnan – University of Maryland

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

10:53 AM – 11:06 AM MST

Endangered Species Act and urban pest management: How mandates and label changes will affect the pest control industry



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Sonja Thomas (she/her/hers) – Alabama Cooperative Extension System/Auburn University

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

11:06 AM – 11:19 AM MST

Endangered Species Act in extension and outreach



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Downen Jocson (she/her/hers) – Washington State University

Co-Author: Wendy Sue Wheeler – Washington State University

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
Science Policy

11:19 AM – 12:00 PM MST

Panel discussion

Location: Phoenix Convention Center, 122 A, PCC

8:00 AM – 12:00 PM MST

Current Research and Future Challenges for Management of Corn Pests

Organizer: Dalton Ludwick (he/him/his) – USDA-ARS Organizer: Aaron J. Gassmann – Iowa State University Member Symposium Plant-Insect Ecosystems	
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Dalton Ludwick (he/him/his) – USDA-ARS	
8:05 AM – 8:20 AM MST A multitrophic evaluation of western corn rootworm, corn, and <i>Beauveria bassiana</i> Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Abigail Lee Kropf (she/her/hers) – USDA-ARS Co-Author: Aaron J. Gassmann – Iowa State University Member Symposium Plant-Insect Ecosystems	
8:20 AM – 8:35 AM MST Flight phenology of <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) and insights into the moth origin based on hydrogen isotopes Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Eduardo S. Calixto – West Florida Research and Education Center Co-Author: Silvana V. Paula-Moraes – University of Florida Member Symposium Plant-Insect Ecosystems	
8:35 AM – 8:50 AM MST No strain, no gain: Why understanding <i>Spodoptera frugiperda</i> strains in the field matters for research and management Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Andie C. Miller – Texas A&M University Co-Author: Ashley E. Tessnow – Texas A&M University Co-Author: Robert L. Meagher, Jr. (he/him/his) – USDA-ARS Co-Author: Rod Nagoshi, Ph.D. – USDA-ARS Co-Author: Todd M. Gilligan – USDA-APHIS Co-Author: Spencer Behmer – Texas A&M University Co-Author: David L. Kerns – Texas A&M University Co-Author: Greg Sword – Texas A&M University Member Symposium Plant-Insect Ecosystems	
8:50 AM – 9:05 AM MST	

Impacts of the brassinosteroid synthesis pathway on western corn rootworm development Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Dalton Ludwick (he/him/his) – USDA-ARS Co-Author: Norman Best – USDA-ARS Co-Author: Bruce E. Hibbard – USDA-ARS Member Symposium Plant-Insect Ecosystems	
9:05 AM – 9:20 AM MST Utilizing entomopathogenic nematodes for biological control of western corn rootworm Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Abigail Lyons (she/her/hers) – University of Nebraska Co-author: Tom Powers – University of Nebraska Co-author: Carlos Martins – University of Nebraska Co-author: Eric Schwan Resende – University of Nebraska Co-author: Raven Myhre – University of Nebraska Co-author: Milan Chauhan – University of Nebraska Co-author: Randy Lloyd – University of Nebraska Co-author: Julie Ann Peterson – University of Nebraska Member Symposium Plant-Insect Ecosystems	
9:20 AM – 9:35 AM MST Ecological considerations for entomopathogenic nematode control of corn rootworms Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Adrian J. Pekarcik – USDA-ARS Co-Author: Chad Nielson – USDA-ARS Co-Author: Emma Von Hagel – South Dakota State University Co-Author: Jonah Worden – Dakota State University Co-Author: David I. Shapiro-Ilan – USDA-ARS Member Symposium Plant-Insect Ecosystems	
9:35 AM – 9:50 AM MST Break Location: Phoenix Convention Center, 127 A, PCC	
9:50 AM – 10:05 AM MST The risk of bionematicide seed treatments to entomopathogenic nematodes used in corn rootworm, <i>Diabrotica</i> spp. management Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Tuesday Kristiansen (she/her/hers) – University of Guelph Co-Author: David Hooker – University of Guelph	

Co-Author: Aaron J. Gassmann – Iowa State University Co-Author: Jocelyn L. Smith – University of Guelph Member Symposium Plant-Insect Ecosystems
10:05 AM – 10:20 AM MST Potential field evolved resistance of European corn borer to Bt traits in Connecticut  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Kelsey E. Fisher – Connecticut Agricultural Experiment Station Member Symposium Plant-Insect Ecosystems
10:20 AM – 10:35 AM MST Navigating the cornfield: Progress and future directions of <i>Helicoverpa zea</i> management  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Alexis Alsdorf – North Carolina State University Co-Author: Dominic Reisig – North Carolina State University Member Symposium Plant-Insect Ecosystems
10:35 AM – 10:50 AM MST Genomic variation associated with western corn rootworm resistance to transgenic <i>Bacillus thuringiensis</i> Cry3Bb1 corn  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Brad S. Coates – USDA-ARS Co-Author: Aaron J. Gassmann – Iowa State University Member Symposium Plant-Insect Ecosystems
10:50 AM – 11:05 AM MST On-going monitoring of resistance evolution in <i>Helicoverpa zea</i> to Bt toxins in the Carolinas  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Tim Bryant – Virginia Tech University Co-Author: Jeremy Greene – Clemson University Co-Author: Dominic Reisig – North Carolina State University Co-Author: Francis P.F. Reay-Jones – Clemson University Member Symposium Plant-Insect Ecosystems
11:05 AM – 11:20 AM MST Diversity of Vip3Aa resistance mechanisms in fall armyworm (<i>Spodoptera frugiperda</i>)  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Rajeev Roy – University of Tennessee

Co-Author: Dawson Kerns – University of Tennessee Co-Author: Fangneng Huang – Louisiana State University Co-Author: Fei Yang – University of Minnesota Co-Author: David L. Kerns – Texas A&M University Co-Author: Juan Luis Jurat-Fuentes (he/him/his) – University of Tennessee Member Symposium Plant-Insect Ecosystems
8:00 AM – 12:00 PM MST 10-min: P-IE, IPM - General 2 Moderator: Jhalendra P. Rijal (he/him/his) – University of California Moderator: Nathan Mercer – CDFA 10-Minute Presentation Plant-Insect Ecosystems
8:00 AM – 8:12 AM MST Developing a proactive management program for emerald ash borer in California  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Ricky Lara (he/him/his) – University of California Co-Author: Daniel Roberts – California Department of Food and Agriculture Co-Author: Vincent Maiquez – California Department of Food and Agriculture 10-Minute Presentation Plant-Insect Ecosystems
8:12 AM – 8:24 AM MST Climate change and pests: Emerging threats to California's tree crops  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Jhalendra P. Rijal (he/him/his) – University of California 10-Minute Presentation Plant-Insect Ecosystems
8:24 AM – 8:36 AM MST Effect of <i>Grevillea robusta</i> leaf extract in comparison with synthetic phytol on <i>Heterotermes indicola</i> Wasmann (Blattodea: Rhinotermitidae) and Its gut flagellates  Location: Phoenix Convention Center, 221 C Presenting Author: Naveeda Akhtar Qureshi – Quaid-i-Azam University Co-Author: Shanzae Tahir – Quaid-i-Azam University Co-Author: Eisha Ehsan Ehsan ul Haq – Quaid-i-Azam University 10-Minute Presentation Plant-Insect Ecosystems
8:36 AM – 8:48 AM MST

Potential use of fermenting bread dough as an attractant for monitoring of *Veronicella cubensis* (Pfeiffer)

(Stylommatophora: Veronicellidae)



Location: Phoenix Convention Center, 221 C

Presenting Author: Christopher Shogren – University of California

10-Minute Presentation Plant-Insect Ecosystems

8:48 AM – 9:00 AM MST

Protection from below: Silicon supplementation and entomopathogenic nematodes to manage turfgrass insects



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Tarikul Islam – Rutgers University

Co-Author: Matthew Steven Brown (he/him/his) – Rutgers University

Co-Author: Joseph R. Heckman – Rutgers University

Co-Author: Albrecht M. Koppenhöfer – Rutgers University

10-Minute Presentation Plant-Insect Ecosystems

9:00 AM – 9:12 AM MST

Break

Location: Phoenix Convention Center, 221 C

9:12 AM – 9:24 AM MST

Radiant® and Sequoia® performance as influenced by spray volume



Location: Phoenix Convention Center, 221 C

Presenting Author: Jesse M. Richardson – Corteva Agriscience

Co-Author: John C. Palumbo – University of Arizona

10-Minute Presentation Plant-Insect Ecosystems

9:24 AM – 9:36 AM MST

Revision of Varroa destructor economic injury levels and pathogens linked to honey bee (*Apis mellifera* L.) colony mortality.



Location: Phoenix Convention Center, 221 C

Presenting Author: Nuria Morfin – The University of British Columbia

Co-Author: Leonard J. Foster – The University of British Columbia

Co-Author: Ernesto Guzman-Novoa (he/him/his) – University of Guelph

Co-Author: Paul Van Westendorp – BC Ministry of Agriculture and Food

Co-Author: Robert W. Currie – University of Manitoba

Co-Author: Heather Higo – The British Columbia Honey Producers Association

10-Minute Presentation Plant-Insect Ecosystems

9:36 AM – 9:48 AM MST

Spotted lanternfly impacts on eastern U.S. forest plants: A mesocosm experiment



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Clayton Traylor – Temple University

Co-Author: Matthew Banks – Temple University

Co-Author: Joshua Caplan – Temple University

Co-Author: Sasha Eisenman – Temple University

Co-Author: Amy Freestone – Temple University

Co-Author: Chris LeClair – Temple University

Co-Author: Mark Swartz – The Pennsylvania State University

Co-Author: Brent Sewall – Temple University

10-Minute Presentation Plant-Insect Ecosystems

9:48 AM – 10:00 AM MST

Surface spray applications of non-repellent insecticides disinfest balled and burlapped nursery stock of red imported fire ants



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: David H. Oi – USDA-ARS

Co-Author: Rachel A. Atchison – USDA-ARS

Co-Author: Ronald Weeks – USDA-APHIS

10-Minute Presentation Plant-Insect Ecosystems

10:00 AM – 10:12 AM MST

Synergistic strategies: Fungicides and entomopathogenic nematodes in turfgrass pest control



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Matthew Steven Brown (he/him/his) – Rutgers University

Co-Author: Ming-Yi Chou – Rutgers University

Co-Author: Tarikul Islam – Rutgers University

Co-Author: Albrecht M. Koppenhöfer – Rutgers University

10-Minute Presentation Plant-Insect Ecosystems

10:12 AM – 10:24 AM MST

Break

Location: Phoenix Convention Center, 221 C

10:24 AM – 10:36 AM MST

The bacterial *Methyloburum extorquens* product TS201 induces multiple modes of action to reduce *Diabrotica virgifera virgifera* western corn rootworm feeding damage in maize



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Natalie Breakfield (she/her/hers) – NewLeaf Symbiotics

Co-Author: Man P. Huynh (he/him/his) – University of Missouri Co-Author: Bruce E. Hibbard – USDA-ARS Co-Author: Dalton Ludwick (he/him/his) – USDA-ARS Co-Author: Allison Jack – NewLeaf Symbiotics 10-Minute Presentation Plant-Insect Ecosystems
10:36 AM – 10:48 AM MST The effect of different trap colors and lures on capturing <i>Chrysobothris mali</i> (Coleoptera: Buprestidae) in California walnuts  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Samaneh Sakaki, Ph.D. (she/her/hers) – UCCE Stanislaus Co-Author: Jhalendra P. Rijal (he/him/his) – University of California 10-Minute Presentation Plant-Insect Ecosystems
10:48 AM – 11:00 AM MST Understanding pest population dynamics in squash: The role of cultivar selection and weather conditions  Location: Phoenix Convention Center, 221 C Presenting Author: Sanower Warsi, Ph.D. – Fort Valley State University Co-Author: Yinping Li Co-Author: Alvin M. Simmons – USDA-ARS Co-Author: George N. Mbata – Fort Valley State University 10-Minute Presentation Plant-Insect Ecosystems
11:00 AM – 11:12 AM MST Using a living mulch as an IPM tool to manage insect pests in cantaloupe  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Leo Kerner (he/him/his) – University of Maryland Co-Author: Cerruti Hooks – University of Maryland Co-Author: Alan Leslie – University of Maryland Co-Author: Dwayne D. Joseph, Ph.D. – University of Maryland 10-Minute Presentation Plant-Insect Ecosystems
11:12 AM – 11:24 AM MST Population genomics of red sunflower seed weevil, <i>Smicronix fulvus</i>  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Nicholas J. Miller – Illinois Institute of Technology Co-Author: Jarrad R. Prasifka – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems
11:24 AM – 11:36 AM MST Unveiling the underground: Prionus tile longhorn beetles in blueberries in North Carolina  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Lorena Lopez (she/her/hers) – North Carolina State University 10-Minute Presentation Plant-Insect Ecosystems
11:36 AM – 11:48 AM MST Characterizing lepidopteran moth species composition and their impact in floral hemp production systems  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Govinda Shrestha – Oregon State University Co-Author: Alison Merkle – Oregon State University Co-Author: Samikshya Pandey (she/her/hers) – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems
8:00 AM – 12:00 PM MST 10-min: P-IE, Chemical Ecology Moderator: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University Moderator: Christopher M. Ranger (he/him/his) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
8:00 AM – 8:12 AM MST A test of the sequential cues hypothesis in <i>Chrysobothris</i> flatheaded borers (Coleoptera: Buprestidae)  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University Co-Author: Karla Michele Addesso – Tennessee State University 10-Minute Presentation Plant-Insect Ecosystems
8:12 AM – 8:24 AM MST Can attract-and-kill suppress South American palm weevil populations in California?  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Mark S. Hoddle, Ph.D. D.Sc. (he/him/his) – University of California 10-Minute Presentation Plant-Insect Ecosystems
8:24 AM – 8:36 AM MST

Colorado potato beetle: Factors affecting pheromone communication and behavioral control



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Donald C. Weber – USDA-ARS

Co-Author: Ashot Khrimian – USDA-ARS

Co-Author: Filadelfo Guzman – USDA-ARS

Co-Author: Thomas P. Kuhar – Virginia Tech

Co-Author: Helene Doughty – Virginia Cooperative Extension

Co-Author: Ariela I. Haber – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

8:36 AM – 8:48 AM MST

Combining 2-pentylfuran repellent with an attract-and-kill component for managing spotted wing drosophila



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Binita Shrestha – Cornell University

Co-Author: Gregory M. Loeb – Cornell University

Co-Author: Dong H. Cha – USDA-ARS

Co-Author: Stephen P. Hesler – Cornell University

Co-Author: Gerry Bohmfalk – Scentry Biologicals

10-Minute Presentation Plant-Insect Ecosystems

8:48 AM – 9:00 AM MST

Delineating the effective zone of inhibition of SPLAT MCH-based semiochemical repellents for interrupting spruce beetle, *Dendroctonus rufipennis* (Coleoptera: Curculionidae), host searching and aggregation behaviors



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Jackson P. Audley (he/him/his) – USDA-Forest Service

Co-Author: Christopher Fettig – USDA-Forest Service

Co-Author: Jason Moan – USDA-Forest Service

Co-Author: Jessie Moan – USDA-Forest Service

Co-Author: Steven Munson – USDA-Forest Service

Co-Author: Leif Mortenson – USDA-Forest Service

Co-Author: Darren Blackford – USDA-Forest Service

Co-Author: Elizabeth Graham – USDA-Forest Service

Co-Author: Agenor Mafra-Neto – ISCA Technologies, Inc.

10-Minute Presentation Plant-Insect Ecosystems

9:00 AM – 9:12 AM MST

Break

Location: Phoenix Convention Center, 225 A, PCC

9:12 AM – 9:24 AM MST

Effects of conspecific and heterospecific neighbors on plant volatile emissions and arthropod visitation



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Arash F. Maleki – The Pennsylvania State University

Co-Author: Monica Kersch-Becker – The Pennsylvania State University

Co-Author: Rachael Shippee – Penn State University

10-Minute Presentation Plant-Insect Ecosystems

9:24 AM – 9:36 AM MST

I smell, therefore I react: Evaluating the performance of commercial lures on western flower thrips as potential tools for mass capture strategies in vegetable crops



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Deena Wael Husein, Ph.D. – USDA-ARS

Co-Author: Daniel Hasegawa – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

9:36 AM – 9:48 AM MST

Optimizing trap placement for a semiochemical-based cucumber beetle control strategy



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Demian A. Nunez – Virginia Tech

Co-Author: Thomas P. Kuhar – Virginia Tech

10-Minute Presentation Plant-Insect Ecosystems

9:48 AM – 10:00 AM MST

Over 30 years of research on bark beetle anti-aggregation pheromones: Myths and reality



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Darrell W. Ross (he/him/his) – North Dakota State University

10-Minute Presentation Plant-Insect Ecosystems

10:00 AM – 10:12 AM MST

Break

Location: Phoenix Convention Center, 225 A, PCC

10:12 AM – 10:24 AM MST

Spotted lanternflies respond to their own chemical signals used in lures in field studies



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Miriam F. Cooperband – USDA-APHIS

Co-Author: Kelly Murman – USDA-APHIS
10-Minute Presentation Plant-Insect Ecosystems
10:24 AM – 10:36 AM MST The impact of flight on subsequent semiochemical-mediated communication in the mountain pine beetle, <i>Dendroctonus ponderosae</i> (Coleoptera: Curculionidae: Scolytinae) 
Location: Phoenix Convention Center, 225 A, PCC
Presenting Author: Maya L. Evenden – University of Alberta
Co-Author: Kelsey Jones – Agriculture and Agri-Food Canada
Co-Author: Leanne N. Petro – University of Alberta
Co-Author: Antonia Elizabeth Musso – University of Alberta
Co-Author: Rahmatollah Rajabzadeh – University of Alberta
Co-Author: Guncha Ishangulyyeva – University of Alberta
Co-Author: Nadir Erbilgin – University of Alberta
10-Minute Presentation Plant-Insect Ecosystems
10:36 AM – 10:48 AM MST X-ray tomography for revealing the gallery architecture of Ambrosia beetles as influenced by stress-induced semiochemicals 
Location: Phoenix Convention Center, 225 A, PCC
Presenting Author: Christopher M. Ranger (he/him/his) – USDA-ARS
Co-Author: Jessi A. Raubenolt – The Ohio State University
Co-Author: Juan Carlos Cambroneró – University of Padova
Co-Author: Davide Rassati (he/him/his) – University of Padova
Co-Author: Michael E. Reding – USDA-ARS
10-Minute Presentation Plant-Insect Ecosystems
10:48 AM – 11:00 AM MST Assessing variation in floral scent and pollinators of the keystone plant species <i>Cirsium pitcheri</i> on its inflorescent heads with weevil <i>Larinus planus</i> predation 
Location: Phoenix Convention Center, 225 A, PCC
Presenting Author: Rina Talaba
Co-Author: Kay Havens – Chicago Botanic Gardens
Co-Author: Paul CaraDonna – Northwestern University
Co-Author: Nina Theis – Elms College
Co-Author: Pati Vitt – Lake County Forest Preserves
10-Minute Presentation Plant-Insect Ecosystems
11:00 AM – 11:12 AM MST

Conservation of the chemoreceptors mediating male- and female-produced sex pheromones in longhorned beetles (Coleoptera: Cerambycidae) 
Location: Phoenix Convention Center, 225 A, PCC
Presenting Author: Robert F. Mitchell (he/him/his) – The Pennsylvania State University
Co-Author: Kayla M. Hefner – University of Wisconsin
Co-Author: Cody M. Kessler – University of Wisconsin
Co-Author: Jothi K. Yuvaraj – Lund University
Co-Author: Terrence P. Sylvester – University of Memphis
Co-Author: Stephanie Haddad – University of Memphis
Co-Author: Rich H. Adams – University of Arkansas
Co-Author: Martin N. Andersson – Lund University
Co-Author: Duane D. McKenna – University of Memphis
10-Minute Presentation Plant-Insect Ecosystems
8:00 AM – 1:00 PM MST Entomological Collections Network Annual Meeting (Day 2) Location: Sheraton Phoenix Downtown, Phoenix Ballroom DE
Organizer: M. Andrew Johnston – Purdue University
Functions/Events/Meetings
8:00 AM – 4:00 PM MST CANCELLED: ACE Exam Prep Class and Testing Opportunity Location: Phoenix Convention Center, 129 A, PCC
Organizer: Willet Hossfeld, ICE-CCP (he/him/his) – Entomological Society of America
Workshop Certification
8:00 AM – 5:00 PM MST Speaker Practice Room Location: Phoenix Convention Center, 121 B
General Speaker Practice Room
8:00 AM – 5:00 PM MST Insect Decline and Scientific Societies: Ways All Entomologists Can Help Address This Grand Challenge
Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America
Organizer: Marianne Alleyne – University of Illinois
Organizer: Ricky Lara (he/him/his) – University of California
Organizer: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History
Organizer: Sajjan Grover – Bayer Crop Science
Organizer: Christine Elliott (she/her/hers) – Purdue University
Organizer: Silvana V. Paula-Moraes – University of Florida
Organizer: Sheina B. Sim (she/her/hers) – USDA-ARS



Organizer: Gagandeep Brar – Bayer Crop Science Organizer: Chris Halsch – State University of New York Program Symposium Workshop Science Policy
8:00 AM – 8:15 AM MST Introductory remarks  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Program Symposium Workshop Science Policy
8:15 AM – 10:00 AM MST Cluster 1: What societies are doing and how to get involved Location: Phoenix Convention Center, 124 AB
8:15 AM – 8:30 AM MST Professional Society-level efforts to address insect decline Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Program Symposium Science Policy
8:30 AM – 9:30 AM MST How are other scientific societies addressing insect decline/sustainability internally  Location: Phoenix Convention Center, 124 AB Presenting Author: Luke Tilley – Royal Entomological Society Presenting Author: Baldwyn Torto – International Center of Insect Physiology and Ecology Presenting Author: Rodrigo Feitosa – Brazilian Society of Entomology Presenting Author: Hardy Kern – American Bird Conservancy Moderator: Marianne Alleyne – University of Illinois Program Symposium Science Policy
9:30 AM – 10:00 AM MST How to get engaged with the International Union for Conservation of Nature (IUCN)  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Monika Bohm (she/her/hers) – Indianapolis Zoo Program Symposium Science Policy
10:00 AM – 10:15 AM MST Break Location: Phoenix Convention Center, 124 AB

10:15 AM – 12:30 PM MST Cluster 2: Communicating the story to the public and policymakers and building coalitions Location: Phoenix Convention Center, 124 AB
10:15 AM – 11:00 AM MST Engaging with farmers and ranchers  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Rudy Rice – Solutions from the Land Presenting Author: Anne Nielsen – Rutgers University Panelist: Christine Elliott (she/her/hers) – Purdue University Moderator: Erin Cadwalader (she/her/hers) – Entomological Society of America Program Symposium Science Policy
11:00 AM – 11:45 AM MST Engaging with public health  Location: Phoenix Convention Center, 124 AB Presenting Author: Ary Faraji, BCE – Salt Lake City Mosquito Abatement District Presenting Author: Kristina Lopez – North Shore Mosquito Abatement District Presenting Author: Charles Lubelczyk – MaineHealth Moderator: Ricky Lara (he/him/his) – University of California Program Symposium Science Policy
11:45 AM – 12:30 PM MST Engaging with industry  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Mark Krieger – Corteva Agriscience Presenting Author: Caydee E. Savinelli (she/her/hers) – Syngenta Presenting Author: Frank Wong – Bayer Crop Science Moderator: Sajjan Grover – Bayer Crop Science Program Symposium Science Policy
12:30 PM – 1:00 PM MST Break Location: Phoenix Convention Center, 124 AB
1:00 PM – 2:00 PM MST Breakout groups Location: Phoenix Convention Center, 124 AB
2:00 PM – 2:30 PM MST Breakout group reporting

Location: Phoenix Convention Center, 124 AB
2:30 PM – 4:00 PM MST Cluster 3: Empowering entomologists to help through data Location: Phoenix Convention Center, 124 AB
2:30 PM – 3:15 PM MST Workshop on how your longitudinal data can help the community  Location: Phoenix Convention Center, 124 AB Presenting Author: Will Kuhn – Discover Life in America Presenting Author: Christie Bahlai – Kent State University Presenting Author: Eliza Grames – Binghamton University Program Symposium Science Policy
3:15 PM – 3:45 PM MST Breakout groups by section to discuss data sets, challenges to data sharing Location: Phoenix Convention Center, 124 AB
3:45 PM – 4:00 PM MST Concluding remarks Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History
8:00 AM – 5:00 PM MST Developing a Roadmap for the Conservation of U.S. Native Bees Location: Phoenix Convention Center, 226 B Organizer: Ross C. Winton – Washington Department of Fish and Wildlife Organizer: Hollis Woodard – University of California Organizer: Sarina Jepsen – Xerces Society for Invertebrate Conservation Organizer: Saff Killingsworth – Xerces Society for Invertebrate Conservation Functions/Events/Meetings
8:30 AM – 11:30 AM MST Tour: Biocollections at Arizona State University  Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings
9:00 AM – 10:00 AM MST Entomology 2024 Program Committee Meeting Location: Sheraton Phoenix Downtown, Paradise Valley Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America Organizer: Rosina Romano, MTA, CMP, DES – Entomological Society of America

Functions/Events/Meetings Committee Meeting
9:00 AM – 10:00 AM MST Early Career Professional Committee Meeting Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton Organizer: Nicole F. Quinn – University of Florida Organizer: Anastasia M. Cooper (she/her/hers) – Auburn University Organizer: Scott T. O'Neal – Corteva Agriscience Functions/Events/Meetings Committee Meeting Early Career
9:00 AM – 10:00 AM MST Cloud Users Do It Better: An Introduction to Amazon Web Services With a Case Study Deploying Spatiotemporal Models for Entomology Location: Phoenix Convention Center, 125 AB, PCC Organizer: Timothy Farkas, Ph.D. – EcoData Technology Mini Workshop
9:00 AM – 12:00 PM MST Advancement and Future of Microbials as Part of Integrated Pest Management Organizer: Anamika Sharma (she/her/hers) – Florida A&M University Organizer: Shaohui Wu – The Ohio State University Organizer: Pasco B. Avery – University of Florida Organizer: Eric Clifton (he/him/his) – BioWorks Inc. Organizer: Lorenzo Rossi – University of Florida Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:00 AM – 9:05 AM MST Introductory remarks Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Anamika Sharma (she/her/hers) – Florida A&M University

9:05 AM – 9:25 AM MST Improving the rhizosphere microbiome in Florida citrus groves through mulching and cover crops to foster sustainable horticultural practices  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Lorenzo Rossi – University of Florida Co-Author: Pasco B. Avery – University of Florida Co-Author: Fox John-Paul – University of Florida Co-Author: Lukas Hallman – University of Florida Co-Author: John Santiago – USDA-ARS Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:25 AM – 9:45 AM MST The use of entomopathogenic nematodes in the advancement of IPM programs  Location: Phoenix Convention Center, 122 C Presenting Author: David I. Shapiro-Ilan – USDA-ARS Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:45 AM – 10:05 AM MST Conservation of entomopathogenic fungi in agroecosystems  Location: Phoenix Convention Center, 122 C Presenting Author: Mary Barbercheck – The Pennsylvania State University Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:05 AM – 10:25 AM MST Challenges and future needs of incorporating microbial pesticides in IPM  Location: Phoenix Convention Center, 122 C Presenting Author: Surendra Dara – Oregon State University Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:25 AM – 10:45 AM MST Break Location: Phoenix Convention Center, 122 C
10:45 AM – 11:05 AM MST How <i>Beauveria bassiana</i> became the keystone tool for bed bug management  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Nina Jenkins – ConidioTec LLC

Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:05 AM – 11:25 AM MST Cotton genotypes vary in foliar elicitation of plant defenses by fungal spores and subsequent effects on aphids  Location: Phoenix Convention Center, 122 C Presenting Author: Greg Sword – Texas A&M University Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:25 AM – 11:35 AM MST Discussion Location: Phoenix Convention Center, 122 C
11:35 AM – 11:40 AM MST Closing remarks Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Anamika Sharma (she/her/hers) – Florida A&M University
11:40 AM – 12:00 PM MST Panel discussion Location: Phoenix Convention Center, 122 C
9:00 AM – 12:00 PM MST Industry Perspective - Empowering Ag Through Technological Advancements in Biological Insect Control Organizer: Rosana Serikawa – Corteva Agriscience Organizer: Valeria Laurentis, Ph.D. – Corteva Agriscience Organizer: Monica B. Olson (she/her/hers) – Corteva Agriscience Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology 9:00 AM – 9:05 AM MST Introductory remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Monica B. Olson (she/her/hers) – Corteva Agriscience 9:05 AM – 9:20 AM MST Entomopathogenic fungi research: An agricultural overview  Location: Phoenix Convention Center, 126 B Presenting Author: Valeria Laurentis, Ph.D. – Corteva Agriscience Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:20 AM – 9:35 AM MST

Innovative insecticidal biological solutions  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Monica B. Olson (she/her/hers) – Corteva Agriscience Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:35 AM – 9:50 AM MST Baculovirus insecticides: Present and future - opportunities and challenges  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Paula G. Marçon, Ph.D. (she/her/hers) – AgBiTech Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:50 AM – 10:02 AM MST Break Location: Phoenix Convention Center, 126 B
10:02 AM – 10:17 AM MST Discovery, development, and commercialization of sprayable RNA-based biopesticides  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Kenneth Narva (he/him/his) – GreenLight Biosciences Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:17 AM – 10:32 AM MST Trends in the biological insecticide market: What makes a successful biocontrol product to meet grower needs  Location: Phoenix Convention Center, 126 B Presenting Author: Daniel Zommick, Ph.D. – Valent Biosciences Corporation Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:32 AM – 10:47 AM MST How environmental factors may influence the performance of biopesticides  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Jeremy Wagnitz – Certis Biologicals Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:47 AM – 10:59 AM MST Break Location: Phoenix Convention Center, 126 B

10:59 AM – 11:14 AM MST Putting the right drop in the right place: The role application has on biologics success  Location: Phoenix Convention Center, 126 B Presenting Author: Matthew Tarver – Bayer Crop Science Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:14 AM – 11:29 AM MST Advancing biological insecticides: Market acceptance, challenges, and innovative solutions  Location: Phoenix Convention Center, 126 B Presenting Author: Thais Rodrigues – Nufarm Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:29 AM – 11:54 AM MST Panel discussion Location: Phoenix Convention Center, 126 B
11:54 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Monica B. Olson (she/her/hers) – Corteva Agriscience
9:30 AM – 10:30 AM MST Enabling Students and Early Career Professionals to Pursue Leadership Location: Phoenix Convention Center, 128 AB, PCC Organizer: Flinn Martin O'Hara – University of Florida Organizer: Anastasia M. Cooper (she/her/hers) – Auburn University Organizer: Sajjan Grover – Bayer Crop Science Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Organizer: DeShae Dillard (he/him/his) – Michigan State University Panelist: Jacqueline M. Maille (she/her/hers) – Kansas State University Panelist: Edmund Norris – USDA-ARS Panelist: Laura Lavine – Washington State University Panelist: Michelle L. Boone (she/her/hers) – National Park Service Panelist: Cheri Abraham – Syngenta Panelist: Victoria Pickens (she/her/hers) – Kansas State University Mini Workshop Early Career Student
10:00 AM – 12:00 PM MST From <i>Ahasverus</i> to <i>Tribolium</i>: Exploring Pathways in Stored Products and Lessons for Insect Science Organizer: William R. Morrison, III (he/him/his) – USDA-ARS Organizer: Sabita Ranabhat (she/her/hers) – Kansas State University



Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:00 AM – 10:05 AM MST Introductory remarks Location: Phoenix Convention Center, 225 B, PCC Presenting Author: William R. Morrison, III (he/him/his) – USDA-ARS
10:05 AM – 10:20 AM MST Finding my place in entomology, the quest to solve world hunger  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Hannah E. Quellhorst, Ph.D. – Kansas State University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:20 AM – 10:35 AM MST Experimental evolution with <i>Tribolium castaneum</i>: Investigating the processes that influence rapid adaptation to novel environment  Location: Phoenix Convention Center, 225 B Presenting Author: Lily F. Durkee – Colorado State University Co-Author: Laure M. Olazcuaga – Colorado State University Co-Author: Brett A. Melbourne – University of Colorado Co-Author: Ruth Hufbauer – Colorado State University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:35 AM – 10:50 AM MST Leveraging transferrable skills and lesson learned in becoming an entomologist  Location: Phoenix Convention Center, 225 B Presenting Author: Deanna S. Scheff (she/her/hers) – USDA-ARS Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:50 AM – 11:00 AM MST Break Location: Phoenix Convention Center, 225 B
11:00 AM – 11:15 AM MST Insights into my stored product entomology journey, with lessons learned  Location: Phoenix Convention Center, 225 B Presenting Author: Tanja McKay – Arkansas State University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology

11:15 AM – 11:30 AM MST From graduate student to graduate dean: Creating your own path of proactive change  Location: Phoenix Convention Center, 225 B Presenting Author: Linda Mason, Ph.D. – Purdue University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
11:30 AM – 11:45 AM MST Well, how did I get here? Lessons learned from a career in stored product entomology  Location: Phoenix Convention Center, 225 B Presenting Author: James F. Campbell – USDA-ARS Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
11:45 AM – 12:00 PM MST Trails, pathways, and adaptations of a stored product entomologist  Location: Phoenix Convention Center, 225 B Presenting Author: Franklin Arthur, Ph.D. – Kansas State University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:00 AM – 12:00 PM MST IPM in the Digital Age: Using Big Data to Enhance Decision-making and Bridge Adoption Gaps Organizer: Emily Allyce Rampone – Washington State University Organizer: Diego Rincon – Washington State University Organizer: David Crowder – Washington State University Section Symposium Plant-Insect Ecosystems 10:00 AM – 10:03 AM MST Introductory remarks Location: Phoenix Convention Center, 126 C Presenting Author: Emily Allyce Rampone – Washington State University
10:03 AM – 10:23 AM MST Linking phenology models and monitoring data to improve planning of pest management programs  Location: Phoenix Convention Center, 126 C Presenting Author: Diego Rincon – Washington State University Co-Author: David Crowder – Washington State University Section Symposium Plant-Insect Ecosystems

10:23 AM – 10:43 AM MST The USA National Phenology Network's Pheno Forecasts predict seasonal activity in pest and invasive species to support decision making  Location: Phoenix Convention Center, 126 C Presenting Author: Theresa M. Crimmins, Ph.D. – USA National Phenology Network Co-Author: National Phenology Network Team USA – National Phenology Network Section Symposium Plant-Insect Ecosystems
10:43 AM – 11:03 AM MST Predicting pest population dynamics in Washington potatoes  Location: Phoenix Convention Center, 126 C Presenting Author: Emily Allyce Rampone – Washington State University Co-Author: Diego Rincon – Washington State University Co-Author: David Crowder – Washington State University Section Symposium Plant-Insect Ecosystems
11:03 AM – 11:23 AM MST Using remote sensing to understand landscape variation in pest risk  Location: Phoenix Convention Center, 126 C Presenting Author: Sara Emery – Cornell University Co-author: Jaclyn Eller – Cornell University Co-author: Katie Gold – Cornell University Section Symposium Plant-Insect Ecosystems
11:23 AM – 11:43 AM MST Economics and decision making: What can big data do and not do  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: David W. Onstad – Entomological Society of America Section Symposium Plant-Insect Ecosystems
11:43 AM – 11:58 AM MST Panel discussion Location: Phoenix Convention Center, 126 C
11:58 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 126 C Presenting Author: Emily Allyce Rampone – Washington State University

10:30 AM – 12:30 PM MST Ecology and Management of Natural Enemies in Urban Ecosystems Organizer: Caleb J. Wilson – University of Kentucky Organizer: Samuel F. Ward (he/him/his) – The Ohio State University Section Symposium Plant-Insect Ecosystems
10:30 AM – 10:32 AM MST Introductory remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Samuel F. Ward (he/him/his) – The Ohio State University
10:32 AM – 10:47 AM MST Using the seasonal phenology of natural enemies to improve IPM programs for scale insects  Location: Phoenix Convention Center, 126 A Presenting Author: Carlos Quesada – West Virginia University Section Symposium Plant-Insect Ecosystems
10:47 AM – 11:02 AM MST Understanding the interactions between commercial biopesticides and local coccinellids for crapemyrtle bark scale management  Location: Phoenix Convention Center, 126 A Presenting Author: Rodrigo Diaz – Louisiana State University Co-author: Giovana Matos Franco – Colorado State University Co-author: Yan Chen – Hammond Research Station, Louisiana State University Agricultural Center Co-author: Vinson Doyle – Louisiana State University Section Symposium Plant-Insect Ecosystems
11:02 AM – 11:17 AM MST Shifts in native lady beetle communities over a century following landscape change and establishment of exotic species  Location: Phoenix Convention Center, 126 A Presenting Author: Kayla I. Perry (she/her/hers) – The Ohio State University Co-Author: Christie Bahlai – Kent State University Co-Author: Timothy Assal – Kent State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Section Symposium Plant-Insect Ecosystems
11:17 AM – 11:32 AM MST

Predators in turfgrass: How various factors influence their abundance and behavior Location: Phoenix Convention Center, 126 A Presenting Author: Shimat Villanasery V. Joseph – University of Georgia Co-Author: Fawad Khan – University of Georgia Co-Author: Gurjit Singh – University of Georgia Section Symposium Plant-Insect Ecosystems
11:32 AM – 11:44 AM MST Break Location: Phoenix Convention Center, 126 A
11:44 AM – 11:59 AM MST Multi-trophic consequences of vermicompost in urban gardens Location: Phoenix Convention Center, 126 A Presenting Author: Kylie Fuoss – University of Illinois Co-Author: Carmen Blubaugh – University of Illinois Section Symposium Plant-Insect Ecosystems
11:59 AM – 12:14 PM MST The impact of land use on the density of <i>Bulimulus bonariensis</i> (Rafinesque) (Stylommatophora: Bulimulidae) and its parasitic mite, <i>Austreynetes</i> sp. nov. (Trombidiformes: Ereyetidae) Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Noah N. Barguez-arias (she/her/hers) – University of Florida Co-Author: Nicole F. Quinn – University of Florida Co-Author: Samuel Bolton – Florida Department of Agriculture and Consumer Services Section Symposium Plant-Insect Ecosystems
12:14 PM – 12:29 PM MST Opportunities to simultaneously manage pests and conserve arthropods in urban landscapes Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Caleb J. Wilson – University of Kentucky Co-Author: Zoë Katelyn York – University of Kentucky Co-Author: Benjamin Knowlton (he/him/his) – University of Kentucky Section Symposium Plant-Insect Ecosystems
12:29 PM – 12:30 PM MST Closing remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Samuel F. Ward (he/him/his) – The Ohio State University

10:30 AM – 12:30 PM MST 10-min: P-IE, Behavior, Genetics, and Diagnostics Moderator: Luke Hearon – The Ohio State University Moderator: Tyler J. Raszick – USDA-APHIS-PPQ Science & Technology 10-Minute Presentation Plant-Insect Ecosystems
10:30 AM – 10:42 AM MST Buzzdetect: A machine-learning tool for bioacoustic detection of flying insects Location: Phoenix Convention Center, 223 Presenting Author: Luke Hearon – The Ohio State University Co-Author: Reed M. Johnson – The Ohio State University 10-Minute Presentation Plant-Insect Ecosystems
10:42 AM – 10:54 AM MST eDNA and eRNA monitoring for honey bee pests and pathogens Location: Phoenix Convention Center, 223 Presenting Author: Leigh Boardman – University of Memphis Co-Author: Kaitlin R. Deutsch (she/her/hers) – University of Florida Co-Author: James D. Ellis – University of Florida 10-Minute Presentation Plant-Insect Ecosystems
10:54 AM – 11:06 AM MST Exploring the feasibility of radio transmitters for locating rare bumble bee (<i>Bombus</i> spp.) nests Location: Phoenix Convention Center, 223 Presenting Author: Jakob Tiler Goldner – West Virginia Division of Natural Resources Co-Author: Rick Doyle – West Virginia Division of Natural Resources Co-Author: Brian Gordon – West Virginia Division of Natural Resources Co-Author: Alexander Silvis – West Virginia Division of Natural Resources 10-Minute Presentation Plant-Insect Ecosystems
11:06 AM – 11:18 AM MST Lessons from across the pond: Great Britain’s attempts to eradicate <i>Ips typographus</i> in the face of unprecedented long distance dispersal Location: Phoenix Convention Center, 223, PCC Presenting Author: Max Blake, Ph.D. – Forest Research 10-Minute Presentation Plant-Insect Ecosystems
11:18 AM – 11:30 AM MST

Rainfall affects detection of invasive ant environmental DNA in water  Location: Phoenix Convention Center, 223, PCC Presenting Author: Lori Lach (she/her/hers) – James Cook University Co-Author: Samantha Tol – James Cook University Co-Author: Carl Shuetrim – James Cook University Co-Author: Peter Yeeles – James Cook University Co-Author: Cecilia Villacorta-Rath – James Cook University 10-Minute Presentation Plant-Insect Ecosystems
11:30 AM – 11:42 AM MST Source estimation and molecular diagnostics for an emerging pest in the Western hemisphere, the cotton jassid, <i>Amrasca biguttula</i>  Location: Phoenix Convention Center, 223, PCC Presenting Author: Tyler J. Raszick – USDA-APHIS-PPQ Science & Technology Co-Author: Shirley Cruz – USDA-APHIS Co-Author: Daniela Sanchez – USDA-APHIS Co-Author: Matthew Ciomperlik – USDA-APHIS Co-Author: Rebecca A. Clement (she/her/hers) – USDA-APHIS Co-Author: Todd M. Gilligan – USDA-APHIS 10-Minute Presentation Plant-Insect Ecosystems
11:42 AM – 11:54 AM MST The applications of machine learning in insect identification and classification on sticky card in agricultural setting  Location: Phoenix Convention Center, 223 Presenting Author: Jamal Hunter – University of Georgia Co-Author: Paul Severns – University of Georgia Co-Author: Angelita L. Acebes-Doria (she/her/hers) – USDA-ARS Co-Author: Glen Rains – University of Georgia Co-Author: Brett R. Blaauw – University of Georgia 10-Minute Presentation Plant-Insect Ecosystems
11:54 AM – 12:06 PM MST Tomodensitometry as a tool to detect and study xylophagous insects  Location: Phoenix Convention Center, 223 Presenting Author: Veronique Martel (she/her/hers) – Natural Resources Canada Co-Author: Sébastien Bélanger – Natural Resources Canada Co-Author: Simon Trudeau – Natural Resources Canada Co-Author: Christian Hebert – Natural Resources Canada

10-Minute Presentation Plant-Insect Ecosystems
12:06 PM – 12:18 PM MST Using qPCR to differentiate two co-occurring stem borers in sugarcane using eDNA from frass  Location: Phoenix Convention Center, 223, PCC Presenting Author: Hannah J. Penn, Ph.D. (she/her/hers) – USDA-ARS Co-Author: Alice A. Wright – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
12:18 PM – 12:30 PM MST Does host plants benefit from non-predatory effects of zoophytophagous predators against herbivores?  Location: Phoenix Convention Center, 223 Presenting Author: Ning Di – Beijing Academy of Agriculture and Forestry Sciences Co-Author: Su Wang 10-Minute Presentation Plant-Insect Ecosystems
11:00 AM – 12:00 PM MST An Overview of Research, Training, and Education Funding Opportunities in NSF's Directorate for Biological Sciences Location: Phoenix Convention Center, 128 AB Organizer: Patrick Abbot, Ph.D. – National Science Foundation Mini Workshop
11:00 AM – 12:00 PM MST A Brief Introduction to Machine Learning in R, With an End-to-end Example From Pest Management Location: Phoenix Convention Center, 125 AB, PCC Organizer: Alexander Blake – EcoData Technology Organizer: Robert Clark – EcoData Technology Organizer: Timothy Farkas, Ph.D. – EcoData Technology Mini Workshop
11:30 AM – 2:30 PM MST Tour: Biocollections at Arizona State University  Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings
12:00 PM – 1:30 PM MST Acarological Society of America Business Meeting Location: Phoenix Convention Center, 226 C, PCC

Organizer: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Functions/Events/Meetings	
12:00 PM – 1:30 PM MST Public Health Entomology for All (PHEFA) Educational Luncheon (Invitation Only) Location: Sheraton Phoenix Downtown, Encanto A Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Functions/Events/Meetings	
12:30 PM – 1:00 PM MST Student and ECP Volunteer Training Location: Phoenix Convention Center, North Ballroom Foyer Organizer: Danielle Tempesta – Entomological Society of America Functions/Events/Meetings General Early Career Student	
12:30 PM – 1:00 PM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America General Moderator Training	
12:30 PM – 2:00 PM MST Editor-in-Chief Meeting Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton Organizer: Jessica McEwan – Entomological Society of America Functions/Events/Meetings Committee Meeting Publications	
12:30 PM – 2:30 PM MST Entomology Games - Preliminary Round Location: Phoenix Convention Center, North Ballroom Organizer: David Plotkin – University of Florida Organizer: Cheri Abraham – Syngenta Functions/Events/Meetings Student	
12:30 PM – 2:30 PM MST Level up Your TAship: Empowering Tomorrow’s Educators of Insect Science Location: Phoenix Convention Center, 125 AB, PCC Organizer: David Serrano (he/him/his) – Broward College Organizer: Victoria Pickens (she/her/hers) – Kansas State University Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Panelist: David Serrano (he/him/his) – Broward College	

Panelist: Victoria Pickens (she/her/hers) – Kansas State University Panelist: Jacqueline M. Maille (she/her/hers) – Kansas State University Panelist: Shelby K. Kilpatrick (she/her/hers) – Texas A&M University Panelist: Melissa Reed – Oklahoma State University Panelist: Samantha Hittson – Oklahoma State University Panelist: Paulina Maldonado – University of Arizona Workshop Formal and Informal Teaching Early Career Student	
1:00 PM – 3:00 PM MST Emerging Trends in Insect-plant Interactions Organizer: Shubha Subramanyam – USDA-ARS Organizer: Sajjan Grover – Bayer Crop Science Organizer: Pritha Kundu – University of Nebraska Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
1:00 PM – 1:02 PM MST Introductory remarks Location: Phoenix Convention Center, 122 C Presenting Author: Shubha Subramanyam – USDA-ARS	
1:02 PM – 1:16 PM MST Sorting out the basis of defoliator resistance in soybean Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Wayne Parrott – University of Georgia Co-Author: Zenglu Li – University of Georgia Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
1:16 PM – 1:30 PM MST The effect of below-ground plant-microbe interactions and land management on plant-insect interactions Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Andrea M. Fethers – The Ohio State University Co-Author: Alison Bennett – The Ohio State University Co-Author: Karen Goodell (she/her/hers) – The Ohio State University Co-Author: Jacob Hopkins – The Ohio State University Co-Author: Frances S. Sivakoff – The Ohio State University Co-Author: Joshua Blakeslee – The Ohio State University Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
1:30 PM – 1:44 PM MST	

Examining gall morphology variation in sister species of gall-inducing tephritid flies  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Vincent Martinson – University of New Mexico Co-Author: Quinlyn Baine (she/her/hers) – University of New Mexico Co-Author: Ellen O. Martinson – University of New Mexico Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
1:44 PM – 1:58 PM MST Defensive duel: The role of fall armyworm "oral cues" in shaping sorghum defenses  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Sanket Shinde – University of Nebraska Co-Author: Pritha Kundu – University of Nebraska Co-Author: Joe Louis – University of Nebraska Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
1:58 PM – 2:12 PM MST Gene editing reveals novel functions of a salivary protein  Location: Phoenix Convention Center, 122 C Presenting Author: Gary Felton – The Pennsylvania State University Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
2:12 PM – 2:26 PM MST Convergent molecular evolution of a key innovation shapes toxin-mediated multitrophic interactions around milkweeds  Location: Phoenix Convention Center, 122 C Presenting Author: Simon Groen – University of California Co-Author: Perla Achi – University of California Co-Author: Adler Dillman – University of California Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
2:26 PM – 2:40 PM MST CANCELLED: When mushrooms bite back: How oyster mushroom (<i>Pleurotus</i> spp.) hunting strategies can impact fungus gnat (<i>Lycoriella ingenua</i>) pest management  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Grace Sward – Corteva Agriscience Co-author: Valerie Anderson – BioLine Agrosiences Co-author: Christopher M. Ranger (he/him/his) – USDA-ARS Co-author: Luis A. Canas – The Ohio State University

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
2:40 PM – 2:54 PM MST Lipid-mediated sorghum defense against sap-feeding aphids  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Pritha Kundu – University of Nebraska Co-Author: Heena Puri – Impetus Agriculture Inc. Co-Author: Kashish Verma (she/her/hers) – University of Nebraska Co-Author: Mary Roth – Kansas State University Co-Author: Ruth Welti – Kansas State University Co-Author: Joe Louis – University of Nebraska Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
1:00 PM – 3:00 PM MST 10-min: P-IE, Apiculture Moderator: Tonya F. Shepherd – Texas A&M University Moderator: Elizabeth M. Walsh (she/her/hers) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
1:00 PM – 1:12 PM MST <i>Nosema ceranae</i> infection alters honey bee (<i>Apis mellifera</i>) queen behavior and reproductive capacity  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Juliana Rangel – Texas A&M University Co-Author: Madison Marie Rowe – Texas A&M University Co-Author: Abigail Martinez – University of Texas Co-Author: Keegan Nichols – Texas A&M University Co-Author: Tonya F. Shepherd – Texas A&M University 10-Minute Presentation Plant-Insect Ecosystems
1:12 PM – 1:24 PM MST Bee viral dynamics in a Sierran wildflower system  Location: Phoenix Convention Center, 221 C Presenting Author: Nina Ariadne Sokolov (she/her/hers) – University of California Co-Author: Anna Hatzakis – University of California Co-Author: Seva Hatip – University of California Co-Author: Michael Boots – University of California 10-Minute Presentation Plant-Insect Ecosystems

1:24 PM – 1:36 PM MST

Comparing and assessing multi-locus genotypes (MLGs) between amitraz resistant and susceptible populations of *Varroa destructor*, an *Apis mellifera* ectoparasite.” 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Tonya F. Shepherd – Texas A&M University

Co-Author: Taylor Reams, Ph.D., M.S. (she/her/hers) – Washington State University

Co-Author: Frank D. Rinkevich, Jr. – USDA-ARS

Co-Author: Juliana Rangel – Texas A&M University

10-Minute Presentation Plant-Insect Ecosystems

1:36 PM – 1:48 PM MST

Do honey bee workers prefer virus-contaminated nectar in the field? 

Location: Phoenix Convention Center, 221 C

Presenting Author: Elizabeth M. Walsh (she/her/hers) – USDA-ARS

Co-Author: Joseph E. McCarthy – USDA-ARS

Co-Author: Michael Simone-Finstrom – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

1:48 PM – 2:00 PM MST

Does the time worker honey bees spend in cluster contribute to the transition from summer to winter bees? 

Location: Phoenix Convention Center, 221 C

Presenting Author: Gloria DeGrandi-Hoffman – USDA-ARS

Co-Author: Vanessa Corby-Harris – USDA-ARS

Co-Author: Christina M. Grozinger – The Pennsylvania State University

Co-Author: Meghan Milbrath – Michigan State University

Co-Author: Geoffrey Williams – Auburn University

Co-Author: Brandon Kingsley Hopkins, Ph.D., M.S. – Washington State University

10-Minute Presentation Plant-Insect Ecosystems

2:00 PM – 2:12 PM MST

Key findings from a three-year longitudinal study on the health and nutrition of honey bee colonies in the subtropical thornscrub biome of the Sonoran Desert in Southern Arizona, USA 

Location: Phoenix Convention Center, 221 C

Presenting Author: Vanessa Corby-Harris – USDA-ARS

Co-Author: Lucy Snyder – USDA-ARS

Co-Author: Jeena Davidson – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

2:12 PM – 2:24 PM MST

Managed bumble bee colonies influence pathogen and parasite prevalence in bumble bee communities 

Location: Phoenix Convention Center, 221 C

Presenting Author: Nezahat Pinar Barkan, Ph.D. – The Ohio State University

Co-Author: Amber Tripodi – USDA-APHIS

Co-Author: James P. Strange (he/him/his) – The Ohio State University

10-Minute Presentation Plant-Insect Ecosystems

2:24 PM – 2:36 PM MST

Propolis inhibits mite population growth in honey bee colonies 

Location: Phoenix Convention Center, 221 C

Presenting Author: Michael Simone-Finstrom – USDA-ARS

Co-Author: Frank D. Rinkevich, Jr. – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

2:36 PM – 2:48 PM MST

Sterol nutritional physiology in bees fed pollen diets 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Asmita Gautam – Mississippi State University

Co-Author: Mckaela E. Whilden (she/her/hers) – Mississippi State University

Co-Author: Pierre Lau (he/him/his) – USDA-ARS

Co-Author: Arathi Seshadri – USDA-ARS

Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University

10-Minute Presentation Plant-Insect Ecosystems

2:48 PM – 3:00 PM MST

Thermoregulation and population dynamics in honey bees under heat stress 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Jun Chen – Arizona State University

Co-Author: Jun Chen – Arizona State University

Co-Author: Adrian L. Fisher II, II – Arizona State University

Co-Author: Cahit Ozturk – Arizona State University

Co-Author: Jennifer H. Fewell – Arizona State University

Co-Author: Brian H. Smith – Arizona State University

Co-Author: Gloria DeGrandi-Hoffman – USDA-ARS

Co-Author: Yun Kang – Arizona State University

Co-Author: Jon F. Harrison – Arizona State University

10-Minute Presentation	Plant-Insect Ecosystems
1:00 PM – 3:00 PM MST 10-min: P-IE, Weed Biocontrol Moderator: Natalie M. West – USDA-ARS Moderator: Adryenna Danielle Perez – University of Texas	⬆
10-Minute Presentation	Plant-Insect Ecosystems
1:00 PM – 1:12 PM MST Impact and morphology of <i>Megastigmus transvaalensis</i> on the Brazilian peppertree in the Rio Grande Valley  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Adryenna Danielle Perez – University of Texas Co-Author: Christopher J. Vitek – University of Texas Co-Author: Daniel Flores – USDA-APHIS	
10-Minute Presentation	Plant-Insect Ecosystems
1:12 PM – 1:24 PM MST Herbivore priority effects and impacts on the Brazilian peppertree biological control agent <i>Pseudophilothrips ichini</i> (Thysanoptera: Phlaeothripidae)  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Dale Allen Halbritter (he/him/his) – USDA-ARS Co-Author: Jorge Leidi – USDA-ARS Co-Author: Carly Cogan – USDA-ARS Co-Author: Miriam Gaeta-Robles – USDA-ARS Co-Author: Kamarri Davis – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
1:24 PM – 1:36 PM MST Mass releases of <i>Megamelus scutellaris</i> in south Florida for biocontrol of waterhyacinth  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Sebastian W. Palmieri (he/him/his) – University of Florida Co-Author: Megan Reid – University of Maryland Co-Author: Lyn Gettys – University of Florida Co-Author: Melissa Smith – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
1:36 PM – 1:48 PM MST Progress towards the biological control of invasive knotweed species in Massachusetts 	

Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Jeremy Catalin Andersen – University of Massachusetts	
10-Minute Presentation	Plant-Insect Ecosystems
1:48 PM – 2:00 PM MST Variation in the impact of biological control on leafy spurge is associated with agent abundance  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Natalie M. West – USDA-ARS Co-Author: John F. Gaskin – USDA-ARS Co-Author: Tatyana A. Rand – USDA-ARS Co-Author: Joseph Milan – BLM	
10-Minute Presentation	Plant-Insect Ecosystems
1:30 PM – 3:00 PM MST 10-min: P-IE, Vectors of Plant Diseases Moderator: William Jacob Pitt – Washington State University Moderator: Brian W. Bahder – University of Florida	⬆
10-Minute Presentation	Plant-Insect Ecosystems
1:30 PM – 1:42 PM MST <i>Xyleborus bispinatus</i> and the chamber of secrets: Flight activity, symbiosis, and inside-gallery behaviors  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Octavio A. Menocal (he/him/his) – Florida Department of Agriculture and Consumer Services Co-Author: Daniel Carrillo – University of Florida	
10-Minute Presentation	Plant-Insect Ecosystems
1:42 PM – 1:54 PM MST Comparison of yellow dwarf disease incidence and aphid densities in wheat and barley cultivars  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Mritunjoy Barman, Ph.D. – University of Nebraska Co-Author: Nikhitha Gangavarapu – University of Nebraska Co-Author: Sofiya Arora – University of Nebraska Co-Author: Gary Hein – University of Nebraska Co-Author: Satyanarayana Tatineni – USDA-ARS Co-Author: Shaonpius Mondal – University of Nebraska	
10-Minute Presentation	Plant-Insect Ecosystems
1:54 PM – 2:06 PM MST	

SIR simulator 1.0: A stochastics, individual-based, spatially-explicit simulation model designed to improve management of insect transmitted plant pathogens  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Mark S. Sisterson – USDA-ARS Co-Author: Haitao Huang – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
2:06 PM – 2:18 PM MST Electropenetrography (EPG) of a phytoplasma vector, <i>Colladonus montanus reductus</i>  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: William Jacob Pitt – Washington State University Co-Author: Gina M. Angelella – USDA-ARS Co-Author: Adrian Marshall – USDA-ARS Co-Author: Tobin Northfield – Washington State University 10-Minute Presentation Plant-Insect Ecosystems
2:18 PM – 2:30 PM MST Gut-binding peptides as novel tools to block <i>Candidatus Liberibacter asiaticus</i> (CLas) transmission by <i>Diaphorina citri</i>  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Miltan Chandra Roy, Ph.D. – University of Florida Co-Author: Erik L. Roldan – University of Florida Co-Author: Lukasz L. Stelinski – University of Florida Co-Author: Bryony C. Bonning (she/her/hers) – University of Florida Co-Author: Kirsten Pelz Pelz-Stelinski (she/her/hers) – University of Florida 10-Minute Presentation Plant-Insect Ecosystems
2:30 PM – 2:42 PM MST Planthopper diversity on palms in Madagascar and the identification of putative phytoplasma vectors  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Brian W. Bahder – University of Florida Co-Author: Melody Bloch (she/her/hers) – University of Florida Co-Author: Fabian Pilet – CIRAD Co-Author: Ericka Helmick – University of Florida Co-Author: Charles R. Bartlett – University of Delaware 10-Minute Presentation Plant-Insect Ecosystems
1:30 PM – 3:30 PM MST

Empowering Tomorrow with Insect Science: I'm Finishing Grad School, Now What? Organizer: Lauren E. Fann (she/her/hers) – Almond Board of California Organizer: Abigail Welch – Semios Member Symposium Early Career Student
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 225 B Presenting Author: Lauren E. Fann (she/her/hers) – Almond Board of California
1:35 PM – 1:40 PM MST How to get paid to look for bugs: The importance of pest surveillance in government work  Location: Phoenix Convention Center, 225 B Presenting Author: Anna R. Pasternak – Virginia Department of Agriculture and Consumer Services Member Symposium Early Career Student
1:40 PM – 1:45 PM MST From research labs to city halls: Navigating medical entomology in local government  Location: Phoenix Convention Center, 225 B Presenting Author: Yaziri Gonzalez – City of Brownsville Member Symposium Early Career Student
1:45 PM – 1:50 PM MST How an introvert's journey from an early career scientist to making her mark in leadership roles  Location: Phoenix Convention Center, 225 B Presenting Author: Lina Bernaola – Texas A&M University Member Symposium Early Career Student
1:50 PM – 1:55 PM MST From daughter of an entomologist to finding my own entomological passions: How my journey has led me to being an entomologist in agtech  Location: Phoenix Convention Center, 225 B Presenting Author: Abigail Welch – Semios Member Symposium Early Career Student
1:55 PM – 2:00 PM MST

Utilizing the basics of entomology as the framework to oversee an entomology, disease and weed management research program  Location: Phoenix Convention Center, 225 B Presenting Author: Lauren E. Fann (she/her/hers) – Almond Board of California Member Symposium Early Career Student	
2:00 PM – 3:00 PM MST Panel discussion Location: Phoenix Convention Center, 225 B	
3:00 PM – 3:05 PM MST Closing remarks Location: Phoenix Convention Center, 225 B Presenting Author: Lauren E. Fann (she/her/hers) – Almond Board of California	
1:30 PM – 3:30 PM MST 10-min: SysEB, Microbiome and Symbiosis Moderator: Cristian Fernando Beza-Beza, Ph.D. – University of Minnesota Moderator: Lilian Caesar, Ph.D. (she/her/hers) – Indiana University 10-Minute Presentation Systematics, Evolution, and Biodiversity	^
1:30 PM – 1:42 PM MST A potential cost to environmental symbiont acquisition in the arboreal leaf-footed bug <i>Leptoglossus zonatus</i>  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Molly S. Hunter (she/her/hers) – University of Arizona Co-Author: Liam T. Sullivan – Entomology & Insect Science GIDP Co-Author: Suzanne E. Kelly (she/her/hers) – University of Arizona Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas 10-Minute Presentation Systematics, Evolution, and Biodiversity	
1:42 PM – 1:54 PM MST Decoding the symbiotic dynamics of the wood-degrading bess beetles (Coleoptera: Passalidae) and their gut microbiomes: Evolutionary and ecological insights  Location: Phoenix Convention Center, 226 A Presenting Author: Cristian Fernando Beza-Beza, Ph.D. – University of Minnesota Co-Author: Larry Jiménez-Ferbans – Universidad del Magdalena Co-Author: Aram Mikaelyan – North Carolina State University 10-Minute Presentation Systematics, Evolution, and Biodiversity	

1:54 PM – 2:06 PM MST Microbial symbioses in treehoppers: Multipartite masterpieces or muddled mess?  Location: Phoenix Convention Center, 226 A Presenting Author: Amanda M.V. Brown – Texas Tech University Co-Author: McKinlee M. Salazar – Texas Tech University Co-Author: Monica T. Pupo – Universidade de São Paulo 10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:06 PM – 2:18 PM MST Metabarcoding characterization of bacterial and fungal communities from diverse North American wild bees  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Trevor J. Sless – York University Co-Author: Katherine Chau – York University Co-Author: Phuong Nguyen (she/her/hers) – York University Co-Author: Makaylee Keao Crone (they/them/theirs) – York University Co-Author: Sandra Rehan – York University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:18 PM – 2:30 PM MST The dynamics of honey bee queen microbiome and its mobilome under stress  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Lilian Caesar, Ph.D. (she/her/hers) – Indiana University Co-Author: Edward Hsieh – University of Illinois Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Co-Author: Irene Newton – Indiana University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:30 PM – 2:42 PM MST Virome compositions in honey bee (<i>Apis mellifera</i>) and small carpenter bee (<i>Ceratina calcarata</i>) in response to various agricultural landscapes in New Hampshire  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Zixiao Zhao – Central State University Co-Author: Sandra Rehan (she/her/hers) – York University Co-Author: Hongmei Li-Byarlay – Central State University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:42 PM – 2:54 PM MST	

Sequence mining reveals host-associated forms, expression patterns, and evolutionary divergence of <i>Apis mellifera</i> filamentous virus  Location: Phoenix Convention Center, 226 A Presenting Author: Scott Comman – U.S. Geological Survey 10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:54 PM – 3:06 PM MST Range limits, symbiont diversity and specificity in fungus-gardening ants  Location: Phoenix Convention Center, 226 A Presenting Author: Jon Nicholas Seal – University of Texas Co-Author: Katrin Kellner (she/her/hers) – University of Texas 10-Minute Presentation Systematics, Evolution, and Biodiversity	
3:06 PM – 3:18 PM MST Myrmecochory: A global cross-kingdom convergence in angiosperms and stick insects (Phasmatodea)  Location: Phoenix Convention Center, 226 A Presenting Author: James A. Robertson – USDA-APHIS 10-Minute Presentation Systematics, Evolution, and Biodiversity	
3:18 PM – 3:30 PM MST Community assembly of the Hawaiian <i>Drosophila</i> microbiome  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Matthew J. Medeiros – University of Hawaii Co-Author: Sean Schoville – University of Wisconsin Co-Author: Kacie Kajihara – University of Hawaii Co-Author: Nicole Hynson – University of Hawaii Co-Author: Donald Price – University of Las Vegas Co-Author: Joanne Y. Yew – University of Hawaii 10-Minute Presentation Systematics, Evolution, and Biodiversity	
1:30 PM – 4:30 PM MST International Society of Hymenopterists Meeting Organizer: Natalie Dale-Skey – Natural History Museum, London Organizer: Craig Brabant (he/him/his) – University of Wisconsin-Madison Organizer: Yuanmeng Zhang – University of Edinburgh Organized Meeting	

1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Jessica Awad (she/her/hers) – Florida Museum of Natural History	
1:35 PM – 2:15 PM MST UCEs, LCGs and beyond: Current and emerging methods for unraveling Hymenoptera phylogeny and evolution  Location: Phoenix Convention Center, 127 A Presenting Author: Michael G. Branstetter – USDA-ARS Organized Meeting	
2:15 PM – 2:45 PM MST Discussion Location: Phoenix Convention Center, 127 A	
2:45 PM – 2:50 PM MST Closing remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Jessica Awad (she/her/hers) – Florida Museum of Natural History	
2:50 PM – 4:30 PM MST Social Location: Phoenix Convention Center, 127 A	
1:30 PM – 4:30 PM MST Expanding Education in Entomology: Advocacy for the Underrepresented Communities and Youth in STEM Organizer: Erin Harris – Texas A&M University Organizer: Sienna McPeck – Texas A&M University Organizer: Shelby K. Kilpatrick (she/her/hers) – Texas A&M University Organizer: Lauren Beebe (she/her/hers) – Texas A&M University Organizer: Tammy Lee Bouldin (she/her/hers) – Texas A&M University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion	
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Erin Harris – Texas A&M University	
1:35 PM – 1:50 PM MST Informal insect experiences positively impact everyone 	

Location: Phoenix Convention Center, 221 A Presenting Author: Andrine A. Shufran (she/her/hers) – Oklahoma State University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
1:50 PM – 2:05 PM MST Teamwork makes the dream work: First-hand success story of diversity and inclusion in STEM  Location: Phoenix Convention Center, 221 A Presenting Author: Jordan Smink – Mississippi State University Co-Author: Heather Jordan – Mississippi State University Co-Author: Cedric Gainwell – Mississippi State University Co-Author: Tanner Laird – Mississippi State University Co-Author: Garrett Lofton – Mississippi State University Co-Author: Sam Warren – Mississippi State University Co-Author: Casey Flint – Texas A&M University Co-Author: Chelsea Miranda – Howard Payne University Co-Author: Rachel Ann McNeal – Texas A&M University Co-Author: Chris Dallager (he/him/his) – Mississippi State University Co-Author: Christine Williams – Mississippi State University Co-Author: Jeffery Tomberlin – Texas A&M University Co-Author: C. Anguiano – Texas A&M University Co-Author: Jordan Parkins – Texas A&M University Co-Author: A. Powell – Texas A&M University Co-Author: K. Gibson – Texas A&M University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
2:05 PM – 2:20 PM MST Increasing engagement of first-generation students and underrepresented communities in entomology research through Course-based Undergraduate Research Experiences (CUREs)  Location: Phoenix Convention Center, 221 A Presenting Author: Anthony Auletta – University of Florida Co-Author: Jason Lee Williams – University of Florida Co-Author: John S. LaPolla, Ph.D. – Towson University Co-Author: Andrea Lucky – University of Florida Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
2:20 PM – 2:25 PM MST Break Location: Phoenix Convention Center, 221 A
2:25 PM – 2:40 PM MST Creative outreach: Using art to foster understanding of entomology at Bug Bowl 

Location: Phoenix Convention Center, 221 A Presenting Author: Emily Justus – Purdue University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
2:40 PM – 2:55 PM MST Insect Expo as a springboard for creating the next generation of entomologists  Location: Phoenix Convention Center, 221 A Presenting Author: Wizzie Brown, BCE – Texas A&M University Co-Author: Molly Keck, BCE – Texas A&M University Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
2:55 PM – 3:00 PM MST Break Location: Phoenix Convention Center, 221 A
3:00 PM – 3:15 PM MST Lessons from Loam: Experiences and advice for designing and publishing educational board games  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Max Helmberger (he/him/his) – Michigan State University Co-Author: Timothy P. Lampasona – Vassar College Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
3:15 PM – 3:30 PM MST Diversity beyond insects in entomology: Examples from an HSI  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Alexander Orfinger – University of Florida Section Symposium Formal and Informal Teaching Diversity, Equity, and Inclusion
3:30 PM – 4:10 PM MST Panel discussion Location: Phoenix Convention Center, 221 A
4:10 PM – 4:15 PM MST Closing remarks Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Erin Harris – Texas A&M University
1:30 PM – 4:30 PM MST Ornamental Entomology

Organizer: Thomas Whitney – The Davey Tree Expert Company Organizer: Adam Baker – The Davey Tree Expert Company Organizer: Chris Riley – Bartlett Tree Experts	⬆
Member Symposium Plant-Insect Ecosystems	
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Thomas Whitney – The Davey Tree Expert Company	
1:35 PM – 1:50 PM MST Flight dispersal patterns of <i>Xylosandrus germanus</i> and <i>Anisandrus maiche</i> (Coleoptera: Curculionidae) among flooded trees  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Julie Baniszewski – USDA-ARS Co-Author: Alejandro Del-Pozo – Virginia Tech Co-Author: Michael E. Reding – USDA-ARS Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS	
Member Symposium Plant-Insect Ecosystems	
1:50 PM – 2:05 PM MST Evaluation of entomopathogenic nematodes as a management tactic against ambrosia beetles  Location: Phoenix Convention Center, 222 A Presenting Author: Kyle Slusher – USDA-ARS Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS Co-Author: David I. Shapiro-Ilan – USDA-ARS	
Member Symposium Plant-Insect Ecosystems	
2:05 PM – 2:20 PM MST Efficacy of <i>Aphidoletes</i> predator releases to mitigate aphid populations on linden street trees  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Thomas Whitney – The Davey Tree Expert Company Co-Author: A.D. Ali – The Davey Tree Expert Company	
Member Symposium Plant-Insect Ecosystems	
2:20 PM – 2:35 PM MST Assessing natural enemy diversity and abundance in urban forest habitats  Location: Phoenix Convention Center, 222 A Presenting Author: Jeremy Slone – Bartlett Tree Experts	

Co-Author: Isabel Marez – Bartlett Tree Experts
Member Symposium Plant-Insect Ecosystems
2:35 PM – 2:50 PM MST Management of staining associated with the black olive tree in Florida and the Caribbean  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: A.D. Ali – The Davey Tree Expert Company
Member Symposium Plant-Insect Ecosystems
2:50 PM – 3:00 PM MST Break Location: Phoenix Convention Center, 222 A
3:00 PM – 3:15 PM MST Update on an invasion: Phenology, mating disruption and chemical control of the box tree moth in the US  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Alejandro Del-Pozo – Virginia Tech Co-author: David J. Rivera (he/him/his) – Virginia Tech Co-author: Julie Brindley – Virginia Tech Co-author: Matthew Havers – IR4 Project Co-author: Cristi Palmer – IR4 Project Co-author: Phillip A. Lewis – USDA-APHIS Co-author: Gregory S. Simmons – USDA-APHIS Co-author: Ignacio Baez – USDA-ARS
Member Symposium Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST The hurdles of horned oak gall wasp management: Next steps to understanding the efficacy issue  Location: Phoenix Convention Center, 222 A Presenting Author: Adam Baker – The Davey Tree Expert Company Co-Author: Don Grosman – Arborjet Inc. Co-Author: Emmett Muennink – Arborjet Inc. Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS
Member Symposium Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST Exploring potential applications of paclobutrazol in ornamental landscape pest control  Location: Phoenix Convention Center, 222 A

Presenting Author: Kendra Wagner – Rainbow Ecoscience Co-Author: Adam Dale – University of Florida Member Symposium Plant-Insect Ecosystems	
3:45 PM – 4:00 PM MST Recent advancements in products & equipment in tree health care  Location: Phoenix Convention Center, 222 A Presenting Author: Don Grosman – Arborjet Inc. Member Symposium Plant-Insect Ecosystems	
4:00 PM – 4:15 PM MST No neonicotinoids, now what? Alternative chemistries for challenging urban tree and shrub pests  Location: Phoenix Convention Center, 222 A Presenting Author: Chris Riley – Bartlett Tree Experts Co-Author: Michael Raupp – University of Maryland Co-Author: mark scott – Bartlett Tree Experts Co-Author: Paula Shrewsbury – University of Maryland Co-Author: Mark Ware – Rainbow Ecoscience Member Symposium Plant-Insect Ecosystems	
1:30 PM – 4:30 PM MST Leafhoppers in North America Organizer: Berenice Romero (she/her/hers) – Louisiana State University Organizer: Gina M. Angelella – USDA-ARS Organizer: Edel Perez-Lopez – Université Laval Organizer: Sean M. Prager, Ph.D., FRES – University of Saskatchewan Member Symposium Plant-Insect Ecosystems	
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Berenice Romero (she/her/hers) – Louisiana State University	

1:35 PM – 1:50 PM MST The fate of <i>Empoasca fabae</i> : Born to die in Canada?  Location: Phoenix Convention Center, 131 B Presenting Author: Edel Perez-Lopez – Université Laval Co-Author: Abraao Almeida-Santos – Université Laval Member Symposium Plant-Insect Ecosystems	
1:50 PM – 2:05 PM MST A tripartite battle: Uncovering interactions among cranberries, phytoplasmas, and leafhoppers  Location: Phoenix Convention Center, 131 B Presenting Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Co-Author: James Polashock – USDA-ARS Member Symposium Plant-Insect Ecosystems	
2:05 PM – 2:20 PM MST Unraveling the host range and behavior of aster leafhoppers in western Canada  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Berenice Romero (she/her/hers) – Louisiana State University Co-author: Tim Dumonceaux – Agriculture and Agri-Food Canada Co-author: Joanna Rojek – University of Saskatchewan Co-author: Tyler Wist – Agriculture and Agri-Food Canada Co-author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan Member Symposium Plant-Insect Ecosystems	
2:20 PM – 2:35 PM MST From nature to lab: Brochosomes paving the way for future materials  Location: Phoenix Convention Center, 131 B Presenting Author: Elizabeth Bello – University of Illinois Co-Author: Marianne Alleyne – University of Illinois Member Symposium Plant-Insect Ecosystems	

2:35 PM – 2:50 PM MST Beet leafhopper and the spread of multiple pathogens in the Pacific Northwest of the USA  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Tiziana Oppedisano (she/her/hers) – Montana State University Co-Author: Silvia Rondon – Oregon State University Member Symposium Plant-Insect Ecosystems
2:50 PM – 3:00 PM MST Break Location: Phoenix Convention Center, 131 B
3:00 PM – 3:15 PM MST Assessing seasonal host use and pathogen transmission by beet leafhopper (<i>Circulifer tenellus</i>) in vegetable and hemp crop systems  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Camille Wagstaff – Washington State University Co-Author: David Crowder – Washington State University Member Symposium Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST Exploring chemosensory receptors in Cicadellidae leafhoppers  Location: Phoenix Convention Center, 131 B Presenting Author: William Walker – USDA-ARS Co-Author: Katherine Easterling – USDA-ARS Member Symposium Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST X-Force: Developing an integrated pest management program for the leafhopper vectors of X-disease  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Adrian Marshall – USDA-ARS Co-author: Abigail Clarke – Washington State University Co-author: Cesar A. Reyes Corral (he/him/his) – Washington State University Co-author: Tobin Northfield – Washington State University Co-author: Rodney Cooper – USDA-ARS Member Symposium Plant-Insect Ecosystems
3:45 PM – 4:00 PM MST

The complex molecular genetics of the X-disease pathosystem: Differentially expressed genes in two <i>Colladonus</i> species infected and not infected with <i>Ca. Phytoplasma pruni</i>  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Katherine Easterling – USDA-ARS Co-Author: Rodney Cooper – USDA-ARS Co-Author: Marco Pitino – USDA-ARS Co-Author: Adrian Marshall – USDA-ARS Co-Author: William Walker – USDA-ARS Member Symposium Plant-Insect Ecosystems
4:00 PM – 4:15 PM MST Unveiling the molecular mechanisms underlying the effects of beet curly top virus on beet leafhopper performance  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jinlong Han – Colorado State University Co-author: Maria Paula Mejia – Colorado State University Co-author: Punya Nachappa – Colorado State University Member Symposium Plant-Insect Ecosystems
4:15 PM – 4:25 PM MST Discussion Location: Phoenix Convention Center, 131 B
4:25 PM – 4:30 PM MST Closing remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Berenice Romero (she/her/hers) – Louisiana State University
1:30 PM – 4:30 PM MST Forecasting Invasive Insect Species: Integrating Climate Change Dynamics of Today and Tomorrow Organizer: Julian R. Golec (he/him/his) – Corteva Agriscience Organizer: Leonardo David Salgado – Cornell University Section Symposium Plant-Insect Ecosystems
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Julian R. Golec (he/him/his) – Corteva Agriscience
1:35 PM – 1:55 PM MST Strengthen invasive species management through regional networks 

Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Deborah Grantham – Cornell University Section Symposium Plant-Insect Ecosystems
1:55 PM – 2:15 PM MST Real-time forecasts of phenology and climate-based establishment risk for invasive insects  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Brittany Barker – Oregon State University Co-Author: Matthew Baur – University of California Co-Author: Len Coop – Oregon State University Co-Author: Silvia Rondon – Oregon State University Section Symposium Plant-Insect Ecosystems
2:15 PM – 2:35 PM MST Using insect phenology and host preferences, weather and climate records, and remote sensing to detect forest canopy disturbances  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Therese M. Poland (she/her/hers) – USDA-Forest Service Co-author: Brian Sturtevant – USDA-Forest Service Co-author: Matthew Garcia – University of Wisconsin Co-author: Clay Morrow – USDA-Forest Service Co-author: Andrew Liebhold – USDA-Forest Service Co-author: Barry Wilson – USDA-Forest Service Section Symposium Plant-Insect Ecosystems
2:35 PM – 2:50 PM MST Break Location: Phoenix Convention Center, 126 A, PCC
2:50 PM – 3:10 PM MST Investigating and modeling the impacts of emerging agricultural pests in the face of climate change with SAFARIS  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Yu Takeuchi – North Carolina State University Co-Author: Amber Tripodi – USDA-APHIS Section Symposium Plant-Insect Ecosystems
3:10 PM – 3:30 PM MST

Can increased emphasis on the foraging ecology of classical biological control agents improve the management of invasive pests under global change in managed and natural ecosystems?  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Todd David Johnson (he/him/his) – Louisiana State University Co-Author: Paul K. Abram – AAFC Co-Author: Ryan Lee Paul – Oregon State University Section Symposium Plant-Insect Ecosystems
3:30 PM – 3:50 PM MST Understanding the impact of climate change on classical biological control of invasive emerald ash borer and possible mitigations  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Jian Duan – USDA-ARS Section Symposium Plant-Insect Ecosystems
3:50 PM – 4:10 PM MST Spotted lanternfly's tenth anniversary in North America: What's working and what lies ahead  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Eric Clifton (he/him/his) – BioWorks Inc. Section Symposium Plant-Insect Ecosystems
1:30 PM – 4:30 PM MST Taxon-Immersion Courses: Sustaining and Inspiring Arthropod Diversity Science Organizer: Jason Lee Williams – University of Florida Organizer: Marek L. Borowiec (he/him/his) – Colorado State University Organizer: Andrea Lucky – University of Florida Section Symposium Systematics, Evolution, and Biodiversity
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 131 C Presenting Author: Andrea Lucky – University of Florida
1:35 PM – 1:50 PM MST The Bee Course: The past, present and future of a flagship course on wild bees  Location: Phoenix Convention Center, 131 C Presenting Author: Bryan N. Danforth – Cornell University Section Symposium Systematics, Evolution, and Biodiversity

1:50 PM – 2:05 PM MST How to make a taxon-immersion course count: Key components of the intensive three-day Invasive Ant Boot Camp  Location: Phoenix Convention Center, 131 C Presenting Author: Andrea Lucky – University of Florida Co-Author: Jason Lee Williams – University of Florida Section Symposium Systematics, Evolution, and Biodiversity
2:05 PM – 2:20 PM MST Ant course: Fostering the training and transcultural collaboration of the next generation of ant scientists  Location: Phoenix Convention Center, 131 C Presenting Author: Brian Lee Fisher (he/him/his) – California Academy of Sciences Section Symposium Systematics, Evolution, and Biodiversity
2:20 PM – 2:35 PM MST With the powers of biocontrol and taxonomy combined.... <i>Trissolcus</i> ID workshops  Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Elijah Talamas – Florida State Collection of Arthropods Co-author: Kim Alan Hoelmer (he/him/his) – USDA-ARS Co-author: Matthew Buffington – USDA-ARS Section Symposium Systematics, Evolution, and Biodiversity
2:35 PM – 2:45 PM MST Break Location: Phoenix Convention Center, 131 C
2:45 PM – 3:00 PM MST Effective strategies for integrating field safety into your insect diversity course  Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Robin M. Verble (she/her/hers) – Missouri University of Science and Technology Section Symposium Systematics, Evolution, and Biodiversity
3:00 PM – 3:15 PM MST Heteroptera immersion abroad and at home: Lessons learned from the “Biodiversity of True Bugs” short courses  Location: Phoenix Convention Center, 131 C Presenting Author: Christiane Weirauch – University of California

Section Symposium Systematics, Evolution, and Biodiversity
3:15 PM – 3:30 PM MST Cricket course: Hands-on training in Ensifera identification, ecology, behavior, and bioacoustics  Location: Phoenix Convention Center, 131 C Presenting Author: Hojun Song – Texas A&M University Section Symposium Systematics, Evolution, and Biodiversity
3:30 PM – 3:45 PM MST The Bark Beetle Academy and bark & ambrosia beetle taxonomy training  Location: Phoenix Convention Center, 131 C Presenting Author: Sarah Smith – Michigan State University Co-Author: Jiri Hulcr – University of Florida Co-Author: Marc F. DiGirolomo – USDA-Forest Service Co-Author: Robert J. Rabaglia – Maryland Department of Agriculture Co-Author: E. R. Hoebeke – University of Georgia Section Symposium Systematics, Evolution, and Biodiversity
3:45 PM – 4:00 PM MST Discussion Location: Phoenix Convention Center, 131 C
4:00 PM – 4:05 PM MST Closing remarks Location: Phoenix Convention Center, 131 C Presenting Author: Andrea Lucky – University of Florida
1:30 PM – 5:30 PM MST Macrophotography Workshop Location: Phoenix Convention Center, 128 AB Organizer: Ian M. Wright (he/him/his) – Museum of Riverside Workshop
1:30 PM – 5:30 PM MST Biology and Conservation of Solitary, Ground-nesting Bees Organizer: Bryan N. Danforth – Cornell University Organizer: Michael Ulyshen – USDA-Forest Service Organizer: Alexandra Harmon-Threatt – University of Illinois Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 130 Presenting Author: Bryan N. Danforth – Cornell University	
1:35 PM – 1:47 PM MST Chasing a little-known fairy bee (<i>Perdita meconis</i>) in a dynamic desert landscape  Location: Phoenix Convention Center, 130 Presenting Author: Terry Griswold – USDA-ARS Co-Author: Ann Mull (she/her/hers) – USDA-ARS Co-Author: Sarit Chanprame (she/her/hers) – Utah State University Co-Author: Colin McKensie (he/him/his) – USDA-ARS Co-Author: Colleen Meidt – Utah State University Co-Author: Joe Wilson (he/him/his) – Utah State University Co-Author: Kelsey K. Graham – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
1:47 PM – 1:59 PM MST Nesting habits predict rarity of North American leaf-cutter bees (genus <i>Megachile</i>)  Location: Phoenix Convention Center, 130, PCC Presenting Author: Keng-Lou James Hung (he/him/his) – University of Oklahoma Co-Author: Mary Powley (she/her/hers) – University of Oklahoma Co-Author: Victor Gonzalez (he/him/his) – University of Kansas Co-Author: John S. Ascher (he/him/his) – National Univerisity of Singapore Co-Author: Terry Griswold – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
1:59 PM – 2:11 PM MST A tourist's guide to the microbiome of the bee brood cell mini-ecosystem  Location: Phoenix Convention Center, 130, PCC Presenting Author: Jordan Kueneman (he/him/his) – Cornell University Co-Author: Magda Paola Argueta Guzman (she/her/hers) – University of California Co-Author: Quinn McFrederick – University of California Co-Author: Bryan N. Danforth – Cornell University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
2:11 PM – 2:23 PM MST Host-parasite interactions between <i>Xenoglossa pruinos</i> (Apidae: Eucerini) and <i>Triepeolus remigatus</i> (Apidae: Epeolini) are characterized by tolerance and avoidance 	

Location: Phoenix Convention Center, 130 Presenting Author: Stephania Sandoval Arango (she/her/hers) – The Pennsylvania State University Co-Author: Thomas C. Baker – The Pennsylvania State University Co-Author: Margarita M. López-Urbe, Ph.D. – The Pennsylvania State University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
2:23 PM – 2:35 PM MST Abundance and richness of ground nesting bees and wasps increases with fire frequency in Florida longleaf pine flatwoods  Location: Phoenix Convention Center, 130, PCC Presenting Author: Lily J.G Fulton (she/her/hers) – University of Florida Co-Author: Rachel E. Mallinger – University of Florida Co-Author: Michael Ulyshen – USDA-Forest Service Co-Author: Dorota Porazinska – University of Florida Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
2:35 PM – 2:47 PM MST Solitary bees can disperse farther than they forage  Location: Phoenix Convention Center, 130 Presenting Author: Nicholas Dorian – Chicago Botanic Garden Co-Author: Elizabeth Crone (she/her/hers) – University of California Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
2:47 PM – 3:02 PM MST Break Location: Phoenix Convention Center, 130	
3:02 PM – 3:14 PM MST Pesticide hazard for ground nesting solitary bee species associated with North American agroecosystems  Location: Phoenix Convention Center, 130 Presenting Author: Susan Chan (she/her/hers) – University of Guelph Co-Author: Sabrina Rondeau (she/her/hers) – University of Guelph Co-Author: Alana Pindar – Cape Breton University Co-Author: Nigel Raine (he/him/his) – University of Guelph Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
3:14 PM – 3:26 PM MST Exploring the vulnerability of ground-nesting bees to climate change  Location: Phoenix Convention Center, 130	

Presenting Author: Víctor Hugo González (he/him/his) – University of Kansas
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:26 PM – 3:38 PM MST
Solitary bees provide a framework for pollinator conservation using status assessments 
Location: Phoenix Convention Center, 130, PCC
Presenting Author: Tara Cornelisse – NatureServe
Co-Author: Bruce Young (he/him/his) – NatureServe
Co-Author: Dale Schweitzer (he/him/his) – NatureServe
Co-Author: Terry Griswold – USDA-ARS
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:38 PM – 3:50 PM MST
Enhancing ground-nesting bee habitat through substrate manipulations across an urban gradient 
Location: Phoenix Convention Center, 130, PCC
Presenting Author: Amber Fredenburg (she/her/hers) – The Ohio State University
Co-Author: Karen Goodell (she/her/hers) – The Ohio State University
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:50 PM – 4:02 PM MST
Identifying and creating on-farm nesting habitat for blueberry specialist pollinators 
Location: Phoenix Convention Center, 130, PCC
Presenting Author: Hannah K. Levenson (she/her/hers) – North Carolina State University
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
4:02 PM – 4:14 PM MST
Rapid recovery and long-term abundance trends in ground-nesting bee populations in restored landfill sites 
Location: Phoenix Convention Center, 130
Presenting Author: Miriam H. Richards (she/her/hers) – Brock University
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
4:14 PM – 4:30 PM MST
Break
Location: Phoenix Convention Center, 130

4:30 PM – 5:30 PM MST
Poster session
Location: Phoenix Convention Center, 130
4:30 PM – 5:30 PM MST
SD20: An inconspicuous bond: Bison and aculeate wasps linked through disturbance in tallgrass-prairie 
Location: Phoenix Convention Center, 130
Presenting Author: Joshua Klostermann – University of Missouri
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display
4:30 PM – 5:30 PM MST
SD21: Assessing location, habitat, and substrate preferences for native sunflower bees in California 
Location: Phoenix Convention Center, 130
Presenting Author: Neal M. Williams – University of California
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display
4:30 PM – 5:30 PM MST
SD22: Bees display limited acclimation capacity for heat tolerance 
Location: Phoenix Convention Center, 130, PCC
Presenting Author: Natalie Herbison – University of Kansas
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display
4:30 PM – 5:30 PM MST
SD23: Cedar glade bee communities and their interactions with endemic flowering plants 
Location: Phoenix Convention Center, 130, PCC
Presenting Author: Samuel Wilhelm (he/him/his) – University of Tennessee
Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display
4:30 PM – 5:30 PM MST
SD24: Do burns benefit bees? A landscape-scale fire experiment in western Minnesota prairie 
Location: Phoenix Convention Center, 130, PCC

Presenting Author: Ian Roberts (he/him/his) – Northwestern University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD25: Emergence dynamics, sex ratio, and parasitism rates in *Andrena regularis*, an early spring, solitary, ground-nesting bee (Hymenoptera: Apoidea: Andrenidae) 

Location: Phoenix Convention Center, 130

Presenting Author: Bryan N. Danforth – Cornell University

Co-Author: Steven Hoge (he/him/his) – Cornell University

Co-Author: Rachel Fordyce (she/her/hers) – Cornell University

Co-Author: Maria Van Dyke (she/her/hers) – Cornell University

Co-Author: Jordan Kueneman (he/him/his) – Cornell University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD26: Evaluating the effect of tillage regime on ground nesting bee incidence, abundance, and diversity in the Southeastern United States 

Location: Phoenix Convention Center, 130

Presenting Author: Anthony Cuminale – Auburn University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD27: Follow the pollen: The pollen budget of *Cucurbita pepo* and *Xenoglossa pruinosa* 

Location: Phoenix Convention Center, 130

Presenting Author: Nigel Raine (he/him/his) – University of Guelph

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD28: Forest bees need compositionally diverse canopies 

Location: Phoenix Convention Center, 130, PCC

Presenting Author: Clayton Traylor – Temple University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD29: Harnessing community science to conserve and study ground-nesting bee aggregations 

Location: Phoenix Convention Center, 130

Presenting Author: Cassidy Dobler (she/her/hers) – Cornell University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD30: History and extent of prescribed fire influence ground nesting bee diversity 

Location: Phoenix Convention Center, 130

Presenting Author: Miriam Edelkind-Vealey – University of Georgia

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD31: Importance of above- and below-ground habitat features for ground-nesting bees 

Location: Phoenix Convention Center, 130

Presenting Author: Elinor M. Lichtenberg – University of North Texas

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST

SD32: Microbial metamorphosis: Symbiotic bacteria and fungi proliferate in diapause and may enhance overwintering survival in a solitary bee 

Location: Phoenix Convention Center, 130

Presenting Author: Shawn Christensen (he/him/his) – University of California

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
Poster Display

4:30 PM – 5:30 PM MST SD33: Native grass and forb restoration on monotypic crested wheatgrass (<i>Agropyron cristatum</i>) pasture increases pollinator abundance and ground-nesting bees  Location: Phoenix Convention Center, 130 Presenting Author: Joshua W. Campbell – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD34: Patterns of nest-site selection by <i>Colletes thoracicus</i> within a forested watershed  Location: Phoenix Convention Center, 130, PCC Presenting Author: Michael Ulyshen – USDA-Forest Service Co-Author: Clayton Traylor – Temple University Co-Author: Bryan N. Danforth – Cornell University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD35: Population genomics of <i>Nomia melanderi</i>, the world's most intensively ground nesting bee  Location: Phoenix Convention Center, 130 Presenting Author: Jonathan Berenguer Uhuad Koch – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD36: The bee fauna of the Sam Houston State University Piney Woods Environmental Research Laboratory (Walker County, Texas): A multi-year survey using multiple methods  Location: Phoenix Convention Center, 130, PCC Presenting Author: John Pascarella (he/him/his) – Sam Houston State University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD37: The effects of long term neonicotinoid and fungicide exposure on ground nesting bee communities  Location: Phoenix Convention Center, 130 Presenting Author: Alexandra Harmon-Threatt – University of Illinois

Co-Author: Anthony Yannarell – University of Illinois Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD38: Untangling the impacts of kleptoparasitism on bee health and behavior  Location: Phoenix Convention Center, 130, PCC Presenting Author: Erika Dalliance (they/them/theirs) – University of Tennessee Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
4:30 PM – 5:30 PM MST SD39: Using early successional habitat along transmission line rights-of-way to understand the ecology of the Nearctic <i>Melitta</i> species <i>M. eickworti</i>  Location: Phoenix Convention Center, 130, PCC Presenting Author: Jacob Keller (he/him/his) – State University of New York - Environmental Science and Forestry Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems Poster Display
1:30 PM – 5:30 PM MST RNAi-based Bioinsecticides: Realizing the Commercial Potential for Sustainable Pest Management Organizer: William Moar (he/him/his) – Bayer Crop Science Organizer: Kenneth Narva (he/him/his) – GreenLight Biosciences Organizer: Agoston Jerga (he/him/his) – Bayer Crop Science Organizer: Ibrahim A. El-Shesheny, Ph.D. (he/him/his) – University of Tennessee Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
1:30 PM – 1:45 PM MST StaufenC facilitates utilization of the ERAD pathway to transport dsRNA through endoplasmic reticulum to cytosol  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Jinmo Koo (he/him/his) – University of California Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
1:45 PM – 2:00 PM MST Double-stranded RNA formulation toward the commercialization of sprayable RNAi solutions: Overcoming delivery barriers and other technological challenges 

Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Jason Gillian – GreenLight Biosciences, Inc. Co-Author: Jerome Laisney, Ph.D. (he/him/his) – GreenLight Biosciences Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
2:00 PM – 2:15 PM MST Towards insecticidal RNAi in refractory insects: Anucleate cell-based encapsulation improves delivery and uptake of dsRNA in fall armyworm (<i>Spodoptera frugiperda</i>)  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Ibrahim A. El-Shesheny, Ph.D. (he/him/his) – University of Tennessee Co-Author: Cris Oppert – AgroSpheres Co-Author: Joseph Frank (he/him/his) – AgroSpheres Co-Author: Ameer Shakeel (he/him/his) – AgroSpheres Co-Author: Juan Luis Jurat-Fuentes (he/him/his) – University of Tennessee Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
2:15 PM – 2:30 PM MST The mode of action of RNAi pesticide in the two spotted spider mite <i>Tetranychus urticae</i>  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Vojislava Grbic, Ph.D. (she/her/hers) – University of Texas Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
2:30 PM – 2:45 PM MST A new approach to managing Varroa mites in honeybees  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Brian Manley, Ph.D. – GreenLight Biosciences, Inc. Co-Author: Kenneth Narva (he/him/his) – GreenLight Biosciences Co-Author: Ethann Barnes – GreenLight Biosciences Co-Author: Katie Youngs – GreenLight Biosciences Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
2:45 PM – 3:00 PM MST Varroa control in honey bee hives using dsRNA: The New Zealand experience  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Phil Lester, Ph.D. (he/him/his) – Victoria University of Wellington Co-author: James Baty – Victoria University of Wellington Co-author: Mariana Bulgarella – Victoria University of Wellington Co-author: Antoine Felden – Victoria University of Wellington Co-author: John Haywood – Victoria University of Wellington

Co-author: Rose Ann McGruddy – Victoria University of Wellington Co-author: Joana Merk – Victoria University of Wellington Co-author: Zoe Smeele – Victoria University of Wellington Co-author: Brian Manley, Ph.D. – GreenLight Biosciences, Inc. Co-author: Kenneth Narva (he/him/his) – GreenLight Biosciences Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
3:00 PM – 3:15 PM MST Break Location: Phoenix Convention Center, 131 A, PCC
3:15 PM – 3:30 PM MST Advances in yeast RNAi insecticide technology for control of insect pests of medical and agricultural importance  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Keshava Mysore, Ph.D. (he/him/his) – Indiana University Co-Author: Teresia Njoroge – Indiana University Co-Author: Akilah Stewart – Indiana University Co-Author: Majidah Hamid-Adiamoh – Indiana University Co-Author: David S. Kang – USDA-ARS Co-Author: David Severson – Indiana University Co-Author: Molly Duman-Scheel – Indiana University Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST RNA-based biopesticides: Do we need carriers for improved efficacy?  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Neena Mitter – Charles Sturt University Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
3:45 PM – 4:00 PM MST Ecological risk assessment of RNA-based insecticides  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Christopher R. Brown (he/him/his) – Bayer Crop Science Co-Author: Joshua Fischer – Bayer Crop Science Co-Author: Steven Levine, Ph.D. – Bayer Crop Science Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems
4:00 PM – 4:15 PM MST

Unifying bioinformatics frameworks for risk assessment of dsRNA-based biopesticides  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Krishna Sridharan, Ph.D. (he/him/his) – GreenLight Biosciences Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems	
4:15 PM – 4:30 PM MST Functional characterization of the E75 Gene in the Diamondback moth, <i>Plutella xylostella</i> and its role in insect pest management  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Sharath Chandra Gaddelapati – Donald Danforth Plant Science Center Co-Author: Nanasahab Chougule – AgroSpheres Co-Author: Joseph Frank (he/him/his) – AgroSpheres Co-Author: Bala P. Venkata – Donald Danforth Plant Science Center Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems	
4:30 PM – 4:45 PM MST Balancing the integration of biopesticides in potato pest management and the ongoing threat of insecticide resistance  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Russell L. Groves, Ph.D. – University of Wisconsin Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems	
4:45 PM – 5:00 PM MST Advances in RNAi for pest control: Insights and applications from Brazil  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Henrique Marques-Souza, Ph.D. (he/him/his) – Universidade Estadual de Campinas Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems	
1:30 PM – 5:30 PM MST Careers in Extension Entomology: Strategies for Applied Research, Education, and Student Success Organizer: Joanie King – New Mexico State University Organizer: Max R. Schmidtbauer – Colorado State University Organizer: Melissa Schreiner – Colorado State University Organizer: Lisa Mason – Colorado State University Organizer: Tawny Simisky (she/her/hers) – University of Massachusetts Organizer: Houston Wilson (he/him/his) – University of California Organizer: Kadie Elizabeth Britt – Colorado State University Organizer: Silvia Rondon – Oregon State University Organizer: Karim Gharbi – Colorado State University	

Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Melissa Schreiner – Colorado State University	
1:35 PM – 1:50 PM MST Performative DEI and the need for data-driven policy  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Raul F. Medina – Texas A&M University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
1:50 PM – 2:05 PM MST Involving students in the extension process  Location: Phoenix Convention Center, 121 C Presenting Author: Joanie King – New Mexico State University Co-Author: Esther Heerema – Texas Tech University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
2:05 PM – 2:20 PM MST Complete metamorphosis, cultivating the next generation of extension entomologists  Location: Phoenix Convention Center, 121 C Presenting Author: Max R. Schmidtbauer – Colorado State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
2:20 PM – 2:35 PM MST Strategies for entomologist's well-being: The art of balance in extension  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Melissa Schreiner – Colorado State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
2:35 PM – 2:45 PM MST Break Location: Phoenix Convention Center, 121 C	
2:45 PM – 3:00 PM MST Engagement strategies and communication tools for a successful extension career 	

Location: Phoenix Convention Center, 121 C Presenting Author: Lisa Mason – Colorado State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
3:00 PM – 3:15 PM MST Master Gardener volunteers: Leveraging community networks towards effective outreach  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Seth Whitehouse (he/him/his) – University of Tennessee Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST One year as an extension educator: Finding connections between entomology and pesticide safety education  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Sally Nelson (she/her/hers) – University of Minnesota Extension Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST Applied field of turfgrass entomology in the Northeast: Impacts and challenges  Location: Phoenix Convention Center, 121 C Presenting Author: Olga Kostromytska – University of Massachusetts Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
3:45 PM – 3:55 PM MST Break Location: Phoenix Convention Center, 121 C
3:55 PM – 4:10 PM MST Have you read the extension professional's creed? I hadn't!  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Tawny Simisky (she/her/hers) – University of Massachusetts Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
4:10 PM – 4:25 PM MST Starting a career in extension: Early-career perspectives  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Alireza Shokoohi (he/him/his) – UMass Extension Co-Author: Nicole Bell – University of Massachusetts

Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
4:25 PM – 4:40 PM MST Bridging the gap: How integrating extension into graduate programs can prepare students for future careers  Location: Phoenix Convention Center, 121 C Presenting Author: Emily Althoff – University of Minnesota Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
4:40 PM – 5:25 PM MST Panel discussion Location: Phoenix Convention Center, 121 C Panelist: Thomas P. Kuhar – Virginia Tech Panelist: William Hutchison – University of Minnesota
5:25 PM – 5:30 PM MST Closing remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Melissa Schreiner – Colorado State University
1:30 PM – 5:30 PM MST Insects as Food, Feed, and Fertilizer: Engaging and Training the Next Generation of Scientists Organizer: Lisa G. Neven (she/her/hers) – USDA-ARS Organizer: Kelsy Robinson (she/her/hers) – USDA-ARS Organizer: Annie Donoghue – USDA-ARS Organizer: Kristin Duffield – USDA-ARS Organizer: Komala Arsi – USDA-ARS Organizer: Tawni Crippen – USDA-ARS Organizer: Jeffery Tomberlin – Texas A&M University Organizer: Heather Jordan – Mississippi State University Organizer: Aaron Hobbs – North American Coalition for Insect Agriculture Organizer: Ian J. Banks (he/him/his) – EnviroFlight, LLC Member Symposium
1:30 PM – 1:50 PM MST Current status of the insect agriculture industry  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Aaron Hobbs – North American Coalition for Insect Agriculture Member Symposium
1:50 PM – 2:10 PM MST

USDA-ARS MINistock update: Current research and future outlooks  Location: Phoenix Convention Center, 127 B Presenting Author: Kelsy Robinson (she/her/hers) – USDA-ARS Member Symposium
2:10 PM – 2:30 PM MST Unlocking talent: Inclusion of students with intellectual disabilities as STEM researchers  Location: Phoenix Convention Center, 127 B Presenting Author: Chris Dallager (he/him/his) – Mississippi State University Member Symposium
2:30 PM – 2:50 PM MST Exploring viral disease dynamics in reared crickets  Location: Phoenix Convention Center, 127 B Presenting Author: Kristin Duffield – USDA-ARS Member Symposium
2:50 PM – 3:00 PM MST Break Location: Phoenix Convention Center, 127 B
3:00 PM – 3:20 PM MST Insect frass fertilizer to boost soil health and agronomic efficiency in the circular economy  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Helen Amorim (she/her/hers) – University of Arkansas Member Symposium
3:20 PM – 3:40 PM MST Enhancing specialty crop production with insect-derived soil amendments  Location: Phoenix Convention Center, 127 B Presenting Author: Melina Agila – Purdue University Co-Author: Laura L. Ingwell – Purdue University Member Symposium
3:40 PM – 4:00 PM MST Fomenting scientific inquiry around mycotoxins in insect supported circular economies  Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Ryan T. Paulk – USDA-ARS Member Symposium
4:00 PM – 4:20 PM MST Transcriptomic surveillance as a tool to screen for microbes in industrial insects  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Hunter Walt (he/him/his) – Mississippi State University Member Symposium
4:20 PM – 4:30 PM MST Break Location: Phoenix Convention Center, 127 B
4:30 PM – 5:30 PM MST Lightning bug panel Location: Phoenix Convention Center, 127 B
1:30 PM – 5:30 PM MST Acarology Research Methodologies: From Lab to Field Organizer: Amy C. Murillo – University of California Organizer: Emilie Pauline Demard (she/her/hers) – University of Florida Member Symposium ^
1:30 PM – 1:40 PM MST Introductory remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Amy C. Murillo – University of California
1:40 PM – 2:00 PM MST Too many mites, too little time: Expeditious methods for manipulating and characterizing soil microarthropod communities  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Kara S. Gibson (she/her/hers) – Northern Arizona University Co-Author: Amber Born – Northern Arizona University Co-Author: Nancy C. Johnson – Northern Arizona University Co-Author: Deborah A. Neher – University of Vermont Co-Author: Anita J. Antoninka, Ph.D. – Northern Arizona University Member Symposium
2:00 PM – 2:20 PM MST

Developing pictorial identification guidelines for mesostigmatid biting mites found in homes and other structures  Location: Phoenix Convention Center, 226 C Presenting Author: Andrew Mason Sutherland, BCE – University of California Member Symposium
2:20 PM – 2:35 PM MST Break Location: Phoenix Convention Center, 226 C
2:35 PM – 2:55 PM MST Techniques, tools, and tips for photographing mites  Location: Phoenix Convention Center, 226 C Presenting Author: Matthew Bertone – North Carolina State University Member Symposium
2:55 PM – 3:15 PM MST Correlation between feeding and heteromorphic life stages of Astigmata through rearing  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Pavel Klimov – Purdue University Member Symposium
3:15 PM – 3:35 PM MST Tick Tactics: Innovative approaches in tick research  Location: Phoenix Convention Center, 226 C Presenting Author: Kathryn Reif – Auburn University Member Symposium
3:35 PM – 3:50 PM MST Break Location: Phoenix Convention Center, 226 C
3:50 PM – 4:10 PM MST Introduction and recent improvements to the mite collection at the Oregon State Arthropod Collection, OSU, Corvallis, Oregon  Location: Phoenix Convention Center, 226 C Presenting Author: Christopher Marshall – Oregon State University Co-Author: David R. Maddison (he/him/his) – Oregon State University Co-Author: Gerald Krantz – Oregon State University

Member Symposium
4:10 PM – 4:30 PM MST Indirect effects of plasma-activated water to two-spotted spider mites [<i>Tetranychus urticae</i> (Acari: Tetranychidae)] depend on crop species  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Patrice Savi – University of California Co-Author: Sydney Robertson – University of California Co-Author: Myles Hammond – University of California Co-Author: Anil Mantri – University of California Co-Author: Christian Nansen – University of California Member Symposium
4:30 PM – 5:00 PM MST Discussion Location: Phoenix Convention Center, 226 C
1:30 PM – 5:30 PM MST Empowering Insect Pest Management Tomorrow Through Sterile Insects, Advancements Today and Beyond Organizer: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS Organizer: Rui Cardozo Pereira – International Atomic Energy Agency Organizer: Adalberto Perez de Leon – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
1:30 PM – 1:35 PM MST SIT and pest control: Introductory remarks  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity

1:35 PM – 1:55 PM MST SIT then and now  Location: Phoenix Convention Center, 122 B Presenting Author: Pedro Rendon – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
1:55 PM – 2:10 PM MST Fruit fly SIT & areawide management  Location: Phoenix Convention Center, 122 B Presenting Author: Corinna Bazelet – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
2:10 PM – 2:25 PM MST Genetic and diagnostic tools to enhance the fruit fly SIT program  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Keun Chae – Texas A&M University Co-Author: Tyler J. Raszick – USDA-APHIS-PPQ Science & Technology Co-Author: Todd Terrance – USDA-ARS Co-Author: Roxanne Farris – USDA-ARS Co-Author: Evan W. Braswell – USDA-ARS Co-Author: Don Vacek – USDA-APHIS Co-Author: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
2:25 PM – 2:40 PM MST Codling moth SIT success stories in apple and pear  Location: Phoenix Convention Center, 122 B Presenting Author: Chris Adams – Oregon State University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
2:40 PM – 2:50 PM MST Break Location: Phoenix Convention Center, 122 B

2:50 PM – 3:05 PM MST Pink bollworm successful program  Location: Phoenix Convention Center, 122 B Presenting Author: Earl Andress – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
3:05 PM – 3:20 PM MST Developing Sterile Insect Technique to help manage navel orangeworm (<i>Amyelois transitella</i>)  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Michael A. Garvey (he/him/his) – USDA Co-Author: Jeanbaptiste Quirino – ACRPC Co-Author: Andrea Walton – USDA-APHIS Co-Author: Ethan Stahura – ACRPC - USDA Co-Author: Jonah Kenneth Brosemann – USDA-APHIS Co-Author: Earl Andress – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
3:20 PM – 3:40 PM MST Mosquito SIT programs: The Lee County, Florida case  Location: Phoenix Convention Center, 122 B Presenting Author: Rachel Morreale – Lee County Mosquito Control District Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
3:40 PM – 4:00 PM MST Biotechnology-enhanced SIT: Challenges & opportunities  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Maxwell J. Scott (he/him/his) – North Carolina State University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
4:00 PM – 4:10 PM MST Break Location: Phoenix Convention Center, 122 B
4:10 PM – 4:30 PM MST

Public-private partnership prospects for SIT  Location: Phoenix Convention Center, 122 B Presenting Author: Nathan Moses-Gonzales – M3 Agriculture Technologies Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
4:30 PM – 4:45 PM MST Updates on the New World screwworm SIT program in Central America  Location: Phoenix Convention Center, 122 B Presenting Author: Bridget McFarland – USDA-APHIS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
4:45 PM – 5:00 PM MST SIT to infinity & beyond  Location: Phoenix Convention Center, 122 B Presenting Author: Rui Cardozo Pereira – International Atomic Energy Agency Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
5:00 PM – 5:10 PM MST SIT and pest control: Concluding remarks  Location: Phoenix Convention Center, 122 B Presenting Author: Adalberto Perez de Leon – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
1:30 PM – 5:30 PM MST Advancements and Opportunities in Non-Target Organism Risk Assessment of Insect-Protected GM Crops Organizer: Christopher R. Brown (he/him/his) – Bayer Crop Science Organizer: Amanda Pierce – U.S. Environmental Protection Agency Organizer: Joerg Romeis (he/him/his) – Agroscope Organizer: Chitvan Khajuria – Bayer Crop Science Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
1:30 PM – 1:40 PM MST	

Introductory remarks Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Christopher R. Brown (he/him/his) – Bayer Crop Science	
1:40 PM – 1:55 PM MST Environmental risk assessment: Similarities and differences between crop protection chemistry and plant-incorporated protectants  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Bridget F. O'Neill (she/her/hers) – Corteva Agriscience Co-Author: Ashley St. Clair – Corteva Agriscience Co-Author: Kristine LeRoy (she/her/hers) – Corteva Agriscience Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
1:55 PM – 2:10 PM MST Challenges of non-target insect test methods for biological pesticide registrations  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Michael Patnaude (he/him/his) – Smithers Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
2:10 PM – 2:25 PM MST Conservancy in environmental risk assessments  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Kristine LeRoy (she/her/hers) – Corteva Agriscience Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
2:25 PM – 2:30 PM MST Q & A session Location: Phoenix Convention Center, 126 C, PCC	
2:30 PM – 2:45 PM MST How and why to conduct non-target tests with ants  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Marius Pohl – University of Münster Co-Author: Udo Hommen – Fraunhofer Institute for Molecular Biology and Applied Ecology Co-Author: Sebastian Eilebrecht – Fraunhofer Institute for Molecular Biology and Applied Ecology Co-Author: Christoph Schäfers – Fraunhofer Institute for Molecular Biology and Applied Ecology Co-Author: Benedikt Ringbeck – Fraunhofer Institute for Molecular Biology and Applied Ecology Co-Author: Bernd Göckener – Fraunhofer Institute for Molecular Biology and Applied Ecology Co-Author: Mathias Otto – Federal Agency for Nature Conservation Co-Author: Jürgen Gadau – University of Münster	

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

2:45 PM – 3:00 PM MST

Insect bioassay method considerations for non-target arthropod risk assessments



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Steven Reyna – Bayer Crop Science

Co-Author: Christopher R. Brown (he/him/his) – Bayer Crop Science

Co-Author: Chitvan Khajuria – Bayer Crop Science

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

3:00 PM – 3:15 PM MST

Advancing ecological risk assessment: Insights from non-target arthropod testing and statistical power analysis



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Carlos Esquivel Palma – Bayer Crop Science

Co-Author: Changjian Jiang – Bayer Crop Science

Co-Author: Lawrence Long – Bayer Crop Science

Co-Author: Chitvan Khajuria – Bayer Crop Science

Co-Author: Joshua Fischer – Bayer Crop Science

Co-Author: Christopher R. Brown (he/him/his) – Bayer Crop Science

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

3:15 PM – 3:20 PM MST

Q & A session

Location: Phoenix Convention Center, 126 C, PCC

3:20 PM – 3:35 PM MST

Updates to EPA's approach to ecological risk assessment of plant-incorporated protectants



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Amanda Pierce – U.S. Environmental Protection Agency

Co-author: Mike Mendelsohn – U.S. Environmental Protection Agency

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

3:35 PM – 3:50 PM MST

Applying problem formulation and plant pest risk assessment during USDA's regulatory status review of insect resistant genetically modified plants



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Katharine Swoboda-Bhattarai – USDA-APHIS

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

3:50 PM – 4:05 PM MST

Assessment of non-target organism testing needs for aquatic systems



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Ming Hua Huang (he/him/his) – Syngenta

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

4:05 PM – 4:20 PM MST

Non-target effects of transgenic corn debris in streams: Invertebrate community structure and plant debris processing



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Bill O. Lamp – University of Maryland

Co-Author: Rebecca Eckert – Gettysburg College

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

4:20 PM – 4:25 PM MST

Q & A session

Location: Phoenix Convention Center, 126 C, PCC

4:25 PM – 4:40 PM MST

Overview of non-target arthropod field studies supporting the risk assessment of insect resistant GM crop products



Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Lawrence Long – Bayer Crop Science

Co-Author: Miguel Ferreira Soria – BASF

Co-Author: Christopher R. Brown (he/him/his) – Bayer Crop Science

Co-Author: Ming Hua Huang (he/him/his) – Syngenta

Co-Author: Kristine LeRoy (she/her/hers) – Corteva Agriscience

Co-Author: Collin Preftakes – Bayer Crop Science

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology

4:40 PM – 4:55 PM MST

Transportability of field-collected NTO data Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Joerg Romeis (he/him/his) – Agroscope Co-author: Michael Meissle – Agroscope Co-author: Steven Naranjo – USDA-ARS Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
4:55 PM – 5:15 PM MST Discussion Location: Phoenix Convention Center, 126 C, PCC	
1:30 PM – 5:30 PM MST 10-min: P-IE, IPM - General 1 Moderator: Ted E. Cottrell – USDA-ARS Moderator: Daniel C. Peck, BCE – Vestaron Corp 10-Minute Presentation Plant-Insect Ecosystems	^
1:30 PM – 1:42 PM MST Adequate post-harvest handling and storage of kola nut <i>Cola acuminata</i> and <i>Cola nitida</i>, using three storage structures in Lagos, Nigeria Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Ihionu G. Chiwuike – Nigerian Stored Products Research Institute Co-Author: Ismaila A. Aderolu, Ph.D. (he/him/his) – University of Abuja 10-Minute Presentation Plant-Insect Ecosystems	
1:42 PM – 1:54 PM MST Assessing the arthropod pest pressure and beneficials in Idaho beans Location: Phoenix Convention Center, 222 B Presenting Author: Armando Falcon-Brindis, Ph.D. – University of Idaho 10-Minute Presentation Plant-Insect Ecosystems	
1:54 PM – 2:06 PM MST Assessment of <i>Chromolaena odorata</i> root powder against <i>Callosobruchus maculatus</i> F (Coleoptera: Chrysalides) on stored cowpea (<i>Vigna unguiculata</i> L. Walp) Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Kelechi Cynthia Ihionu – Nigerian Stored Products Research Institute Co-Author: Ismaila A. Aderolu, Ph.D. (he/him/his) – University of Abuja 10-Minute Presentation Plant-Insect Ecosystems	

2:06 PM – 2:18 PM MST Building capacity for proactive resistance management of whitefly (<i>Bemisia argentifolii</i>) in a cross-commodity landscape Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Naomi Pier – University of Arizona Co-Author: Peter Ellsworth – University of Arizona Co-Author: Alfred Fournier – University of Arizona Co-Author: Alexa M. Brown, B.S. – University of Arizona Co-Author: Wayne A. Dixon, II – University of Arizona 10-Minute Presentation Plant-Insect Ecosystems	
2:18 PM – 2:30 PM MST Does attract-and-kill work? A meta-analysis of field-based studies assessing attract-and-kill in agriculture Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Kyle Matthew Bekelja – Virginia Tech Co-Author: Kelsey Jo Benthall (she/her/hers) – Ridge Quest Inc. Co-Author: Alyssa L. Lucas (she/her/hers) – Florida Department of Agriculture and Consumer Services Co-Author: Elizabeth Kells Rowen (she/her/hers) – West Virginia University Co-Author: Emily Althoff – University of Minnesota Co-Author: Layne Leake – University of Missouri Co-Author: Kevin R. Cloonan – USDA-ARS Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS Co-Author: Tracy C. Leskey – USDA-ARS Co-Author: Kevin B. Rice – Virginia Tech 10-Minute Presentation Plant-Insect Ecosystems	
2:30 PM – 2:42 PM MST Efficacy of lipid-soluble dyes in navel orangeworm, <i>Amyelois transitella</i> Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Jonah Kenneth Brosemann – USDA-APHIS Co-Author: Jeanbaptiste Quirino – ACRPC Co-Author: Ethan Stahura – ACRPC - USDA Co-Author: Guolei Tang – USDA-ARS Co-Author: Michael A. Garvey (he/him/his) – USDA 10-Minute Presentation Plant-Insect Ecosystems	
2:42 PM – 2:54 PM MST Break Location: Phoenix Convention Center, 222 B	

2:54 PM – 3:06 PM MST Efficient larval separation method for Mexican fruit fly infested grapefruit  Location: Phoenix Convention Center, 222 B Presenting Author: Kari Pina – USDA-APHIS Co-Author: frank Dirrigl – University of Texas 10-Minute Presentation Plant-Insect Ecosystems
3:06 PM – 3:18 PM MST Evaluating biopesticides for codling moth management in apples  Location: Phoenix Convention Center, 222 B Presenting Author: Samuel Nathan Brandt – Virginia Tech Co-Author: Abigail Golden – Virginia Tech Co-Author: Kevin B. Rice – Virginia Tech 10-Minute Presentation Plant-Insect Ecosystems
3:18 PM – 3:30 PM MST Field performance of peptide-based insecticide Basin Flex (U1-AGTX-Ta1b-QA) against major lepidopteran pest species in tree nuts, apples, and vegetables: Navel orangeworm (<i>Amyelois transitella</i>), codling moth (<i>Cydia pomonella</i>), beet armyworm (<i>Spodoptera exigua</i>)  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Trang Nguyen (she/her/hers) – Vestaron Corp 10-Minute Presentation Plant-Insect Ecosystems
3:30 PM – 3:42 PM MST Field performance of Spear Lep (GS-omega/kappa-Htx-Hv1a) and Basin Flex (U1-AGTX-Ta1b-QA) against top invasive threats to US agriculture: European grapevine moth, Old World bollworm and tomato leafminer  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Daniel C. Peck, BCE – Vestaron Corp 10-Minute Presentation Plant-Insect Ecosystems
3:42 PM – 3:54 PM MST Funerary archaeoentomology as a tool for studying agricultural resilience during the early American Colonial period (CA. 1680s) at historic St. Mary's City, Maryland, USA  Location: Phoenix Convention Center, 222 B Presenting Author: Michael A. Monzon – Purdue University Co-Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Co-Author: Kimberlee S. Moran (she/her/hers) – Rutgers University

Co-Author: Nicole L. Fahrenfeld – Rutgers University Co-Author: George Hamilton – Rutgers University Co-Author: Krystal Hans (she/her/hers) – Purdue University 10-Minute Presentation Plant-Insect Ecosystems
3:54 PM – 4:06 PM MST Impact of storage structures on peanut quality: Insect pests and aflatoxin risks in peanuts  Location: Phoenix Convention Center, 222 B Presenting Author: James K. Danso – Fort Valley State University Co-Author: George N. Mbata – Fort Valley State University Co-Author: Raegan L. Holton – Premium Peanut 10-Minute Presentation Plant-Insect Ecosystems
4:06 PM – 4:18 PM MST Break Location: Phoenix Convention Center, 222 B
4:18 PM – 4:30 PM MST Insecticidal potential of botanical extracts for management of the oriental fruit fly, <i>Bactrocera dorsalis</i> (Diptera: Tephritidae)  Location: Phoenix Convention Center, 222 B Presenting Author: Wasim Akram – Aga Khan Rural Support Programme Pakistan Co-Author: Azhar Hussain – Karakoram International University 10-Minute Presentation Plant-Insect Ecosystems
4:30 PM – 4:42 PM MST Integrated management of fruit fly (<i>Bactrocera dorsalis</i>), by using nanoparticles additive with combination of entomopathogenic fungi  Location: Phoenix Convention Center, 222 B Presenting Author: Shahbaz Ahmad, Ph.D. – University of the Punjab 10-Minute Presentation Plant-Insect Ecosystems
4:42 PM – 4:54 PM MST Laboratory evaluation of indigenous and commercial entomopathogenic nematodes against red palm weevil, <i>Rhynchophorus ferrugineus</i> (Coleoptera: Curculionidae)  Location: Phoenix Convention Center, 222 B Presenting Author: Khawaja Ghulam Rasool – King Saud University Co-Author: Mureed Husain (he/him/his) – King Saud University Co-Author: Abdulrahman S S. Aldawood (he/him/his) – King Saud University

10-Minute Presentation	Plant-Insect Ecosystems
4:54 PM – 5:06 PM MST	
Leaffooted bug (Hemiptera: Coreidae) aggregation on yucca	
Location: Phoenix Convention Center, 222 B, PCC	
Presenting Author: Ted E. Cottrell – USDA-ARS	
Co-Author: Geoffrey Broadhead – USDA-ARS	
Co-Author: John J. Beck – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
5:06 PM – 5:18 PM MST	
Management of thrips pests in beans in south Florida	
Location: Phoenix Convention Center, 222 B	
Presenting Author: Dakshina R. Seal – University of Florida	
10-Minute Presentation	Plant-Insect Ecosystems
5:18 PM – 5:30 PM MST	
Parametric image-based identification for classification of five stored product coleopteran species using AI techniques	
Location: Phoenix Convention Center, 222 B, PCC	
Presenting Author: Ronnie Opone Serfa Juan, Ph.D. (he/him/his) – USDA-ARS	
Co-Author: Alison R. Gerken – USDA-ARS	
Co-Author: Lester Pordesimo, Ph.D. – USDA-ARS	
Co-Author: Paul Armstrong, Ph.D. – USDA-ARS	
Co-Author: James F. Campbell – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
1:30 PM – 5:30 PM MST	
10-min: P-IE, Ecology	
Moderator: Enakshi Ghosh (she/her/hers) – Colorado State University	
Moderator: Kaleigh Fisher – University of California	
10-Minute Presentation	Plant-Insect Ecosystems
1:30 PM – 1:42 PM MST	
Acquisition and allocation of nutrients across life stages: Can nectar-feeding compensate for nutritional deficiencies from the larval diet in <i>Pieris rapae</i> butterflies?	
Location: Phoenix Convention Center, 129 B, PCC	
Presenting Author: Natasha Tigreros – University of Arizona	

10-Minute Presentation	Plant-Insect Ecosystems
1:42 PM – 1:54 PM MST	
Dispersal from outbreak core areas may overwhelm management efforts at invasion fronts	
Location: Phoenix Convention Center, 129 B, PCC	
Presenting Author: Devin William Goodsman – Canadian Forest Service	
Co-Author: Christian MacQuarrie – Canadian Forest Service	
Co-Author: Emma Hudgins – University of Melbourne	
Co-Author: Yemshanov Denys – Natural Resources Canada	
10-Minute Presentation	Plant-Insect Ecosystems
1:54 PM – 2:06 PM MST	
Ecological immunology for insect conservation	
Location: Phoenix Convention Center, 129 B, PCC	
Presenting Author: Enakshi Ghosh (she/her/hers) – Colorado State University	
Co-Author: Matthew Wallace – East Stroudsburg University	
Co-Author: Ruth Hufbauer – Colorado State University	
10-Minute Presentation	Plant-Insect Ecosystems
2:06 PM – 2:18 PM MST	
Effects of parental diet on Mormon cricket egg diapause and embryonic development rate	
Location: Phoenix Convention Center, 129 B, PCC	
Presenting Author: Robert B. Srygley – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
2:18 PM – 2:30 PM MST	
Evaluating the contributions of host plant species and arthropods to phyllosphere microbial communities	
Location: Phoenix Convention Center, 129 B, PCC	
Presenting Author: Monica Kersch-Becker – The Pennsylvania State University	
Co-Author: Danilo Ferreira Borges dos Santos – The Pennsylvania State University	
Co-Author: Victoria Pocius – Douglas Products	
Co-Author: Jared G. Ali – The Pennsylvania State University	
10-Minute Presentation	Plant-Insect Ecosystems
2:30 PM – 2:42 PM MST	
Break	
Location: Phoenix Convention Center, 129 B, PCC	

2:42 PM – 2:54 PM MST Improving the efficiency and safety of sentinel stink bug eggs using x-ray irradiation and other methods  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Evelyne Hougardy – USDA-ARS Co-Author: Ronald Haff – USDA-ARS Co-Author: Brian N. Hogg – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
2:54 PM – 3:06 PM MST Long-distance migration of hover flies (Diptera: Syrphidae): A global review  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Carl Scott Clem – Illinois State University 10-Minute Presentation Plant-Insect Ecosystems
3:06 PM – 3:18 PM MST Multi-generational adaptation of <i>Osmia lignaria</i> in response to climate change in orchard crops  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Lindsie M. McCabe (she/her/hers) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
3:18 PM – 3:30 PM MST Nutritional ecology of solitary and gregarious Central American locusts, <i>Schistocerca piceifrons</i>, in Yucatán, Mexico  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Arianne Cease – Arizona State University Co-Author: Rick Overson – Arizona State University Co-Author: Mario Poot Pech – Yucatan Plant Health Co-Author: Christopher Brennan – Texas A&M University Co-Author: Sydney Millerwise (she/her/hers) – Arizona State University Co-Author: Stephanie Nunez – Arizona State University Co-Author: Robert Peniche-Ay – Yucatan Plant Health Co-Author: Mira Word Ries – Arizona State University Co-Author: Syeda Mehreen Tahir (she/her/hers) – Arizona State University Co-Author: Christina Tran – Arizona State University 10-Minute Presentation Plant-Insect Ecosystems
3:30 PM – 3:42 PM MST

Pascal's Wager in defending against insect herbivores: Do goldenrod plants bias their use of information away from costly mistakes?  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Eric C. Yipp – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University 10-Minute Presentation Plant-Insect Ecosystems
3:42 PM – 3:54 PM MST Break Location: Phoenix Convention Center, 129 B, PCC
3:54 PM – 4:06 PM MST Rearing the endangered Taylor's checkerspot butterfly at Oregon State University  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Kelley N. Asselin – Oregon State University Co-Author: Maggie Freeman – Oregon State University Co-Author: Kelsey Galimba – Oregon State University Co-Author: Chris Adams – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems
4:06 PM – 4:18 PM MST CANCELLED: Spatial synchrony in climate produces synchronized pulses in the invasive spread of a forest pest  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Kyle J. Haynes – University of Virginia Co-Author: Clare A. Rodenberg (she/her/hers) – University of Virginia Co-Author: Jonathan A. Walter – University of California 10-Minute Presentation Plant-Insect Ecosystems
4:18 PM – 4:30 PM MST The evolution of chemoreceptor genes in bumble bees  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Kaleigh Fisher – University of California Co-Author: Santiago Ramirez – University of California 10-Minute Presentation Plant-Insect Ecosystems
4:30 PM – 4:42 PM MST The incredible ecological feats of harvester ants  Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Derek Uhey – Northern Arizona University Co-Author: Richard W. Hofstetter (he/him/his) – Northern Arizona University Co-Author: Sneha Vissa (she/her/hers) – Northern Arizona University	
10-Minute Presentation Plant-Insect Ecosystems	
4:42 PM – 4:54 PM MST Developing management strategies for the invasive snail <i>Bulimulus bonariensis</i> using behavioral traits and biological control  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Kathi Lorraine Malfa – University of Florida Co-Author: Isaac L. Esquivel – North Florida Research and Education Center	
10-Minute Presentation Plant-Insect Ecosystems	
4:54 PM – 5:06 PM MST Infesting red maple trees with the invasive Asian longhorned beetle (<i>Anoplophora glabripennis</i>) to examine oviposition, fecundity, and survival  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Lindsey Stone (she/her/hers) – Clemson Co-Author: Robert Talbot Trotter, III – USDA Co-Author: Caleb Davis Co-Author: Will Scheper Co-Author: David R. Coyle – Clemson University	
10-Minute Presentation Plant-Insect Ecosystems	
1:30 PM – 5:30 PM MST Student Regular 10-min: MUVE, PBT, and SysEB Moderator: Xiaodan Pan – Rutgers University Moderator: Christina D. Hoddle (she/her/hers) – University of California	
Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity Student	
1:30 PM – 1:42 PM MST Assessing future habitat suitability for at-risk butterflies in a changing climate using species distribution modeling  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Heather Siart – University of Massachusetts Co-Author: Toni Lyn Morelli – Northeast Climate Adaption Science Center	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	

1:42 PM – 1:54 PM MST Bimodal integration of olfactory and mechanosensory information in the antennal lobe of the honeybee <i>Apis mellifera</i>  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Shawn T. Mahoney, II – Arizona State University Co-Author: Ahmed Abdallah – Arizona State University Co-Author: Abhinav Ravichand – Arizona State University Co-Author: Shruti Joshi – University of California Co-Author: Brian H. Smith – Arizona State University Co-Author: Maksim Bazhenov – University of California Co-Author: Mainak Patel – College of William and Mary Co-Author: Hong Lei – Arizona State University	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student	
1:54 PM – 2:06 PM MST Characterizing the cys-loop ligand-gated ion channel gene superfamily of the Colorado potato beetle, <i>Leptinotarsa decemlineata</i>  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Dongxu Chen – University of Maryland Co-Author: David Hawthorne – University of Maryland	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student	
2:06 PM – 2:18 PM MST Cophylogenetic patterns of grasshoppers of the genus Romalea (Orthoptera: Romaleidae) and their eugregarine parasites (Apicomplexa)  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jorge Humberto Medina-Duran – Texas A&M University Co-Author: Jackson Linde, MSc – Texas A&M University Co-Author: Hojun Song – Texas A&M University	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
2:18 PM – 2:30 PM MST Current messaging and dissemination strategies in Arizona counties for mosquito- and tickborne disease  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jordan Robinson – University of Arizona Co-Author: Alexandria Renault – University of Arizona Co-Author: Skyler Eve Finucane (she/her/hers) – University of Arizona Co-Author: Sarah Yeo – University of Arizona	

Co-Author: Mary Hayden – University of Mississippi Co-Author: Kacey Ernst – University of Arizona Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student	
2:30 PM – 2:42 PM MST Detection of tick-borne pathogens from rescued wild animals  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Hye-Ryung Byun – Seoul National University Co-Author: Seong-Ryeong Ji – Seoul National University Co-Author: Mi-Sun Rieu – Seoul National University Co-Author: Sun-Woo Han – Seoul National University Co-Author: Hyun-Young Nam – Seoul National University Co-Author: Joon-Seok Chae – Seoul National University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student	
2:42 PM – 2:54 PM MST Break Location: Phoenix Convention Center, 224 A, PCC	
2:54 PM – 3:06 PM MST Identifying armored scale insects (Diaspididae) using habitus photos  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Phoebe Shubin – University of Massachusetts Co-Author: Benjamin B. Normark – University of Massachusetts Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
3:06 PM – 3:18 PM MST Interactions among black soldier fly larvae, methicillin-resistant <i>Staphylococcus aureus</i>, and ampicillin in potato substrate  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Kalini Jankee – University of Maine Co-Author: Katelynn Bowker – University of Maine Co-Author: Julia Coombs – University of Maine Co-Author: Matthew A. Moyet (he/him/his) – University of Maine Co-Author: Edward Bernard – University of Maine Co-Author: Andrei Alyokhin – University of Maine Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student	
3:18 PM – 3:30 PM MST	

Molecular biogeography of the high elevation Andean buckeye butterfly (<i>Junonia vestina</i>)  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Nataliaia Kopchak – University of Manitoba Co-Author: Jeffrey M. Marcus – University of Manitoba Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
3:30 PM – 3:42 PM MST Resistance profiles of major mosquito disease vectors in Maricopa County, Arizona  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Donald Ward, III, MSPH – Arizona State University Co-Author: Ashlyn Maag – Arizona State University Co-Author: Jack Reihing – Arizona State University Co-Author: Mikayla Utnehmer – Arizona State University Co-Author: Mackenna Berg – Arizona State University Co-Author: Silvie Huijben – Arizona State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student	
3:42 PM – 3:54 PM MST Break Location: Phoenix Convention Center, 224 A, PCC	
3:54 PM – 4:06 PM MST Thermal consequences of sodium channel point mutations, conferred by pyrethroid selection, in the yellow fever mosquito, <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Kendra Dagg – University of Florida Co-Author: Alden Estep – USDA-ARS Co-Author: Oshneil S. Baker – University of Florida Co-Author: Neil Sanscrainte – USDA-ARS Co-Author: Edmund Norris – USDA-ARS Co-Author: Edwin R. Burgess, IV – University of Florida Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student	
4:06 PM – 4:18 PM MST A demonstration of phylogenetic placement-based identification of agriculturally-significant fruit flies (Diptera: Tephritidae)  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Escher Alexander Cattle (he/him/his) – North Carolina State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	

4:18 PM – 4:30 PM MST Why designing UCEs probes is necessary for weevil museomics  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Kevin Alexis Cortes Hernandez (they/them/theirs) – Arizona State University Co-Author: Matthew McIvor Prebus – Arizona State University Co-Author: Matthew Van Dam – California Academy of Sciences Co-Author: Samanta Orellana – Arizona State University Co-Author: Nico Franz – Arizona State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
4:30 PM – 4:42 PM MST Analysis of biodiversity on Kelley’s Island, Ohio, using moths as ecological indicators  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Lauren G. Petronella (she/her/hers) – Student Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
4:42 PM – 4:54 PM MST Impacts of artificial light on the mortality and growth rate of Tanzanian tailless whip scorpions (<i>Damon diadema</i>) Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Kelsey E. Stone – Utah Valley University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
4:54 PM – 5:06 PM MST Social learning through improved tool use efficiency in red fire ants  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jonathan Luke Bowles – University of Georgia Co-Author: Jonathan Luke Bowles – University of Georgia Co-Author: Horace Zeng – University of Georgia Co-Author: Takao Sasaki – University of Georgia Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
1:30 PM – 5:30 PM MST Student Regular 10-min: P-IE Moderator: Don Cipollini, Ph.D. – Wright State University Moderator: Rafia Akhtar Khan (she/her/hers) – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student	

1:30 PM – 1:42 PM MST Are floral visitation records enough to characterize bumble bee diet breadth?  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Samuel O'Dell – University of Oklahoma Co-Author: Keng-Lou James Hung (he/him/his) – University of Oklahoma Student 10-Minute Presentation Plant-Insect Ecosystems Student	
1:42 PM – 1:54 PM MST Characterization of field-evolved pyrethrum resistance among <i>Drosophila hydei</i> populations in North Carolina sweet potato storage facilities  Location: Phoenix Convention Center, 224 B Presenting Author: Shea L. Phillips – North Carolina State University Co-Author: Anders Huseeth – North Carolina State University Student 10-Minute Presentation Plant-Insect Ecosystems Student	
1:54 PM – 2:06 PM MST Consequences of extreme heat for a solitary bee pollinator <i>Osmia lignaria</i> and its pollen nutrition  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Jenna Walters (she/her/hers) – University of Maine Co-Author: James Santiago – Michigan State University Co-Author: Tom Sharkey – Michigan State University Co-Author: Rufus Isaacs – Michigan State University Student 10-Minute Presentation Plant-Insect Ecosystems Student	
2:06 PM – 2:18 PM MST Do powerline rights-of-way impact pollinator diversity?  Location: Phoenix Convention Center, 224 B Presenting Author: Gregory Cruz – Northern Arizona University Student 10-Minute Presentation Plant-Insect Ecosystems Student	
2:18 PM – 2:30 PM MST Don't poop where you eat: Hygienic nest architecture and behavior in bumble bees  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Leah Valdes – Cornell University Co-Author: Scott McArt – Cornell University Co-Author: Wee Hao Ng – Cornell University Co-Author: Rebecca E. Irwin – North Carolina State University Co-Author: Mario Simon Pinilla-Gallego – University of Massachusetts, Amherst	

Student 10-Minute Presentation Plant-Insect Ecosystems Student
2:30 PM – 2:42 PM MST Break Location: Phoenix Convention Center, 224 B
2:42 PM – 2:54 PM MST Effects of drought on bumble bee foraging efficiency and community structure Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Brianne Marie Annette Symak (she/her/hers) – University of Saskatchewan Co-Author: Caleb B. Bryan – University of Saskatchewan Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan Student 10-Minute Presentation Plant-Insect Ecosystems Student
2:54 PM – 3:06 PM MST Efficacy of <i>Trichogramma chilonis</i> parasitizing eggs of lepidopteran pests under laboratory conditions Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Bhawana Regmi (she/her/hers) – University of Nebraska Co-Author: Min Raj Pokhrel – Agriculture and Forestry University Co-Author: Rangaswamy N. Muniappan (he/him/his) – Virginia Tech Co-Author: Lalit Prasad Sah – iDE Nepal Co-Author: Sundar Tiwari – Agriculture and Forestry University Student 10-Minute Presentation Plant-Insect Ecosystems Student
3:06 PM – 3:18 PM MST Feeding and movement behavior of <i>S. frontalis</i> (Coleoptera: Chrysomelidae) in ornamental nurseries Location: Phoenix Convention Center, 224 B Presenting Author: Rajesh Vavilapalli – University of Georgia Co-Author: Shimat Villanasery V. Joseph – University of Georgia Student 10-Minute Presentation Plant-Insect Ecosystems Student

3:18 PM – 3:30 PM MST Mechanisms of pathogen recognition in subterranean termites Location: Phoenix Convention Center, 224 B Presenting Author: Bhawana Luitel – Towson University Co-Author: Mark Bulmer – Towson University Student 10-Minute Presentation Plant-Insect Ecosystems Student
3:30 PM – 3:42 PM MST Optimizing insect diets for mass rearing: Investigating the role of macronutrient regulation Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Carolyn Huynh (she/her/hers) – M3 Agriculture Technologies Co-Author: Marion Le Gall (she/her/hers) – M3 Agriculture Technologies Co-Author: Nathan Moses-Gonzales – M3 Agriculture Technologies Student 10-Minute Presentation Plant-Insect Ecosystems Student
3:42 PM – 3:54 PM MST Break Location: Phoenix Convention Center, 224 B
3:54 PM – 4:06 PM MST Predicting corn rootworm egg density: analyzing soil characteristics and cropping intensity across the Midwest Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Christopher Blume – Bayer Crop Science Co-Author: Emily Bick, BCE-Intern – University of Wisconsin Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin Co-Author: Benjamin Bradford – University of Wisconsin Co-Author: Lauren Glynn – University of Wisconsin Student 10-Minute Presentation Plant-Insect Ecosystems Student

4:06 PM – 4:18 PM MST

Selectivity studies and their choices: Effects of bioinsecticides and insecticides on natural enemies



Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Emile Dayara Rabelo Santana, Ph.D. (she/her/hers) – University of Nebraska

Co-Author: Leonardo Vinicius Thiesen – Universidade de São Paulo

Co-Author: Leandro Ribeiro – EPAGRI

Co-Author: Pedro T. Yamamoto – Universidade de São Paulo

Student 10-Minute Presentation Plant-Insect Ecosystems Student

4:18 PM – 4:30 PM MST

Soft landings for tough times: The impact of ground cover associated characteristics on the overwintering survival and fitness of burrowing Lepidoptera



Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Emma Jonas (she/her/hers) – University of Delaware

Co-Author: Douglas Tallamy – University of Delaware

Student 10-Minute Presentation Plant-Insect Ecosystems Student

4:30 PM – 4:42 PM MST

Transmission dynamics of *Candidatus liberibacter solanacearum* halotypes A and B by potato psyllid nymphs: Bioassay and transcriptomic insights



Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Junepyo Oh – Texas A&M University

Co-Author: Azucena Mendoza-Herrera – Texas A&M University

Co-Author: Cecilia Tamborindeguy – Texas A&M University

Student 10-Minute Presentation Plant-Insect Ecosystems Student

4:42 PM – 4:54 PM MST

Understand the ecological implications of the landscape and local habitats by measuring flower visitor interactions at a northeastern solar facility



Location: Phoenix Convention Center, 224 B

Presenting Author: Grace Shiffrin – University of Massachusetts

Co-Author: Laura Figueroa – University of Massachusetts

Student 10-Minute Presentation Plant-Insect Ecosystems Student

4:54 PM – 5:06 PM MST

Analysis and validation of predicted secretory salivary proteins in *Lycorma delicatula*



Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Alexandria Smith (she/her/hers) – Texas A&M University

Co-Author: Cecilia Tamborindeguy – Texas A&M University

Student 10-Minute Presentation Plant-Insect Ecosystems Student

1:30 PM – 5:30 PM MST

10-min: FIT, General

Moderator: Edmond L. Bonjour – Oklahoma State University

Moderator: Faith J. Weeks – Towson University

10-Minute Presentation Formal and Informal Teaching

1:30 PM – 1:42 PM MST

A butterfly in every classroom 4-H program



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Kenneth Thomas Gioeli, M.Ag. (he/him/his) – University of Florida

Co-Author: Linette Trubulsky – St. Anastasia Catholic School

10-Minute Presentation Formal and Informal Teaching

1:42 PM – 1:54 PM MST

Artistic expression of original research: A case study at the intersection of art, science communication, and informal STEM education



Location: Phoenix Convention Center, 221 B

Presenting Author: Jessica Maccaro – University of California

Co-Author: Boris Baer – University of California

Co-Author: Peter R. Marting – Auburn University

Co-Author: Tanya Nieri – University of California

Co-Author: Daniel Ozer – University of California

10-Minute Presentation Formal and Informal Teaching

1:54 PM – 2:06 PM MST

Developing an educational intervention to reduce tick-borne disease exposure among rural Black children in South Carolina.



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Lidia Gual-Gonzalez – University of South Carolina

10-Minute Presentation Formal and Informal Teaching

2:06 PM – 2:18 PM MST

Educating fumigators in stored grain protection



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Edmond L. Bonjour – Oklahoma State University 10-Minute Presentation Formal and Informal Teaching
2:18 PM – 2:30 PM MST Extreme responses in entomophobia research: Could AI assist in overcoming the bias?  Location: Phoenix Convention Center, 221 B Presenting Author: Moshe Gish – University of Haifa 10-Minute Presentation Formal and Informal Teaching
2:30 PM – 2:42 PM MST Break Location: Phoenix Convention Center, 221 B
2:42 PM – 2:54 PM MST From disgust to acceptance: Exploring consumer attitudes and emotional responses to edible insects in Western cultures  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Agnieszka Orkusz – Wrocław University of Economics and Business Co-Author: Katarzyna Ostasiewicz – Wrocław University of Economics and Business Co-Author: Joanna Harasym – Wrocław University of Economics and Business 10-Minute Presentation Formal and Informal Teaching
2:54 PM – 3:06 PM MST If you give a child a critter: Establishment and expansion of 'Museums in Miniature' in the southeast  Location: Phoenix Convention Center, 221 B Presenting Author: Patricia Louise Wooden – Clemson University Co-Author: Nikolai Artley – Clemson University Co-Author: Caitlin May Silva – Dallas Zoo 10-Minute Presentation Formal and Informal Teaching
3:06 PM – 3:18 PM MST Insect adventures: Inspiring wonder in formal and informal education through science comics  Location: Phoenix Convention Center, 221 B Presenting Author: Jay S. Hosler (he/him/his) – Juniata College 10-Minute Presentation Formal and Informal Teaching
3:18 PM – 3:30 PM MST

Insects and education: Using drawings as tools to gauge knowledge gained in students  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Elizabeth Carlson – Oklahoma State University Co-Author: Andrine A. Shufra (she/her/hers) – Oklahoma State University Co-Author: Emily A. Geest – Oklahoma State University 10-Minute Presentation Formal and Informal Teaching
3:30 PM – 3:42 PM MST Break Location: Phoenix Convention Center, 221 B
3:42 PM – 3:54 PM MST Reframing entomology education presentations to explicitly focus on their importance and relevance to humans and human survival  Location: Phoenix Convention Center, 221 B Presenting Author: Faith J. Weeks – Towson University 10-Minute Presentation Formal and Informal Teaching
3:54 PM – 4:06 PM MST Service-learning biodiversity surveys: A partnership with the Lumbee Tribe of North Carolina  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Kaitlin U. Campbell (she/her/hers) – University of North Carolina Co-Author: Lisa Kelly – University of North Carolina 10-Minute Presentation Formal and Informal Teaching
4:06 PM – 4:18 PM MST Tiptoeing around climate change in K-12 classrooms: Pollinator datasets as a strategy  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Sophie M. Maksymkiw (she/her/hers) – Colorado State University Co-Author: Meena Balgopal – Colorado State University 10-Minute Presentation Formal and Informal Teaching
4:18 PM – 4:30 PM MST When “bugs” need heroes: Using unconventional outreach to engage the public  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Kelly Zimmerman, MSc – Bugs Need Heroes Podcast 10-Minute Presentation Formal and Informal Teaching

2:00 PM – 4:00 PM MST Editor Summit Location: Sheraton Phoenix Downtown, Encanto B, Sheraton Organizer: Jessica McEwan – Entomological Society of America Functions/Events/Meetings Publications	
2:00 PM – 5:00 PM MST Empowering Wild Bee Microbiome Research and Working Toward Phyllosphere Management Organizer: Makaylee Keao Crone (they/them/theirs) – York University Organizer: Phuong Nguyen (she/her/hers) – York University Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	^
2:00 PM – 2:03 PM MST Introductory remarks Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Makaylee Keao Crone (they/them/theirs) – York University	
2:03 PM – 2:25 PM MST A review of wild bee microbiomes and immunity Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Makaylee Keao Crone (they/them/theirs) – York University Co-Author: Jay Evans (he/him/his) – USDA Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
2:25 PM – 2:47 PM MST Microbial acquisition and interactions in the blue orchard bee (<i>Osmia lignaria</i>) Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Alexia Martin (she/her/hers) – University of California, Davis Co-Author: Clara Stuligross – University of California Co-Author: Neal M. Williams – University of California Co-Author: Helen Noroian – University of California Co-Author: Grace Genevieve Melone – University of Wisconsin Co-Author: Rachel Vannette (she/her/hers) – University of California Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
2:47 PM – 2:58 PM MST Break Location: Phoenix Convention Center, 122 A	
2:58 PM – 3:20 PM MST	

Acidophilic bacteria in flowers and bees: Transmission, phenology, and ecotoxicology Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Quinn McFrederick – University of California Co-Author: Hoang Vuong – University of California Co-Author: Lyna Ngor (she/her/hers) – University of California Co-Author: Magda Paola Argueta Guzman (she/her/hers) – University of California Co-Author: Helen Vo – University of California Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
3:20 PM – 3:42 PM MST Carpenter bee microbiomes are distinctive and related to microbiomes of honey bees and bumble bees Location: Phoenix Convention Center, 122 A Presenting Author: Jo Anne Holley – University of Texas Co-Author: Anna Pham – University of Texas Co-Author: Nancy A. A. Moran – University of Texas Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
3:42 PM – 3:53 PM MST Break Location: Phoenix Convention Center, 122 A	
3:53 PM – 4:15 PM MST Microbiomes impact wild bee development and associate with social role Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Phuong Nguyen (she/her/hers) – York University Co-Author: Sandra Rehan (she/her/hers) – York University Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
4:15 PM – 4:37 PM MST Environmental interlopers in the bumble bee gut microbiome: Ecology and roles in bee health Location: Phoenix Convention Center, 122 A Presenting Author: Tobin Hammer – University of California Co-Author: Kristal Watrous – University of California Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology	
4:37 PM – 4:59 PM MST Vulture bee microbiomes: Who, what, and possibly why	

Location: Phoenix Convention Center, 122 A
Presenting Author: Laura Figueroa – University of Massachusetts
Co-Author: Jessica Maccaro – University of California
Co-Author: Quinn McFrederick – University of California
Section Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
4:59 PM – 5:00 PM MST
Closing remarks
Location: Phoenix Convention Center, 122 A, PCC
Presenting Author: Makaylee Keao Crone (they/them/theirs) – York University
2:00 PM – 5:00 PM MST
Management Impacts on Arthropod-based Ecosystem Services in Agricultural Landscapes
Organizer: Holly E. Myers (she/her/hers) – University of Kentucky
Organizer: DeShae Dillard (he/him/his) – Michigan State University
Organizer: Nathan Haan – University of Kentucky
Section Symposium Plant-Insect Ecosystems
2:00 PM – 2:05 PM MST
Introductory remarks
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: DeShae Dillard (he/him/his) – Michigan State University
2:05 PM – 2:20 PM MST
Harnessing Diptera diversity as a bioindicator in agroecosystems 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: DeShae Dillard (he/him/his) – Michigan State University
Co-Author: Hannah Joy Burrack – Michigan State University
Co-Author: Doug A. Landis – Michigan State University
Section Symposium Plant-Insect Ecosystems
2:20 PM – 2:35 PM MST
Maximizing the benefits of local farm management on insect biodiversity and ecosystem services across landscape gradients 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: Chloe Yi-Luo Cho (she/her/hers) – Cornell University
Co-Author: Katja A. Poveda – Cornell University
Section Symposium Plant-Insect Ecosystems
2:35 PM – 2:50 PM MST

Using a novel mesocosm system to reveal effects of floral diversification on bumble bee colony-level health 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: Lexi Gauger (she/her/hers) – University of Kentucky
Co-author: Kathleen Fiske – University of Kentucky
Co-author: David Gonthier – University of Kentucky
Section Symposium Plant-Insect Ecosystems
2:50 PM – 3:00 PM MST
Break
Location: Phoenix Convention Center, 126 B, PCC
3:00 PM – 3:15 PM MST
The effect of endectocides on Scarabaeidae in West Virginia 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: Haylie Brown – West Virginia University
Co-Author: Elizabeth Kells Rowen (she/her/hers) – West Virginia University
Section Symposium Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST
Manipulating cultivar diversity: Impacts to arthropod communities in pasture agroecosystems 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: Colby Grant – University of Kentucky
Co-Author: A. Elizabeth Carlisle – University of Kentucky
Co-Author: Rebecca McCulley – University of Kentucky
Co-Author: Nathan Haan – University of Kentucky
Section Symposium Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST
Can we fine-tune tallgrass prairie restoration and management with controlled burns for bumble bee conservation? 
Location: Phoenix Convention Center, 126 B, PCC
Presenting Author: Jade Kochanski – University of Wisconsin
Co-Author: Stephanie L. McFarlane – University of Wisconsin
Co-Author: Sean Schoville – University of Wisconsin
Co-Author: Claudio Gratton – University of Wisconsin
Section Symposium Plant-Insect Ecosystems
3:45 PM – 4:00 PM MST

Arthropod communities in pastured-poultry agroecosystems  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Karina Garcia (she/her/hers) – Handsome Brook Farms Co-Author: Yuuki Cherian – University of Kentucky Co-Author: David Gonthier – University of Kentucky Section Symposium Plant-Insect Ecosystems
4:00 PM – 4:10 PM MST Break Location: Phoenix Convention Center, 126 B, PCC
4:10 PM – 4:25 PM MST Toward a political ecology of insect conservation in North American agricultural landscapes  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Benjamin Iuliano – University of Wisconsin Co-Author: Chatura Vaidya – University of Texas Co-Author: Gordon Fitch – York University Section Symposium Plant-Insect Ecosystems
4:25 PM – 4:40 PM MST Effects of prairie strips on the functional diversity of carabid communities  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Cynthia Fiser – Michigan State University Co-Author: Doug A. Landis – Michigan State University Section Symposium Plant-Insect Ecosystems
4:40 PM – 4:45 PM MST Closing remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: DeShae Dillard (he/him/his) – Michigan State University
2:30 PM – 5:30 PM MST Tour: Biocollections at Arizona State University  Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings
3:00 PM – 4:00 PM MST New Member Cheesecake Social Location: Phoenix Convention Center, North Ballroom Foyer

Organizer: Rosina Romano, MTA, CMP, DES – Entomological Society of America Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Functions/Events/Meetings
3:00 PM – 4:00 PM MST MUVE Mentorship Networking Meeting Location: Phoenix Convention Center, 223, PCC Organizer: Kyle K. Jordan, BCE – BASF Organizer: Bethany McGregor (she/her/hers) – USDA Functions/Events/Meetings Medical, Urban, and Veterinary Entomology
3:00 PM – 4:00 PM MST Integrating Information Literacy Into Your Entomology Courses Location: Phoenix Convention Center, 125 AB, PCC Organizer: Joseph Raczkowski – The Ohio State University Organizer: Ellen Klinger – The Ohio State University Organizer: Benjamin Philip – The Ohio State University Mini Workshop Formal and Informal Teaching
3:00 PM – 5:00 PM MST NCSRP Research Planning Meeting Location: Sheraton Phoenix Downtown, Deer Valley Organizer: Anthony J. McMechan – University of Nebraska Organizer: Kelley Tilmon – The Ohio State University Functions/Events/Meetings
3:30 PM – 5:00 PM MST 10-min: P-IE, Education and Outreach Moderator: Katherine Dentzman (she/her/hers) – Iowa State University Moderator: Anthony M. Shelton – Cornell University 10-Minute Presentation Plant-Insect Ecosystems
3:30 PM – 3:42 PM MST A theoretical framework “3MP” to improve the adoption of green IPM tactics and consideration on climate-smart agricultural practices  Location: Phoenix Convention Center, 225 A Presenting Author: Peng Han, Ph.D. (he/him/his) – Yunnan University Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Co-Author: Myron P. Zalucki – University of Queensland Co-Author: Shu-sheng Liu – Zhejiang University Co-Author: Nicolas Desneux – Institut National de la Recherche Agronomique (INRAe)

10-Minute Presentation	Plant-Insect Ecosystems
3:42 PM – 3:54 PM MST Artist to federal entomologist: A journey of a non-traditional student  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Megan Asche (she/her/hers) – USDA-APHIS	
10-Minute Presentation	Plant-Insect Ecosystems
3:54 PM – 4:06 PM MST Certified crop advisors' knowledge paradigms and pesticide resistance management: A sociological perspective  Location: Phoenix Convention Center, 225 A Presenting Author: Katherine Dentzman (she/her/hers) – Iowa State University	
10-Minute Presentation	Plant-Insect Ecosystems
4:06 PM – 4:18 PM MST Spotted lanternfly detected in Tennessee: Current updates  Location: Phoenix Convention Center, 225 A Presenting Author: Midhula Gireesh (she/her/hers) – University of Tennessee Co-Author: Cindy Bilbrey – Tennessee Department of Agriculture	
10-Minute Presentation	Plant-Insect Ecosystems
4:18 PM – 4:30 PM MST Sustainable IPM approaches for fruit and vegetable entomology in Alabama: Challenges, propositions, and perspectives  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Paulo Cremonez, Ph.D. (he/him/his) – Auburn University	
10-Minute Presentation	Plant-Insect Ecosystems
4:30 PM – 4:42 PM MST The Bt eggplant project in South Asia: Successes, challenges, and next steps  Location: Phoenix Convention Center, 225 A Presenting Author: Anthony M. Shelton – Cornell University Co-Author: Desiree Hautea – University of the Philippines Co-Author: Vijay Paranjape – Cornell University Co-Author: Lourdes Taylo – University of the Philippines Co-Author: Maricelis Acevedo – Cornell University	

10-Minute Presentation	Plant-Insect Ecosystems
3:30 PM – 5:30 PM MST Widespread Communication in Science: Graphical Representation of Leading-edge Techniques Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Organizer: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa Organizer: Sabita Ranabhat (she/her/hers) – Kansas State University Organizer: Alexis Alsdorf – North Carolina State University Organizer: Flinn Martin O'Hara – University of Florida	
Member Symposium	
3:30 PM – 3:35 PM MST Introductory remarks Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University	
3:35 PM – 3:45 PM MST Using distribution models to forecast the future: Will climate change decouple an invasive stored product insect and its biocontrol agent?  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Rachel R. Harman (she/her/hers) – USDA-ARS Co-author: Alison R. Gerken – USDA-ARS Co-author: William R. Morrison, III (he/him/his) – USDA-ARS	
Member Symposium	
3:45 PM – 3:55 PM MST Electropenetrography: A technology for studying feeding behavior of piercing-sucking insects  Location: Phoenix Convention Center, 127 C Presenting Author: Sajjan Grover – Bayer Crop Science	
Member Symposium	
3:55 PM – 4:05 PM MST Safeguarding Bt cotton with experimental social science evidence  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Dominic Reisig – North Carolina State University Co-Author: Greg Ferraro – North Carolina State University Co-Author: Zach Brown – North Carolina State University	
Member Symposium	

4:05 PM – 4:15 PM MST Turning insect pests into animal feed  Location: Phoenix Convention Center, 127 C Presenting Author: Phillip Shults – USDA-ARS Member Symposium
4:15 PM – 4:25 PM MST Machine learning vision for crop insect monitoring  Location: Phoenix Convention Center, 127 C Presenting Author: Ivan Grijalva – Kansas State University Co-Author: Brian Spiesman – Kansas State University Co-Author: Brian McCornack – Kansas State University Member Symposium
4:25 PM – 4:35 PM MST From discovery to commercialization: A brief overview of developing insecticidal traits  Location: Phoenix Convention Center, 127 C Presenting Author: Camila Hofman – Bayer Crop Science Member Symposium
4:35 PM – 4:45 PM MST Revealing rapid evolution  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Ruth Hufbauer – Colorado State University Member Symposium
4:45 PM – 4:55 PM MST Application of single cell and spatial transcriptomic technologies to insect science  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Douglas Harrison – University of Kentucky Co-Author: Nishtha Nayyar – University of Kentucky Co-Author: Surjeet Kumar Arya – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Member Symposium
4:55 PM – 5:25 PM MST Discussion

Location: Phoenix Convention Center, 127 C
5:25 PM – 5:30 PM MST Closing remarks Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University
3:30 PM – 5:30 PM MST Recent Advancements and Study Prospects in Insect Vector Diseases in Specialty Crops Organizer: Rekha Bhandari (she/her/hers) – Michigan State University Organizer: Sudeep Pandey – University of Georgia Member Symposium Plant-Insect Ecosystems
3:30 PM – 3:32 PM MST Introductory remarks Location: Phoenix Convention Center, 122 C Presenting Author: Rekha Bhandari (she/her/hers) – Michigan State University
3:32 PM – 3:46 PM MST Vector–pathogen interfaces in citrus greening pathosystem  Location: Phoenix Convention Center, 122 C Presenting Author: Nabil Killiny – University of Florida Co-author: Nabil Killiny – University of Florida Member Symposium Plant-Insect Ecosystems
3:46 PM – 4:00 PM MST Genome-wide association and population genetics of <i>Diaphorina citri</i>: Examining genetics underlying vector capacity of the Huanglongbing insect vector  Location: Phoenix Convention Center, 122 C Presenting Author: Douglas Stuehler – USDA-ARS Co-Author: Marina A. Mann (she/her/hers) – Cornell University Co-Author: Edward S. Buckler – Cornell University Co-Author: Michelle Heck – USDA-ARS Member Symposium Plant-Insect Ecosystems
4:00 PM – 4:14 PM MST Oxytetracycline and antisense oligonucleotides reduce titer and transmission of bacterial phytopathogen and improve health of citrus trees expressing Huanglongbing  Location: Phoenix Convention Center, 122 C Presenting Author: Lukasz L. Stelinski – University of Florida

Co-Author: Erik L. Roldan – University of Florida Co-Author: Lukasz L. Stelinski – University of Florida Co-Author: Kirsten Pelz Pelz-Stelinski (she/her/hers) – University of Florida	Member Symposium Plant-Insect Ecosystems
4:14 PM – 4:28 PM MST Grove-First: A new framework to find safe, available and affordable solutions to citrus greening disease  Location: Phoenix Convention Center, 122 C Presenting Author: Nicholas Larson – USDA-ARS Co-Author: Guilherme Locatelli – University of Florida Co-Author: Ellen Cochrane – University of Florida Co-Author: Lorenzo Rossi – University of Florida Co-Author: Randall P. Niedz – USDA-ARS Co-Author: Michelle Heck – USDA-ARS	Member Symposium Plant-Insect Ecosystems
4:28 PM – 4:32 PM MST Break Location: Phoenix Convention Center, 122 C	
4:32 PM – 4:46 PM MST Addressing gaps in the ecology of <i>Xylella fastidiosa</i> and its vectors in diversified cropping systems  Location: Phoenix Convention Center, 122 C Presenting Author: Alexandra M. Ratay (she/her/hers) – Clemson University Co-Author: Alexandra M. Ratay (she/her/hers) – Clemson University Co-Author: Elizabeth J. Cieniewicz (she/her/hers) – Clemson University	Member Symposium Plant-Insect Ecosystems
4:46 PM – 5:00 PM MST Development of mating disruption methods to suppress sharpshooter vectors of the bacterium <i>Xylella fastidiosa</i> in vineyards  Location: Phoenix Convention Center, 122 C Presenting Author: Rodrigo Krugner – USDA-ARS Co-Author: Rodrigo Krugner – USDA-ARS	Member Symposium Plant-Insect Ecosystems
5:00 PM – 5:14 PM MST The three-cornered alfalfa hopper, <i>Spissistilus festinus</i>, is an epidemiologically important vector of grapevine red blotch virus in northern California vineyards 	

Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Madison Flasco (she/her/hers) – Louisiana State University Co-Author: Victoria Hoyle – Cornell University Co-Author: Elizabeth J. Cieniewicz (she/her/hers) – Clemson University Co-Author: Gregory M. Loeb – Cornell University Co-Author: Heather L. McLane – Cornell University Co-Author: Marc Fuchs – Cornell University	Member Symposium Plant-Insect Ecosystems
5:14 PM – 5:28 PM MST Management of viruses and grape mealybug vectors in a commercial leafroll-diseased vineyard  Location: Phoenix Convention Center, 122 C Presenting Author: Gregory M. Loeb – Cornell University Co-Author: Gregory M. Loeb – Cornell University Co-Author: Stephen P. Hesler – Cornell University Co-Author: Marc Fuchs – Cornell University	Member Symposium Plant-Insect Ecosystems
5:28 PM – 5:30 PM MST Closing remarks Location: Phoenix Convention Center, 122 C Presenting Author: Rekha Bhandari (she/her/hers) – Michigan State University	
3:30 PM – 5:30 PM MST 10-min: P-IE, Biological Control 2 Moderator: German Vargas – University of Florida Moderator: Mitchell Green – University of Massachusetts	10-Minute Presentation Plant-Insect Ecosystems 
3:30 PM – 3:42 PM MST Overwintering in California: A brief look at the resilience of <i>Trissolcus japonicus</i>  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Daniel Roberts – California Department of Food and Agriculture Co-Author: Vincent Maiquez – California Department of Food and Agriculture Co-Author: Ricky Lara (he/him/his) – University of California	10-Minute Presentation Plant-Insect Ecosystems
3:42 PM – 3:54 PM MST	

Overwintering phenology of two introduced *Spathius* species across the invasion range of emerald ash borer



Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: Mitchell Green – University of Massachusetts

Co-Author: Jian Duan – USDA-ARS

Co-Author: Jeremy Catalin Andersen – University of Massachusetts

Co-Author: Nicole Sawallich – USDA-APHIS

Co-Author: Brittany Barnes – University of Georgia

Co-Author: Whit Bolado – University of Georgia

Co-Author: Kamal J.K. Gandhi – University of Georgia

Co-Author: Jonathan Schmude – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

3:54 PM – 4:06 PM MST

Possible host-determined strains of *Trichopoda pennipes* from *Anasa tristis*, *Nezara viridula*, or

Leptoglossus phyllopus



Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: Norman C. Leppla, BCE – University of Florida

Co-Author: Lillie M. Rooney – University of Florida

10-Minute Presentation Plant-Insect Ecosystems

4:06 PM – 4:18 PM MST

Predators of fall armyworm in different cover crop habitats



Location: Phoenix Convention Center, 222 C

Presenting Author: Robert L. Meagher, Jr. (he/him/his) – USDA-ARS

Co-Author: Carlene A. Chase – University of Florida

Co-Author: Xin Zhao – University of Florida

10-Minute Presentation Plant-Insect Ecosystems

4:18 PM – 4:30 PM MST

Progress on classical biological control of the brown marmorated stink bug in California



Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: Vincent Maiquez – California Department of Food and Agriculture

Co-Author: Daniel Roberts – California Department of Food and Agriculture

Co-Author: Ricky Lara (he/him/his) – University of California

10-Minute Presentation Plant-Insect Ecosystems

4:30 PM – 4:42 PM MST

Spread of *Gryon aetherium* and its host *Bagrada hilaris* in California



Location: Phoenix Convention Center, 222 C

Presenting Author: Nathan Mercer – CDFA

Co-Author: Brian N. Hogg – USDA-ARS

Co-Author: Christopher Borkent – California Department of Food and Agriculture

10-Minute Presentation Plant-Insect Ecosystems

4:42 PM – 4:54 PM MST

Tactics to improve natural enemy releases in pear



Location: Phoenix Convention Center, 222 C

Presenting Author: Daniel Hausler – USDA-ARS

Co-Author: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS

Co-Author: Erica Moretti (she/her/hers) – USDA-ARS

Co-Author: Louis Nottingham – Washington State University

Co-Author: Robert Orpet – Washington State University

10-Minute Presentation Plant-Insect Ecosystems

4:54 PM – 5:06 PM MST

The potential of *Catolaccus hunteri* (Hymenoptera: Pteromalidae) as a biocontrol agent of the hibiscus bud weevil, *Anthonomus testaceosquamosus* (Coleoptera: Curculionidae)



Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: German Vargas – University of Florida

Co-Author: Yisell Velazquez-Hernandez – University of Florida

Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida

10-Minute Presentation Plant-Insect Ecosystems

5:06 PM – 5:18 PM MST

Insect community composition in Pennsylvania industrial hemp crops: Implications for sustainable pest management



Location: Phoenix Convention Center, 222 C

Presenting Author: Jorge Luis Jaramillo Gonzalez – The Pennsylvania State University

Co-Author: Sara Hermann – The Pennsylvania State University

10-Minute Presentation Plant-Insect Ecosystems

3:30 PM – 5:30 PM MST

10-min: P-IE, Pollinators 2

Moderator: Beth E. Ferguson (she/her/hers) – Rutgers University

Moderator: Grace E. Hirzel (she/her/hers) – North Dakota State University



10-Minute Presentation Plant-Insect Ecosystems

3:30 PM – 3:42 PM MST

Do pollinators use flowering vegetation under solar panels? 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Carl D. Bowling – Iowa State University

Co-Author: Matthew E. O'Neal – Iowa State University

Co-Author: Ajay Nair – Iowa State University

Co-Author: Suzanne Slack – Iowa State University

Co-Author: Randall Paul Cass (he/him/his) – Iowa State University

Co-Author: Amy Toth – Iowa State University

10-Minute Presentation Plant-Insect Ecosystems

3:42 PM – 3:54 PM MST

Floral resources, not management, drive wild bee communities and sentinel bee nesting success in urban greenways along the Red River, ND and MN 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Mia G. Park (she/her/hers) – Xerces Society for Invertebrate Conservation

Co-Author: Vincent A. Oliveras – North Dakota State University

Co-Author: Nyah Johnson – North Dakota State University

Co-Author: Zeta Powell – North Dakota State University

Co-Author: Katelyn Johnson – North Dakota State University

Co-Author: Bridger Scraper – North Dakota State University

Co-Author: Joseph P. Rinehart – USDA-ARS

Co-Author: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University

Co-Author: Julia Bowsher – North Dakota State University

10-Minute Presentation Plant-Insect Ecosystems

3:54 PM – 4:06 PM MST

Invasion in the land of fire and ice: The impact of non-native plant-pollinator interactions on native bumble bees in Icelandic heathlands 

Location: Phoenix Convention Center, 221 C

Presenting Author: Morgan E. Christman – USDA-ARS

Co-Author: Elizabeth Sakulich – The Ohio State University

Co-Author: Liam Bennet Whiteman (he/him/his) – The Ohio State University

Co-Author: Kayla I. Perry (she/her/hers) – The Ohio State University

Co-Author: James P. Strange (he/him/his) – The Ohio State University

Co-Author: Claudio Gratton – University of Wisconsin

10-Minute Presentation Plant-Insect Ecosystems

4:06 PM – 4:18 PM MST

Late season value of emergent wetlands for wild bees in the northeastern United States 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Molly Jacobson (she/her/hers) – SUNY College of Environmental Science and Forestry (ESF)

Co-Author: Michael Schummer (he/him/his) – State University of New York

Co-Author: Melissa K. Fierke – State University of New York

Co-Author: Donald Leopold – State University of New York

Co-Author: Paige R. Chesshire (she/her/hers) – State University of New York

10-Minute Presentation Plant-Insect Ecosystems

4:18 PM – 4:30 PM MST

Plant and wild bee response to pollinator meadows installed through the USDA's Natural Resources

Conservation Service (NRCS) initiatives in Rhode Island and Connecticut 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Casey L. Johnson (she/her/hers) – University of Rhode Island

Co-Author: Steven Alm – University of Rhode Island

Co-Author: Tracy A. Zarrillo (she/her/hers) – Connecticut Agricultural Experiment Station

10-Minute Presentation Plant-Insect Ecosystems

4:30 PM – 4:42 PM MST

Plant-pollinator communities in restored cropland in the shortgrass prairie vary due to severe drought in short-grass prairie 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Sarah Elzay, Ph.D. (she/her/hers) – Fort Hays State University

10-Minute Presentation Plant-Insect Ecosystems

4:42 PM – 4:54 PM MST

Pollinator foraging preferences affect male, but not female, fitness in plants in a co-flowering community 

Location: Phoenix Convention Center, 221 C

Presenting Author: Laura Russo – University of Tennessee

Co-Author: Gerardo Arceo-Gomez – East Tennessee State University

10-Minute Presentation Plant-Insect Ecosystems

4:54 PM – 5:06 PM MST

Pollinator thermal preferences in an early-blooming crop 

Location: Phoenix Convention Center, 221 C

Presenting Author: Nicole S. DesJardins – University of Wisconsin

Co-Author: James D. Crall – University of Wisconsin 10-Minute Presentation Plant-Insect Ecosystems
5:06 PM – 5:18 PM MST Relationship between floral communities and <i>Crithidia</i> infection in pollinator communities  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Kate Borchardt (she/her/hers) – University of Massachusetts Co-Author: Lynn S. Adler – University of Massachusetts Co-Author: Laura Figueroa – University of Massachusetts 10-Minute Presentation Plant-Insect Ecosystems
5:18 PM – 5:30 PM MST She loves me / she loves me not: How petal and anthocyanin presence in cultivated sunflower affect native bee foraging preferences  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Grace E. Hirzel (she/her/hers) – North Dakota State University Co-Author: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University Co-Author: Jarrad R. Prasifka – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
4:30 PM – 5:30 PM MST APHIS All Hands Meeting Location: Phoenix Convention Center, 225 B Organizer: Esther Serrano – USDA-APHIS Functions/Events/Meetings
4:30 PM – 5:30 PM MST Integrating Research and Teaching via Development of a Curriculum Module “Symbiosis and Other Relationships” Location: Phoenix Convention Center, 125 AB Organizer: Gaelen R. Burke – University of Georgia Organizer: Harini Krishnan – University of Utah Mini Workshop Formal and Informal Teaching

5:30 PM – 7:30 PM MST Opening Plenary Session Location: Phoenix Convention Center, North Ballroom Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Presenting Author: Shawn Otto – Science Writer, Novelist, Screenwriter Plenary
7:30 PM – 9:30 PM MST Welcome Reception Location: Phoenix Convention Center, Exhibit Hall 6 Functions/Events/Meetings
7:30 PM – 9:30 PM MST Juried Art Show Location: Phoenix Convention Center, Exhibit Hall 6 Organizer: Cindy E. Myers – Entomological Society of America Functions/Events/Meetings Exhibit Hall
7:30 PM – 9:30 PM MST Exhibit Hall Location: Phoenix Convention Center, Exhibit Hall 6 General Exhibit Hall
Monday, November 11, 2024
5:45 AM – 10:45 AM MST Tour: Hot Air Ballooning - SOLD OUT  Location: Sheraton Phoenix Downtown, Porte Cochere/Driveway, Sheraton Functions/Events/Meetings
7:00 AM – 7:30 AM MST Student Competition Judges Training Location: Phoenix Convention Center, 121 C, PCC Organizer: Kadie Elizabeth Britt – Colorado State University Organizer: James Villegas – Louisiana State University Functions/Events/Meetings General
7:00 AM – 7:30 AM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America

General	Moderator Training
7:00 AM – 8:00 AM MST	Women and Allies in Entomology Breakfast  Location: Phoenix Convention Center, North Ballroom Organizer: Chloe Hawkings (she/her/hers) – Rutgers University Functions/Events/Meetings Sponsored By 
7:00 AM – 2:00 PM MST	Judges Break Room Location: Phoenix Convention Center, Patio 4, PCC Organizer: Kadie Elizabeth Britt – Colorado State University Organizer: James Villegas – Louisiana State University Functions/Events/Meetings General
7:00 AM – 5:00 PM MST	Registration and Information Center Location: Phoenix Convention Center, North Ballroom Foyer General Registration and Information Center
7:00 AM – 5:00 PM MST	Presentation Preview Room (PPR) Location: Phoenix Convention Center, 121 A General Presentation Preview Room (PPR)
7:00 AM – 9:00 PM MST	Relaxation Retreat Location: Phoenix Convention Center, Patio 3 General Relaxation Retreat
7:00 AM – 8:00 PM MST	Coat and Bag Check Location: Phoenix Convention Center, Exhibit Hall Foyer General
7:00 AM – 9:00 PM MST	Lactation Room Location: Phoenix Convention Center, Green Room

General	
7:30 AM – 1:30 PM MST	IRAC-US Meeting Location: Sheraton Phoenix Downtown, Paradise Valley, Sheraton Organizer: Caydee E. Savinelli (she/her/hers) – Syngenta Organizer: Graham P. Head – Bayer Crop Science Functions/Events/Meetings
8:00 AM – 10:00 AM MST	Grad 10-min Competition: MUVE, Biocontrol, Pollinators, and Biodiversity Moderator: Rajbir Kaur – University of Bristol Moderator: Anjel Helms – Texas A&M University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:00 AM – 8:12 AM MST	Assessing the establishment and spread of natural enemies of the red imported fire ant, <i>Solenopsis invicta</i>, in North Florida   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Kiara Ivy (she/her/hers) – ESA/CDC Co-Author: Anamika Sharma (she/her/hers) – Florida A&M University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:12 AM – 8:24 AM MST	Black soldier fly, <i>Hermetia illucens</i> (Diptera: Stratiomyidae), larvae reduce parasite eggs but develop poorly on horse manure   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Destiny Nicole Mann (she/her/hers) – University of Delaware Co-Author: Michael Crossley – University of Delaware Co-Author: Amy Biddle – University of Delaware Co-Author: Kasey Hobert – University of Delaware Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:24 AM – 8:36 AM MST	Control of litter beetle (<i>Alphitobius diaperinus</i>): Efficacy of shRNAi for targeted gene silencing and enhanced pest management  

Location: Phoenix Convention Center, 222 A Presenting Author: Kyle Oswalt – Auburn University Co-Author: John Frederick Beckmann – Auburn University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:36 AM – 8:48 AM MST How do RNAi-based Varroa treatments influence individual bee health?   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Joana Merk – Victoria University of Wellington Co-Author: Maelle Anastasi – Victoria University of Wellington Co-Author: Rose Ann McGruddy – Victoria University of Wellington Co-Author: Brian Manley, Ph.D. – GreenLight Biosciences, Inc. Co-Author: Antoine Felden – Victoria University of Wellington Co-Author: Phil Lester, Ph.D. (he/him/his) – Victoria University of Wellington Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:48 AM – 9:00 AM MST Inter-annual bee community response to urbanization   Location: Phoenix Convention Center, 222 A Presenting Author: Anthony Ayers – York University Co-Author: Sandra Rehan (she/her/hers) – York University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 9:12 AM MST Investigating patterns of blow fly (Diptera: Calliphoridae) community assembly in southern California's ecological mosaic   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Hannah Chu (she/her/hers) – University of California Co-Author: Amy C. Murillo – University of California Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:12 AM – 9:24 AM MST Population genetics and virulence of the honey bee brood pathogen, <i>Melissococcus plutonius</i>, in the United States  

Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Nathan Allen – University of Arizona Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:24 AM – 9:36 AM MST Survivor bees: Quantifying environmental stress tolerance in a Southern Californian honeybee population   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Sakshi Watts – University of California Riverside Co-Author: Amber Summers – University of California Co-Author: Boris Baer – University of California Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:36 AM – 9:48 AM MST The impact of buckwheat on rates of parasitism and parasitoid diversity on a cattle facility   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Elizabeth Taylor (she/her/hers) – Northern Illinois University Co-Author: Anna Grimenstein – Northern Illinois University Co-Author: Bethia H. King – Northern Illinois University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:48 AM – 10:00 AM MST The influence of deer-targeted tick control interventions on tick distribution   Location: Phoenix Convention Center, 222 A Presenting Author: Sung-Joo Lee – Columbia University Co-Author: Maria Diuk-Wasser – Columbia University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: MUVE, Medical and Veterinary Entomology Moderator: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati Moderator: Nicholas Larson – USDA-ARS



Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:00 AM – 8:12 AM MST

Diel activity patterns of Arizona mosquito species in urban settings  

Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Adele Bethany Malone (she/her/hers) – Arizona State University

Co-Author: Krijn Paaijmans – Arizona State University

Co-Author: John Townsend – Maricopa County

Co-Author: James Will – Maricopa County

Co-Author: Nicole Busser – Maricopa County

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:12 AM – 8:24 AM MST

Effect of flooring type on survival of *Amblyomma maculatum* and *Amblyomma americanum*  

Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Afsoon Sabet – The Ohio State University

Co-Author: Samuel F. Ward (he/him/his) – The Ohio State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:24 AM – 8:36 AM MST

Factors associated with house flies' carriage of microbial threats to human and animal health



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Victoria Pickens (she/her/hers) – Kansas State University

Co-Author: Cassandra Olds – Kansas State University

Co-Author: Dana Nayduch – USDA-ARS

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:36 AM – 8:48 AM MST

Flying under the radar: Are there unexpected outcomes of antibiotic use in livestock production?



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Herman A. Griesse (he/him/his) – Kansas State University

Co-Author: Dana Nayduch – USDA-ARS

Co-Author: Cassandra Olds – Kansas State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:48 AM – 9:00 AM MST

Host identifications from stable fly, *Stomoxys calcitrans* (Linnaeus 1758), bloodmeals at a Texas wildlife park  

Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Lauren Beebe (she/her/hers) – Texas A&M University

Co-Author: Pia Olafson – USDA-ARS

Co-Author: Phillip Kaufman – Texas A&M University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:00 AM – 9:12 AM MST

Manipulating male mosquito biology as a potential vector control strategy for malaria  

Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Ronald Essah Bentil – University of Idaho

Co-Author: Kevin Omondi Ochwedo, Ph.D. – University of Idaho

Co-Author: Nora Cespedes – University of Idaho

Co-Author: Xiaodi Wang – University of Washington

Co-Author: Jyotishka Datta – Virginia Tech

Co-Author: Michael Robert – Virginia Tech

Co-Author: Edwin Lewis – University of Idaho

Co-Author: Jeff Riffell – University of Washington

Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:12 AM – 9:24 AM MST

Modification of yeast-encapsulated essential oil-based larvicides for stability and extended-release



Location: Phoenix Convention Center, 221 A

Presenting Author: Dianne E. Peterson – University of New Mexico

Co-Author: Michael Workman – University of New Mexico

Co-Author: Ivy Hurwitz – University of New Mexico

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:24 AM – 9:36 AM MST

The identification of direct transstadial transmission bacteria in *Aedes aegypti* (Diptera: Culicidae)



Location: Phoenix Convention Center, 221 A

Presenting Author: Keonhee Kim – University of Georgia

Co-Author: Michael R. Strand – University of Georgia

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:36 AM – 9:48 AM MST

Regulation of tick attachment and rapid blood feeding through the dopamine receptors of the Asian
longhorned tick, *Haemaphysalis longicornis*



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Seoyul Hwang – Kyungpook National University

Co-Author: Donghun Kim – Kyungpook National University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:00 AM – 10:00 AM MST

Grad 10-min Competition: MUVE, Urban and Structural Pests 1

Moderator: Sudip Gaire (he/him/his) – Rentokil Initial

Moderator: Xiaodan Pan – Rutgers University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:00 AM – 8:12 AM MST

Wolbachia, a bacterial endosymbiont, is critical for blood digestion in the common bed bug, *Cimex*
lectularius



Location: Phoenix Convention Center, 221 C

Presenting Author: Elizabeth Wiles – North Carolina State University

Co-Author: Madhavi L. Kakumanu – North Carolina State University

Co-Author: Coby Schal – North Carolina State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:12 AM – 8:24 AM MST

Bait acceptance and seasonal activity of the Asian needle ant, *Brachyponera* (= *Pachycondyla*) *chinensis*

Emery, an emerging medically important species in Central Georgia



Location: Phoenix Convention Center, 221 C

Presenting Author: Karen A. Corsetti – University of Georgia

Co-Author: Conor G. Fair (he/him/his) – University of Georgia

Co-Author: Daniel Suiter – University of Georgia

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:24 AM – 8:36 AM MST

Bed bug-derived histamine: potential health implications and mitigation strategies



Location: Phoenix Convention Center, 221 C

Presenting Author: Simona Principato – University of Kentucky

Co-Author: Zachary DeVries – University of Kentucky

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:36 AM – 8:48 AM MST

Characterizing German cockroach allergen environmental entry and stability



Location: Phoenix Convention Center, 221 C

Presenting Author: Olivia Shea Katz – University of Kentucky

Co-Author: Zachary DeVries – University of Kentucky

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:48 AM – 9:00 AM MST

Determining the age of drywood termite fecal pellets utilizing comparative analysis of bacterial diversity



Location: Phoenix Convention Center, 221 C

Presenting Author: Nicholas Poulos – University of California

Co-Author: Dong-Hwan Choe – University of California

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:00 AM – 9:12 AM MST

Determining the impact of sub-lethal environmental conditions in combination with different insecticides
against bed bugs, *Cimex lectularius*



Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Bandana Shrestha (she/her/hers) – Louisiana State University Co-Author: James R. Ottea – Louisiana State University Co-Author: Qian Sun – Louisiana State University Co-Author: Aaron R. Ashbrook – Louisiana State University	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:12 AM – 9:24 AM MST Investigation into morphology, breeding system, and population structure of <i>Reticulitermes</i> spp. in Southern California   Location: Phoenix Convention Center, 221 C Presenting Author: Joanne Tzu-Chia Chen – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Michael K. Rust – University of California Co-Author: Chow-Yang Lee, BCE – University of California	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:24 AM – 9:36 AM MST Limited efficacy of insecticide dusts through contact and entomophagy of treated prey on Arizona bark scorpions, <i>Centruroides sculpturatus</i>   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: John Lyman Agnew, II (he/him/his) – New Mexico State University Co-Author: Alvaro Romero – New Mexico State University	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:36 AM – 9:48 AM MST Shelter tube geometry of the Asian subterranean termite, <i>Coptotermes gestroi</i> (Wasmann) (Blattodea: Rhinotermitidae), in response to a food source   Location: Phoenix Convention Center, 221 C Presenting Author: Kukhyun Lim – University of Florida Co-Author: Sang-Bin Lee – University of California Co-Author: Nan-Yao Su – University of Florida	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
9:48 AM – 10:00 AM MST	

RNA virus spillover through myrmecophilous interactions   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Charly T. Hartle (they/them/theirs) – Virginia Tech Co-Author: Jia-Wei Tay – University of Hawai'i Co-Author: Chin-Cheng Scotty Yang – Virginia Tech	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: MUVE, Vector Control and Surveillance Moderator: Emily D. Struckhoff – The Pennsylvania State University Moderator: Gillian Eastwood, Ph.D. – Virginia Tech	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:00 AM – 8:12 AM MST An updated catalog of <i>Culicoides</i> biting midges and associated microbial constituents from New Jersey   Location: Phoenix Convention Center, 221 B Presenting Author: Stephanie Zapata – Rutgers University Co-Author: Dana Price – Rutgers University	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:12 AM – 8:24 AM MST Assessing mosquito community composition along urban gradients: Implications for West Nile virus transmission risk   Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Yasmin Tavares – Columbia University Co-Author: Emily Leggat – Columbia University Co-Author: Heather Kopsco (she/her/hers) – Columbia University Co-Author: Waheed Bajwa – New York City Department of Health Co-Author: Maria Diuk-Wasser – Columbia University	Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
8:24 AM – 8:36 AM MST	

Characterization of the primary endosymbionts in the salivary secretion of the lone star tick, *Amblyomma americanum*  

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Andres Felipe Holguin Rocha – Kansas State University

Co-Author: Paulina Maldonado – University of Arizona

Co-Author: Yoonseong Park – Kansas State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:36 AM – 8:48 AM MST

Decoding the diet: Determining *Culicoides* host associations in Arkansas  

Location: Phoenix Convention Center, 221 B

Presenting Author: Cassandra Steele – University of Arkansas

Co-Author: Emily McDermott – University of Arkansas

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

8:48 AM – 9:00 AM MST

Distribution and genetic characteristics of bisexual and parthenogenetic *Haemaphysalis longicornis* in South Korea  

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Jiseok Kim – Kyungpook National University

Co-Author: Seoyul Hwang – Kyungpook National University

Co-Author: Donghun Kim – Kyungpook National University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:00 AM – 9:12 AM MST

Mosquito-flower power: Determining how nectar contents can influence mosquito vectors  

Location: Phoenix Convention Center, 221 B

Presenting Author: Danica M. Shannon – University of Georgia

Co-Author: Daniel Peach – University of Georgia

Co-Author: Nalany Richardson – University of Georgia

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:12 AM – 9:24 AM MST

Mowing as a strategy to manage nymphal blacklegged ticks  

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Sandra M. Zapata-Ramirez – Western Connecticut State University

Co-Author: Victoria L. Hornbostel (she/her/hers) – Medical University of South Carolina

Co-Author: Neeta P. Connally – Western Connecticut State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:24 AM – 9:36 AM MST

Practices, attitudes, and knowledge on vector control among Florida deer farmers  

Location: Phoenix Convention Center, 221 B

Presenting Author: Vilma M. Montenegro – University of Florida

Co-Author: Nathan Burkett-Cadena – University of Florida

Co-Author: Eva A. Buckner (she/her/hers) – University of Florida

Co-Author: Samantha M. Wisely – University of Florida

Co-Author: Juan Campos-Krauer – University of Florida

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:36 AM – 9:48 AM MST

Saccharine ceratopogonids: Determining sugar-source associations of *Culicoides* biting midges (Diptera: Ceratopogonidae)  

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Chip F. Markwardt – Kansas State University

Co-Author: Cassandra Olds – Kansas State University

Co-Author: Bethany McGregor (she/her/hers) – USDA

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

9:48 AM – 10:00 AM MST

Understanding Asian longhorned tick distribution in Virginia pastures  

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Matthew Sharpe (he/him/his) – Virginia Tech

Co-Author: Benjamin L. Aigner (he/him/his) – Virginia Tech

Co-Author: John Currin – Virginia Tech

Co-Author: Gillian Eastwood, Ph.D. – Virginia Tech

Co-Author: Thomas P. Kuhar – Virginia Tech

Presenting Author: Angus Catchot, III – Mississippi State University Co-Author: Urita Agana – Mississippi State University Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University Co-Author: Jeffrey Gore – Mississippi State University Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
9:36 AM – 9:48 AM MST The impact of supplemental feeding on honey bee foraging habits in carrot seed  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Riley Morgan Reed (he/him/his) – Washington State University Co-Author: Brandon Kingsley Hopkins, Ph.D., M.S. – Washington State University Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
9:48 AM – 10:00 AM MST The impacts of pathogen prevalence and landscape composition on propolis production in honey bees  Location: Phoenix Convention Center, 132 A Presenting Author: Samantha Mowery – University of Illinois Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Co-Author: May R. Berenbaum, Ph.D. (she/her/hers) – University of Illinois Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Behavior and Ecology Moderator: Thomas W. Phillips, Ph.D. – Kansas State University Moderator: Jennifer Abshire – USDA-ARS Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:00 AM – 8:12 AM MST Assessing the impact of abiotic factors on black stem borer flight in New York apple orchards  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Sandra Lizarraga – Cornell University Co-Author: Monique Rivera – Cornell University Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:12 AM – 8:24 AM MST

Drought and soil microbial community: Implications for pollinators' preferences and colony fitness  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Jeremy R. Irvine, BSc, AAg (he/him/his) – University of Saskatchewan Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:24 AM – 8:36 AM MST Evaluating the influence of landscape composition on almond orchard susceptibility to leaf-footed bug (<i>Leptoglossus zonatus</i>, Hemiptera: Coreidae) colonization in the spring  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Marina Denise Mendiola (she/her/hers) – California State University Fresno Co-Author: Houston Wilson (he/him/his) – University of California Co-Author: Jacob A. Wenger – California State University Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:36 AM – 8:48 AM MST On the road again: Documenting the flight potential and spatial distribution of ambrosia beetle  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Devin Barry Calpo (they/them/theirs) – Virginia Tech Co-Author: David J. Rivera (he/him/his) – Virginia Tech Co-Author: Julie Brindley – Virginia Tech Co-Author: Alejandro Del-Pozo – Virginia Tech Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
8:48 AM – 9:00 AM MST Oviposition preference of monarch butterflies (<i>Danaus plexippus</i>) on exotic of milkweeds in South Florida  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Sheri L. Holmes – University of Florida Co-Author: Carey Minteer – University of Florida Co-Author: Adam Dale – University of Florida Co-Author: Jaret C. Daniels, Ph.D. – University of Florida Student 10-Minute PresentationPlant-Insect EcosystemsStudentStudent Competition
9:00 AM – 9:12 AM MST Pollinator behavior and visitation rates at urban orchards in St. Louis  Location: Phoenix Convention Center, 122 C, PCC

Presenting Author: George Todd – University of Missouri Co-Author: Aimee Dunlap – University of Missouri Co-Author: Nicole Miller-Struttman – Webster University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
9:12 AM – 9:24 AM MST Spear tips: How asparagus traits shape asparagus beetle preferences  				
Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Laura O. Marmolejo – Michigan State University Co-Author: Zsofia Szendrei – Michigan State University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
9:24 AM – 9:36 AM MST Rhode Island bee diversity and pollen foraging specificity in cultivated and wild cranberry  				
Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Ren Johnson (she/her/hers) – University of Rhode Island Co-Author: Steven Alm – University of Rhode Island				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Biocontrol - General 1				
Moderator: Kaushalya G. Amarasekare (she/her/hers) – Tennessee State University Moderator: Kumar Shrestha – University of Nebraska				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:00 AM – 8:12 AM MST Aerial release of <i>Galerucella californiensis</i> using drone for the biological control of purple loosestrife  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Kushal Naharki – West Virginia University Co-Author: Yong-lak Park – West Virginia University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:12 AM – 8:24 AM MST Evaluating several entomopathogenic fungi for control of soybean gall midge  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Pheylian Alan Anderson – University of Minnesota Co-Author: Colin Peters – University of Minnesota				

Co-Author: Robert Blanchette – University of Minnesota Co-Author: Robert Koch – University of Minnesota				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:24 AM – 8:36 AM MST Exploring natural allies: identifying larval parasitoids for sustainable management of grape berry moth in vineyards  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Neetu Khanal – The Pennsylvania State University Co-Author: Jesus H. Gomez-Llano – The Pennsylvania State University Co-Author: Flor Edith Acevedo – The Pennsylvania State University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:36 AM – 8:48 AM MST Impact of seed imbibition on seed preferences by carabid beetles  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Daniella Canon-Rubio – University of Saskatchewan				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
8:48 AM – 9:00 AM MST Interactive effects of abiotic stress and salicylate-mediated plant resistance on aphid performance and natural enemy response  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Bijay Subedi – The Pennsylvania State University Co-Author: Monica Kersch-Becker – The Pennsylvania State University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
9:00 AM – 9:12 AM MST Optimizing biological control of the diamondback moth (<i>Plutella xylostella</i>): Evaluating the seasonality of its parasitoids and their impact in the Southeastern United States  				
Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Amna Ghani (she/her/hers) – Clemson University Co-Author: Tom Bilbo – Clemson University				
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition	
9:12 AM – 9:24 AM MST Searching for parasitoids of hibiscus mealybug, <i>Nipaecoccus viridis</i> Newstead (Hemiptera: Pseudococcidae): A factitious host and yellow pan trap survey  				

Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Hyojin Jeong – University of Florida Co-Author: Robert L. Kresslein – USDA-ARS Co-Author: Michael W. Gates (he/him/his) – USDA-ARS Co-Author: Nicole F. Quinn – University of Florida	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST Survey of slug-associated nematodes to control a key soybean seedling pest in the Eastern US   Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Thabu Mugala – University of Delaware Co-Author: Michael Crossley – University of Delaware	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST Understanding how applications of the predatory mite <i>Stratiolaelaps scimitus</i> to control <i>Megaselia halterata</i> on mushroom farms affect the transmission of fungal disease   Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Luke Christopher Reynolds (he/him/his) – The Pennsylvania State University Co-Author: Caitlyn Dionysius – The Pennsylvania State University Co-Author: Fatima Diarra – The Pennsylvania State University Co-Author: Ryan Gladwin – The Pennsylvania State University Co-Author: Mike S. Wolfin (he/him/his) – The Pennsylvania State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Biocontrol - Parasitoids Moderator: Anne Nielsen – Rutgers University Moderator: Elijah Talamas – Florida State Collection of Arthropods	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Application of molecular techniques to track foraging and dispersal of a parasitoid wasp (<i>Trissolcus japonicus</i>)   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Emma O. Waltman (she/her/hers) – Rutgers University Co-Author: Emma O. Waltman (she/her/hers) – Rutgers University Co-Author: Ann Rucker – Rutgers University Co-Author: Anne Nielsen – Rutgers University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:12 AM – 8:24 AM MST Developing application methods of <i>Steinernema carpocapsae</i> for biological control of mushroom phorid flies on mushroom farms   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Malachi Brought – The Pennsylvania State University Co-Author: Mike S. Wolfin (he/him/his) – The Pennsylvania State University Co-Author: Justin Riedhammer – The Pennsylvania State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:24 AM – 8:36 AM MST Effect of timing of natural enemy arrival on suppression of the sorghum aphid, <i>Melanaphis sorghi</i>   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Pius A. Bradicich, MSc – Texas A&M University Co-Author: Michael J. Brewer, Ph.D. – Texas A&M University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Egg parasitoid complex of <i>Leptoglossus zonatus</i> Dallas (Hemiptera: Coreidae) in Florida   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Md Tafsir Nur Nabi Rashed – University of Florida Co-Author: Elijah Talamas – Florida State Collection of Arthropods Co-Author: Adam Dale – University of Florida Co-Author: Nicole D. Benda – Florida Department of Agriculture and Consumer Services Co-Author: Amanda C. Hodges – University of Florida	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Harnessing molecular tools to craft biological control strategies for X-disease vectors in cherries and stone fruit   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Cesar A. Reyes Corral (he/him/his) – Washington State University Co-Author: Peter Smytheman – Washington State University Co-Author: Rodney Cooper – USDA-ARS Co-Author: David Horton – USDA-ARS Co-Author: Scott Harper – Washington State University Co-Author: William Walker – USDA-ARS	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

Co-Author: Jeffrey Skevington – Agriculture and Agri-Food Canada Co-Author: Abigail Clarke – Washington State University Co-Author: Adrian Marshall – USDA-ARS Co-Author: Tobin Northfield – Washington State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:00 AM – 9:12 AM MST Rice stink bug parasitoid diversity in the Florida Everglades agricultural area   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Carolina Tieppo Camarozano (she/her/hers) – University of Florida Co-Author: Julien Beuzelin – University of Florida Co-Author: Elijah Talamas – Florida State Collection of Arthropods	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:12 AM – 9:24 AM MST The impact of salinity stress on plant-insect interactions   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Sahil Vinod Pawar – The Pennsylvania State University Co-Author: Gary Felton – The Pennsylvania State University Co-Author: Jared G. Ali – The Pennsylvania State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:24 AM – 9:36 AM MST The role of introduced biocontrol on an invasive forest pest: Life table analysis of the population dynamics of the emerald ash borer in Maryland   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Angela M. Saenz (she/her/hers) – University of Maryland Co-Author: Daniel S. Gruner – University of Maryland	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:36 AM – 9:48 AM MST Unraveling the parasitoid complex of soybean gall midge   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Sarah Lisak – University of Minnesota Co-Author: Amelia Lindsey – University of Minnesota Co-Author: Erin W. Hodgson (she/her/hers) – Iowa State University Co-Author: Anthony J. McMechan – University of Nebraska Co-Author: Robert Koch – University of Minnesota	

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Biocontrol - Pathogens Moderator: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS Moderator: Aline Tassi – University of Florida	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Efficacy of field-collected pathogens against chewing and sucking insects   Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Kimberly Okpah – University of Maryland Co-Author: Tigest A. Tolosa – University of Maryland Co-Author: Kayla Waters (she/her/hers) – University of Maryland Eastern Shore Co-Author: Jocelyn Elliott – University of Maryland Co-Author: Simon Zebelo – University of Maryland	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:12 AM – 8:24 AM MST Evaluating diverse approaches to enhance the sustainability of rootworm management   Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Wyatt J. Bailey – Iowa State University Co-Author: Marshall D. McDaniel – Iowa State University Co-Author: David I. Shapiro-Ilan – USDA-ARS Co-Author: Erin W. Hodgson (she/her/hers) – Iowa State University Co-Author: Clinton D. Pilcher – Corteva Agriscience Co-Author: Aaron J. Gassmann – Iowa State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:24 AM – 8:36 AM MST Evaluation of cotton immune genes treated with <i>Beauveria bassiana</i> (GHA) as endophyte   Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Hadi Farrokhzadeh (he/him/his) – Virginia Tech Co-Author: Gholamhossein Moravvej – Ferdowsi University of Masshad Co-Author: Javad Karimi – Ferdowsi University of Masshad Co-Author: Arash Rashed – Virginia Tech	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:36 AM – 8:48 AM MST	

Improvements to the use of entomopathogenic biocontrol agents against the vine mealybug, <i>Planococcus ficus</i> (Signoret)   Location: Phoenix Convention Center, 127 B Presenting Author: Alexander Maxwell Butcher – Oregon State University Co-Author: Vaughn Walton – Oregon State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Incorporating a variant of HzNv2 into IPM programs against corn earworm (<i>Helicoverpa zea</i>) in Hawai'i   Location: Phoenix Convention Center, 127 B Presenting Author: Mathew A. Price – University of Hawaii Co-Author: Zhiqiang Cheng, Ph.D. (he/him/his) – University of Hawaii Co-Author: Julia Coughlin – University of Hawaii Co-Author: zhening zhang, Ph.D. – University of Hawaii Co-Author: Bruce Webb, Ph.D. – Lepidex Inc. Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:00 AM – 9:12 AM MST Investigation of the bioinsecticide <i>Beauveria bassiana</i> as a fungal endophyte in peach (<i>Prunus persica</i>) seedlings   Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Sabrina A. Elgar (she/her/hers) – University of Georgia Co-Author: David I. Shapiro-Ilan – USDA-ARS Co-Author: Caterina Villari – University of Georgia Co-Author: Dario Chavez – University of Georgia Co-Author: Brett R. Blaauw – University of Georgia Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Novel applications of entomopathogenic fungi targeting aphids in Oregon   Location: Phoenix Convention Center, 127 B Presenting Author: Matthew Scott Pedersen – Oregon State University Co-Author: Nik Wiman – Oregon State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST Relationship between corn earworm feeding and corn ear fungi contamination  

Location: Phoenix Convention Center, 127 B Presenting Author: Kendall Christine Walton – Texas A&M University Co-Author: Thomas Isakeit – Texas A&M University Co-Author: David L. Kerns – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST Soil abiotic factors impact <i>Metarhizium</i> spore movement and biological control capacity   Location: Phoenix Convention Center, 127 B Presenting Author: Morgan H. Swoboda (she/her/hers) – Cornell University Co-Author: Brian Lovett – USDA-ARS Co-Author: Kyle Wickings – Cornell University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:48 AM – 10:00 AM MST Synergy of a trap crop and entomopathogenic nematodes for multi-generational management of flea beetles in high tunnel Brassica crops   Location: Phoenix Convention Center, 127 B Presenting Author: Julia Clare Wooby – Purdue University Co-Author: Samantha A. Willden (she/her/hers) – Cornell University Co-Author: Laura L. Ingwell – Purdue University Co-Author: Ian Kaplan – Purdue University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Biodiversity Moderator: Ashley B. Leach – The Ohio State University Moderator: Heather Leach – Michigan State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Abundance and diversity of beetles (Coleoptera) associated with three species of ash trees (<i>Fraxinus</i> spp.) in Southern Louisiana   Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Andrew P. Sanford – Louisiana State University Co-Author: Todd David Johnson (he/him/his) – Louisiana State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:12 AM – 8:24 AM MST

Arthropod assemblage and seasonal phenology of *Amauromyza karli* Hendel (Diptera: Agramyzidae) in quinoa

Location: Phoenix Convention Center, 122 B

Presenting Author: Neha Panwar – Colorado State University

Co-Author: Adrianna Szczepanec – Colorado State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:24 AM – 8:36 AM MST

Deciphering molecular mechanisms underlying perennial sorghum resistance to sap-feeding aphids

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Esha Kaler (she/her/hers) – University of Nebraska

Co-Author: Pheonah Nabukalu – The Land Institute

Co-Author: Ebony G. Murrell – The Land Institute

Co-Author: Stan Cox – The Land Institute

Co-Author: Joe Louis – University of Nebraska

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:36 AM – 8:48 AM MST

Ecotone edge effects on arthropod biodiversity and aphid management in Texas sorghum

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Ivin Lam – Texas A&M University

Co-Author: Pius A. Bradich, MSc – Texas A&M University

Co-Author: Michael J. Brewer, Ph.D. – Texas A&M University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:48 AM – 9:00 AM MST

Examining the effects of plant diversity on insect biodiversity in natural and semi-natural grasslands

Location: Phoenix Convention Center, 122 B

Presenting Author: Evan Allen Quick, B.A. – University of Saskatchewan

Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:00 AM – 9:12 AM MST

How will insect communities respond to a novel chemical cue introduced by a range-expanding beetle?

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Caroline Kanaskie (she/her/hers) – University of New Hampshire

Co-Author: Claire E. Rutledge – The Connecticut Agricultural Experiment Station

Co-Author: Alicia Bray – Central Connecticut State University

Co-Author: Matthew Ayres – Dartmouth College

Co-Author: Jeff R. Garnas – University of New Hampshire

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:12 AM – 9:24 AM MST

Insect functional traits across landscape gradients are not differentially affected across latitudes

Location: Phoenix Convention Center, 122 B

Presenting Author: Annika Salzberg (she/her/hers) – Cornell University

Co-Author: Heather Grab – Cornell University

Co-Author: Wee Hao Ng – Cornell University

Co-Author: Katja A. Poveda – Cornell University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:24 AM – 9:36 AM MST

Through the canopy and across the landscape: Native Cerambycidae species assemblages and richness in diverse sites in Michigan

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Paige Payter (she/her/hers) – Michigan State University

Co-Author: Paige Payter (she/her/hers) – Michigan State University

Co-Author: Deborah G. McCullough – Michigan State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:00 AM – 10:00 AM MST

Grad 10-min Competition: P-IE, Conservation

Moderator: Michael Cavallaro – Oklahoma State University

Moderator: Christine M. Favorito (she/her/hers) – The Jones Center

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:00 AM – 8:12 AM MST

Bumble bee disease dynamics in agroecosystems: The roles of landscape-scale management and an introduced species

Location: Phoenix Convention Center, 130

Presenting Author: Jenna Melanson – University of British Columbia

Co-Author: Claire Kremen – University of British Columbia

Co-Author: Lauren Ponisio – University of Oregon

Co-Author: Tyler Kelly – Simon Fraser University

Co-Author: Ellen Klinger – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:12 AM – 8:24 AM MST Do municipal investments in backyard greening improve bumble bee health in residential landscapes?   Location: Phoenix Convention Center, 130, PCC Presenting Author: Caralee Shepard – The Ohio State University Co-Author: Hannah Dehus – The Ohio State University Co-Author: Megan Meuti – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:24 AM – 8:36 AM MST Does apiary presence increase honey bee pathogen loads in native bees?   Location: Phoenix Convention Center, 130 Presenting Author: Tristan A. Barley (he/him/his) – University of Illinois Co-Author: Lily Reynolds – University of Illinois Co-Author: Elena M. Gratton – The Pennsylvania State University Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Evaluating practices to maintaining diverse and abundant CP42-pollinator habitat (USDA: FSA) plantings in the southeastern USA   Location: Phoenix Convention Center, 130 Presenting Author: Zachary James Beneduci (he/him/his) – Auburn University Co-Author: Geoffrey Williams – Auburn University Co-Author: Madelyn G. Thompson – Auburn University Co-Author: Anthony P. Abbate (he/him/his) – Auburn University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Managing disease risk in tallgrass prairies: A new frontier   Location: Phoenix Convention Center, 130, PCC Presenting Author: Skylar Ciccolini – University of Missouri Co-Author: Samniqueka Halsey – University of Missouri Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:00 AM – 9:12 AM MST Parks, pollinators, and people: Does neighborhood affluence shape bee and butterfly diversity in Denver city parks?   Location: Phoenix Convention Center, 130, PCC Presenting Author: Nicole Bailey – Colorado State University Co-Author: John Mola – Colorado State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Population size estimates and foraging movement of a rare solitary bee, <i>Andrena parmassiae</i>   Location: Phoenix Convention Center, 130 Presenting Author: Max William McCarthy – Rutgers University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST Sunflower pollen decreases bumble bee parasitism on an individual level but may increase parasite transmission across landscapes   Location: Phoenix Convention Center, 130 Presenting Author: April E. Sharp (she/her/hers) – North Carolina State University Co-Author: Lynn S. Adler – University of Massachusetts Co-Author: Rebecca E. Irwin – North Carolina State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST The value of urban pollinator habitats for moth conservation in a growing city   Location: Phoenix Convention Center, 130, PCC Presenting Author: Lucy Guarnieri – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:48 AM – 10:00 AM MST Virginia orchard IPPM: Native wildflower plot to provide alternative forage, habitat, and refuge for bee pollinators   Location: Phoenix Convention Center, 130 Presenting Author: Ian F. McKellips – Virginia Tech Co-Author: Margaret J. Couvillon – Virginia Tech Co-Author: Abigail Golden – Virginia Tech

Co-Author: Kevin B. Rice – Virginia Tech Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: PBT, Ecology and Climate Change Moderator: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University Moderator: Edmond L. Bonjour – Oklahoma State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 8:12 AM MST Disease dynamics of synergistic stressors in bumble bee microcolonies   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Emily Nadine Runnion (she/her/hers) – The Ohio State University Co-Author: Frances S. Sivakoff – The Ohio State University Co-Author: James P. Strange (he/him/his) – The Ohio State University Co-Author: Ellen Klinger – The Ohio State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:12 AM – 8:24 AM MST Honey bees maintain their microbiome during overwintering storage   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Gagandeep Brar – Bayer Crop Science Co-Author: Lyna Ngor (she/her/hers) – University of California Co-Author: Quinn McFrederick – University of California Co-Author: Alex S. Torson – North Dakota State University Co-Author: Arun Rajamohan – USDA-ARS Co-Author: Preetpal Singh – University of Toronto Co-Author: Joseph P. Rinehart – USDA-ARS Co-Author: Julia Bowsher – North Dakota State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:24 AM – 8:36 AM MST How climate and neighbors interact to shape resource use and foraging behavior in ants   Location: Phoenix Convention Center, 126 B Presenting Author: Anna Paraskevopoulos – University of Colorado	

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:36 AM – 8:48 AM MST Influence of temperature changes in fall armyworm larval development   Location: Phoenix Convention Center, 126 B Presenting Author: Danna Judith Vera – The Ohio State University Co-Author: Andy Michel – The Ohio State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:48 AM – 9:00 AM MST Nitrogen fixation in the stag beetle, <i>Ceruchus Piceus</i> (Coleoptera: Lucanidae)   Location: Phoenix Convention Center, 126 B Presenting Author: Isobel Mifsud – Columbia University Co-Author: Palani Akana – Columbia University Co-Author: Thomas Bytnerowicz – University of Texas Co-Author: Steven Ray Davis – American Museum of Natural History Co-Author: Duncan Menge – Columbia University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 9:12 AM MST Stable isotope analysis clarifies the trophic ecology of pond insects   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Shelby A. Medlock – Louisiana Tech University Co-Author: Julia E. Earl (she/her/hers) – Louisiana Tech University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:12 AM – 9:24 AM MST The impact of nematodes on low temperature tolerance and immune function of <i>Odontotaenius disjunctus</i> Illiger   Location: Phoenix Convention Center, 126 B Presenting Author: Wesley Rhinehart – University of Memphis Co-Author: Leigh Boardman – University of Memphis	

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:24 AM – 9:36 AM MST

Warmer temperature accelerates aging in mosquitoes: Linking changes in gene expression to decreased lifespans and worse infection outcomes  

Location: Phoenix Convention Center, 126 B, PCC

Presenting Author: Jordyn S. Barr (she/her/hers) – Vanderbilt University

Co-Author: Lindsay E. Martin (she/her/hers) – Vanderbilt University

Co-Author: Ann Thomas Tate – Vanderbilt University

Co-Author: Julian F. Hillyer – Vanderbilt University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:36 AM – 9:48 AM MST

Warmer temperature and aging interactively reduce mosquito blood feeding and reproduction  

Location: Phoenix Convention Center, 126 B, PCC

Presenting Author: Lindsay E. Martin (she/her/hers) – Vanderbilt University

Co-Author: Julian F. Hillyer – Vanderbilt University

Co-Author: Tania Y. Estévez-Lao – Vanderbilt University

Co-Author: Tobias McCabe – Vanderbilt University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:48 AM – 10:00 AM MST

Within-colony variation in desiccation resistance of a tropical stingless bee  

Location: Phoenix Convention Center, 126 B, PCC

Presenting Author: Kristin M. Robinson (she/her/hers) – The University of Southern Mississippi

Co-Author: Kaitlin M. Baudier, Ph.D. – University of Southern Mississippi

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:00 AM – 10:00 AM MST

Grad 10-min Competition: PBT, Genetics - Functional and Molecular

Moderator: Katherine Easterling – USDA-ARS

Moderator: Roger Lawrie – University of Puerto Rico



Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:00 AM – 8:12 AM MST

Discovery and functional validation of diapause-related genes in the brown stink bug complex (Hemiptera: Pentatomidae)  

Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Frederico Hickmann – The Ohio State University

Co-Author: Alberto Soares Correa – Universidade de São Paulo

Co-Author: Andy Michel – The Ohio State University

Co-Author: Megan Meuti – The Ohio State University

Co-Author: Jelmer Poelstra – Center for Applied Plant Sciences

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:12 AM – 8:24 AM MST

Exploring insecticide resistance using CRISPR/Cas9 gene editing  

Location: Phoenix Convention Center, 124 AB

Presenting Author: Dylan Brown – Auburn University

Co-Author: Nannan Liu – Auburn University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:24 AM – 8:36 AM MST

First report on CRISPR/Cas12a ribonucleoprotein mediated editing of tryptophan 2,3-dioxygenase of *Spodoptera frugiperda* (J. E. Smith) (Lepidoptera: Noctuidae)  

Location: Phoenix Convention Center, 124 AB

Presenting Author: Dhawane Yogi – Indian Council of Agricultural Research

Co-Author: Ashok Karuppannasamy (he/him/his) – Tata Institute for Genetics and Society

Co-Author: Asokan Ramasamy – Indian Council of Agricultural Research

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:36 AM – 8:48 AM MST

Functional analysis of the UDP-glycosyltransferase gene family involved in gossypol detoxification in the cotton pest *Helicoverpa zea*  

Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Sujin Lee – Mississippi State University

Co-Author: Seung-Joon Ahn – Mississippi State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:48 AM – 9:00 AM MST Genetic basis of cuticular hydrocarbons (CHCs) variation between <i>Drosophila lummei</i> populations   Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Saniya Rose Henderson – Michigan State University Co-Author: Haosu Cong – Michigan State University Co-Author: Zinan Wang (he/him/his) – University of Kentucky Co-Author: Henry Chung – Michigan State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 9:12 AM MST Genomics and transcriptomics of resistance to Bt protein Vip3Aa in <i>Helicoverpa zea</i>   Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Zoe Jensen (she/her/hers) – University of Arizona Co-Author: Carson W. Allan – University of Arizona Co-Author: Luciano M. Matzkin (he/him/his) – University of Arizona Co-Author: Yves Carriere – University of Arizona Co-Author: Benjamin Degain – University of Arizona Co-Author: Bruce E. Tabashnik (he/him/his) – University of Arizona Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:12 AM – 9:24 AM MST Investigating a role for piRNA-associated PIWI genes in overcoming host-plant resistance in the soybean aphid, <i>Aphis glycines</i>   Location: Phoenix Convention Center, 124 AB Presenting Author: Angel Haller – The Ohio State University Co-Author: Andy Michel – The Ohio State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:24 AM – 9:36 AM MST MiRNA pathway is involved in the regulation of aestivation in the cabbage stem flea beetle  	

Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Gözde Güney – Georg-August-University Co-Author: Doga Cedden – University of Göttingen Co-Author: Kerstin Schmitt – Georg-August-University Co-Author: Oliver Valerius – Georg-August-University Co-Author: Johan Zicola – Georg-August-University Co-Author: Michael Rostás – Georg-August-University Co-Author: Stefan Scholten – Georg-August-University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:36 AM – 9:48 AM MST Temporal and spatial viral gene expression in <i>Microplitis demolitor</i> ovaries   Location: Phoenix Convention Center, 124 AB Presenting Author: Kaitlyn Camp – University of Georgia Co-Author: Benjamin Luttinen – Boston Consulting Group Co-Author: Gaelen R. Burke – University of Georgia Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: PBT, Physiology Moderator: Kristopher Silver (he/him/his) – Kansas State University Moderator: Leslie Rault – University of Nebraska Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 8:12 AM MST A mechanism of chemical tolerance via AMP induction associated with the tissue damage and repair pathway in <i>Drosophila melanogaster</i>   Location: Phoenix Convention Center, 125 AB Presenting Author: YeongHo Kim, Ph.D. – Kyungpook National University Co-Author: Young Ho Kim – Kyungpook National University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:12 AM – 8:24 AM MST	

Cardiac extracellular matrix components, pericardin and lonely heart, guide the aggregation of hemocytes to the heart of mosquitoes



Location: Phoenix Convention Center, 125 AB, PCC

Presenting Author: Shabbir Ahmed (he/him/his) – Vanderbilt University

Co-Author: Cole J. Meier – Vanderbilt University

Co-Author: Jordyn S. Barr (she/her/hers) – Vanderbilt University

Co-Author: Tania Y. Estévez-Lao – Vanderbilt University

Co-Author: Julian F. Hillyer – Vanderbilt University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:24 AM – 8:36 AM MST

Development of CRISPR-Interference (CRISPR-I) for sequence-specific repression of gene expression in

Aedes aegypti



Location: Phoenix Convention Center, 125 AB

Presenting Author: Esmé Cope – Texas A&M University

Co-Author: Hitoshi Tsujimoto – Texas A&M University

Co-Author: Zach N. Adelman – Texas A&M University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:36 AM – 8:48 AM MST

Investigating the roles of fatty acids and their derived lipids in male *Drosophila* fertility



Location: Phoenix Convention Center, 125 AB

Presenting Author: Zhuo Chen – Michigan State University

Co-Author: Rajanikanth Chowdanayaka – Michigan State University

Co-Author: Henry Chung – Michigan State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:48 AM – 9:00 AM MST

Low intensity UVB exposure as an immunostimulant in yellow mealworms (*Tenebrio molitor*)



Location: Phoenix Convention Center, 125 AB, PCC

Presenting Author: Michael B. Smith (he/him/his) – Indiana University, Indianapolis

Co-Author: Christine J. Picard – Indiana University

Co-Author: Dennis Oonincx – Wageningen University and Research Centre

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:00 AM – 9:12 AM MST

Novel approaches to manage the virus complex present in sweet potato virus disease (SPVD)



Location: Phoenix Convention Center, 125 AB

Presenting Author: Flinn Martin O'Hara – University of Florida

Co-Author: Sara Navarro – Louisiana State University

Co-Author: Jeffrey Davis – Louisiana State University

Co-Author: Daniel Swale – University of Florida

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:12 AM – 9:24 AM MST

Role and effects of amino acid residues forming the back door in *Apis mellifera* Acetylcholinesterase 1



Location: Phoenix Convention Center, 125 AB

Presenting Author: Jong Hyeok Lee – Seoul National university

Co-Author: Kyungjae Andrew A. Yoon – Seoul National University

Co-Author: SI Hyeock Lee – Seoul National University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:24 AM – 9:36 AM MST

The influence of juvenile hormone on the expression of a major royal jelly protein in *Apis mellifera*



Location: Phoenix Convention Center, 125 AB

Presenting Author: Jumana Hayat – Rutgers University

Co-Author: Chloe Hawkings (she/her/hers) – Rutgers University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:36 AM – 9:48 AM MST

Which came first? The variation in egg cell formation between the model fruit fly and the paper wasp



Location: Phoenix Convention Center, 125 AB, PCC

Presenting Author: Laura Elizabeth Miller (she/her/hers) – Drexel University

Co-Author: Sean O'Donnell – Drexel University Co-Author: Kari Lenhart – Drexel University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Ecology and IPM Moderator: Travis Prochaska – University of Nebraska Moderator: Benjamin L. Aigner (he/him/his) – Virginia Tech Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	^
8:00 AM – 8:12 AM MST Characterizing the role of ferulate-5-hydroxylase (F5H) gene in altering sorghum defense against sugarcane aphids   Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Kashish Verma (she/her/hers) – University of Nebraska Co-Author: Scott E. Sattler – University of Nebraska Co-Author: Joe Louis – University of Nebraska Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:12 AM – 8:24 AM MST Influence of temperature on thrips parvispinus development and reproduction   Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Isamar Sofia Reyes-Arauz (she/her/hers) – University of Florida Co-Author: De-fen Mou (she/her/hers) – University of Florida Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:24 AM – 8:36 AM MST Lawn and order: Impact of Asian jumping worms on turfgrass and soil health   Location: Phoenix Convention Center, 122 A Presenting Author: Jordan Thompson – Virginia Tech Co-Author: Thomas P. Kuhar – Virginia Tech Co-Author: Alejandro Del-Pozo – Virginia Tech Co-Author: Ashley Jernigan – Virginia Tech Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:36 AM – 8:48 AM MST	

Life-history traits of black pecan aphid on selected pecan cultivars   Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Shivakumar Veerlapati (he/him/his) – University of Georgia Co-Author: Rajendra Acharya (he/him/his) – University of Georgia Co-Author: Apurba K K. Barman – University of Georgia Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:48 AM – 9:00 AM MST Linking landscape structure to <i>Melanotus communis</i> (Coleoptera: Elateridae) abundance in agroecosystems across North Carolina   Location: Phoenix Convention Center, 122 A Presenting Author: Emma Schoeppner – North Carolina State University Co-Author: Anders Huset – North Carolina State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 9:12 AM MST Phenology and flight potential of <i>Systema frontalis</i> (Coleoptera: Chrysomelidae) in Eastern Virginia nurseries   Location: Phoenix Convention Center, 122 A, PCC Presenting Author: David J. Rivera (he/him/his) – Virginia Tech Co-Author: Julie Brindley – Virginia Tech Co-Author: Alejandro Del-Pozo – Virginia Tech Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:12 AM – 9:24 AM MST Seasonal phenology of chilli thrips on citrus trees: Insights from a two-year screenhouse investigation   Location: Phoenix Convention Center, 122 A Presenting Author: Zahra Torkaman (she/her/hers) – University of Florida Co-Author: Megan Dewdney – University of Florida Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:24 AM – 9:36 AM MST The impact of cover cropping and insecticide seed treatments on seedcorn maggot pressure in field corn   Location: Phoenix Convention Center, 122 A Presenting Author: Anna DiPaola – Cornell University	

Co-Author: Janice Degni – Cornell University Co-Author: Michael Hunter – Cornell University Co-Author: Jodi Letham – Cornell University Co-Author: Erik Smith – Cornell University Co-Author: Michael Stanyard – Cornell University Co-Author: Katja A. Poveda – Cornell University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST Understanding the impact of pest monitoring traps on bumble bee populations: Insights from northern and central Utah   Location: Phoenix Convention Center, 122 A Presenting Author: Tori Strausser – Utah State University Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS Co-Author: Fabiane M. Mundim – Utah State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Ecology and Toxicology Moderator: Alisson Santana (he/him/his) – University of Nebraska Moderator: Ana Paula Santana Lima (she/her/hers) – University of Nebraska	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Dose-dependence in attraction to (E)-8-dodecenyl acetate by the giant eucosma moth, <i>Eucosma giganteana</i>, and its implications for management of silflower   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Hazel Fae Scribner (they/them/theirs) – Kansas State University Co-Author: Ebony G. Murrell – The Land Institute Co-Author: Nervah Cheremond – The Land Institute Co-Author: Kun Yan Zhu – Kansas State University Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:12 AM – 8:24 AM MST Impact of sorghum polyphenolics on the growth, development, and detoxification enzyme activities in the stored product pest <i>Trogoderma variabile</i> (Coleoptera: Dermestidae)   Location: Phoenix Convention Center, 129 B Presenting Author: Rupinder Singh (he/him/his) – Kansas State University Co-Author: Jaymi Peterson – Kansas State University	

Co-Author: Justin Castaldi – USDA-ARS Co-Author: Kun Yan Zhu – Kansas State University Co-Author: Kaliramesh Siliveru – Kansas State University Co-Author: Dmitry Smolensky – USDA-ARS Co-Author: Erin D. Scully – USDA-ARS	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:24 AM – 8:36 AM MST Insects and cranberries: Understanding floral resources for wild pollinators around cranberry farms   Location: Phoenix Convention Center, 129 B Presenting Author: Stephanie Gagnon (she/her/hers) – McGill University Co-Author: Jessica Paula Gillung (she/her/hers) – McGill University Co-Author: Marilia Gaiarsa – University of California	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Intraspecific variation in bumblebee microbiome sensitivity to pesticides   Location: Phoenix Convention Center, 129 B Presenting Author: Anna R. Tatarko – University of Nevada Co-Author: Rachel L. Vannette – University of California Co-Author: Anne Leonard – University of Nevada	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Investigating landscape scale factors shaping dung beetle communities   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Holly E. Myers (she/her/hers) – University of Kentucky Co-Author: Nathan Haan – University of Kentucky	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:00 AM – 9:12 AM MST Light pollution influences web placement in grass spiders (<i>Agelenopsis</i> spp.) with implications for insect prey populations   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Wes Walsh (he/him/his) – University of Massachusetts Co-Author: Alex Winsor – University of Massachusetts Co-Author: Laura Figueroa – University of Massachusetts Co-Author: Elizabeth Jakob – University of Massachusetts	

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:12 AM – 9:24 AM MST Patterns of plant-pollinator interactions in the Palouse prairie   Location: Phoenix Convention Center, 129 B Presenting Author: Anna Hawse – University of Idaho Co-Author: Stephen P. Cook – University of Idaho			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:24 AM – 9:36 AM MST Relative toxic effects of two retail lawn pesticides on the house cricket, <i>Acheta domesticus</i>   Location: Phoenix Convention Center, 129 B Presenting Author: Md Abu Saleh Abir – Oklahoma State University Co-Author: Michael Cavallaro – Oklahoma State University Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:36 AM – 9:48 AM MST What will rise from the ashes? Evaluating impacts of emerald ash borer on tree regeneration in black ash stands   Location: Phoenix Convention Center, 129 B Presenting Author: River Daniel Raymond Mathieu – Michigan State University Co-Author: Deborah G. McCullough – Michigan State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Invasive Species Moderator: Therese M. Poland (she/her/hers) – USDA-Forest Service Moderator: Telmah Telmadarrehei, Ph.D. – University of Florida			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:00 AM – 8:12 AM MST Developing novel remote sensing techniques to accurately detect the impact of biological control on water hyacinth, <i>Pontederia crassipes</i> Mart   Location: Phoenix Convention Center, 121 C Presenting Author: Usman Mohammed – University of Florida Co-Author: Carey Minter – University of Florida Co-Author: Aditya Singh – University of Florida Co-Author: Stephen Lantin – University of Florida			

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:12 AM – 8:24 AM MST Evaluating the use of predatory plant bugs (Hemiptera: Miridae) as biological control against the invasive South American tomato leafminer (<i>Tuta absoluta</i>) in California tomato fields   Location: Phoenix Convention Center, 121 C Presenting Author: Briley F. Mullin – University of California Co-Author: Benjamin W. Lee – University of California Co-Author: Amy L. Roda – USDA-APHIS Co-Author: Ian Grettenberger – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:24 AM – 8:36 AM MST Exploring population trends and potential chemical control of invasive <i>Bulimulus snails</i> in Florida citrus   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Sankara Ganesh (he/him/his) – University of Florida Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:36 AM – 8:48 AM MST Herbivore risk alters plant palatability across woody plant ontogeny   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Brooke Pellegrini – University of Rhode Island Co-Author: Katherine Overstrum (she/her/hers) – University of Rhode Island Co-Author: Eirette Santiago (she/her/hers) – University of Rhode Island Co-Author: Evan Preisser (he/him/his) – University of Rhode Island			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:48 AM – 9:00 AM MST Impacts of insecticide application timing on the oviposition potential of <i>Ganaspis kimorum</i>   Location: Phoenix Convention Center, 121 C Presenting Author: Benjamin Crossman Johnson – University of Maine Co-Author: Philip Fanning – University of Maine			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:00 AM – 9:12 AM MST			

Nature's avengers: Functional and numerical response studies of <i>Leucotaraxis</i> spp., predators of hemlock woolly adelgid   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Olivia Kay Andrews (she/her/hers) – Virginia Tech Co-Author: Mark Whitmore – Cornell University Co-Author: Scott S. Salom – Virginia Tech Co-Author: Thomas P. Kuhar – Virginia Tech Co-Author: Albert E. Mayfield – USDA-Forest Service Co-Author: Chin-Cheng Scotty Yang – Virginia Tech Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Predicting spread of spotted lanternfly at local and landscape scales using satellite data   Location: Phoenix Convention Center, 121 C Presenting Author: Elisabeth Joll – Purdue University Co-Author: Matthew Ginzel – Purdue University Co-Author: John Couture – Purdue University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST The acacia and <i>Trichilogaster</i> story continues: Biological control of earleaf acacia in Florida   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Sara Elizabeth Salgado Astudillo – University of Florida Co-Author: Emily Le Falchier (she/her/hers) – University of Florida Co-Author: Sheri L. Holmes – University of Florida Co-Author: Melissa Smith – USDA-ARS Co-Author: Matthew F. Purcell (he/him/his) – CSIRO Co-Author: Ryan Zonneveld – The Commonwealth Scientific and Industrial Research Organisation Co-Author: Carey Minter – University of Florida Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST The threat of invasive plants across trophic levels   Location: Phoenix Convention Center, 121 C Presenting Author: Ari Zakroff – George Washington University Co-Author: John O. Stireman, III – Wright State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST

Grad 10-min Competition: P-IE, IPM - Field Crops 1 Moderator: Eric Rebek – FMC Corporation Moderator: Anitha Chitturi (she/her/hers) – Lincoln University of Missouri Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Are yields impacted differently with defoliation in full-season or double-cropped soybean?   Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Igor Sulzbacher Schardong – North Carolina State University Co-Author: Dominic Reisig – North Carolina State University Co-Author: Anders Huseth – North Carolina State University Co-Author: Rachel Vann – North Carolina State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:12 AM – 8:24 AM MST Comparing capture rate of pheromone traps to monitor stink bug populations in soybeans   Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Taynara Possebom (she/her/hers) – North Carolina State University Co-Author: Dominic Reisig – North Carolina State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:24 AM – 8:36 AM MST Determining <i>Euschistus quadrator</i> population dynamics on soybean (<i>Glycine max</i>)   Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Cristofer Mauricio Martinez – Louisiana State University Co-Author: Jeffrey Davis – Louisiana State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Effect of planting date on the southeastern bug complex in cotton   Location: Phoenix Convention Center, 131 B Presenting Author: Sawyer Hopkins – Auburn University Co-Author: Scott H. Graham – Auburn University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST

Efficacy of neonicotinoid insecticidal seed treatments against *Diceraeus melacanthus* at different infestation times

Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Lennis Afraire Rodrigues (she/her/hers) – São Paulo State University

Co-Author: Regiane Cristina De Oliveira – São Paulo State University

Co-Author: Ivair Valmorbida – University of Missouri

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:00 AM – 9:12 AM MST

Efficacy of neonicotinoid seed treatments of soybean under adverse abiotic conditions

Location: Phoenix Convention Center, 131 B

Presenting Author: Sadhana Chhetri – Purdue University

Co-Author: Christian Krupke – Purdue University

Co-Author: Darcy Telenko – Purdue University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:12 AM – 9:24 AM MST

Evaluating predatory arthropod population in ecologically intensified organic cropping systems

Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Hira Poudel (she/her/hers) – Purdue University

Co-Author: Christian Krupke – Purdue University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:24 AM – 9:36 AM MST

Evaluating the efficacy of insecticidal seed treatments (IST) for managing soil insect pests in Bt and non-Bt corn

Location: Phoenix Convention Center, 131 B

Presenting Author: Hunter Daniel Ness – University of Minnesota

Co-Author: Robert Koch – University of Minnesota

Co-Author: Fei Yang – University of Minnesota

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:36 AM – 9:48 AM MST

Evaluating the impact of planting date on Dectes stem borer infestations of South Dakota sunflowers

Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Khuma K. Bhusal (she/her/hers) – South Dakota State University

Co-Author: Philip Rozeboom – South Dakota State University

Co-Author: Patrick Wagner – South Dakota State University

Co-Author: Bradley L. McManus – South Dakota State University

Co-Author: Zachary Loomis – South Dakota State University

Co-Author: Adam J. Varenhorst – South Dakota State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:48 AM – 10:00 AM MST

Assessing plant resistance of rice varieties against the rice stink bug, *Oebalus pugnax*, in Texas

Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Earl C. Agpawa – Texas A&M University

Co-Author: Lina Bernaola – Texas A&M University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:00 AM – 10:00 AM MST

Grad 10-min Competition: P-IE, IPM - General and Field Crops

Moderator: Kyle Matthew Bekelja – Virginia Tech

Moderator: Tim Bryant – Virginia Tech University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:00 AM – 8:12 AM MST

Agroecological importance of smooth brome in managing wheat stem sawfly (Hymenoptera: Cephidae) via its associated braconid parasitoids

Location: Phoenix Convention Center, 131 A

Presenting Author: Jackson Strand – Montana State University

Co-Author: David K. Weaver (he/him/his) – Montana State University

Co-Author: Bob K.D. Peterson – Montana State University

Co-Author: Tracy Sterling – Montana State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:12 AM – 8:24 AM MST

Characterizing the stink bug community composition in the southeastern soybean production system

Location: Phoenix Convention Center, 131 A

Presenting Author: Sujan Panta – North Carolina State University

Co-Author: Anders Huseth – North Carolina State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:24 AM – 8:36 AM MST Comparison of sampling methods for figitid parasitoid wasps of spotted-wing drosophila   Location: Phoenix Convention Center, 131 A Presenting Author: Robert Czokajlo – Washington State University Co-Author: Elizabeth H. Beers – Washington State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Determining the effectiveness of different pesticide formulations against stem borer, <i>Chilo partellus</i> Swinhoe 1885 (Lepidoptera: Crambidae), on <i>Zea mays</i> crop   Location: Phoenix Convention Center, 131 A Presenting Author: Muhammad Ali – University of the Punjab Co-Author: Muhammad Taufeeq – University of the Punjab Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Evaluating management options for Dectes stem borer in South Dakota soybeans   Location: Phoenix Convention Center, 131 A Presenting Author: Zachary Loomis – South Dakota State University Co-Author: Philip Rozeboom – South Dakota State University Co-Author: Bradley L. McManus – South Dakota State University Co-Author: Eric Jones – South Dakota State University Co-Author: Young Chang – South Dakota State University Co-Author: Pappu Yadav – South Dakota State University Co-Author: Adam J. Varenhorst – South Dakota State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:00 AM – 9:12 AM MST Got worms? Biological control of a cranberry pest with entomopathogenic nematodes   Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Elizabeth Hrycyna (she/her/hers) – University of Wisconsin Co-Author: Christelle Guedot – University of Wisconsin Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Impact of peanut variety and insecticide on thrips management in a nematode infested field   Location: Phoenix Convention Center, 131 A

Presenting Author: Caitlyn Lawton – Auburn University Co-Author: Scott H. Graham – Auburn University Co-Author: Kathy Lawrence – Auburn University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST Impact of seed treatments on soybean yield in Alabama   Location: Phoenix Convention Center, 131 A Presenting Author: Megan Woodall – Auburn University Co-Author: Scott H. Graham – Auburn University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST Integrated management of annual bluegrass weevil in short-cut turfgrass   Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Henry Kilburn Rice – The Ohio State University Co-Author: Shaohui Wu – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:48 AM – 10:00 AM MST Moving beyond neonicotinoids in Colorado potato beetle management   Location: Phoenix Convention Center, 131 A Presenting Author: Ray Putri Rantz – Michigan State University Co-Author: Zsafia Szendrei – Michigan State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, IPM - Sustainable Agriculture Moderator: Carmen Blubaugh – University of Illinois Moderator: Dylan J. Beal – UC ANR Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Evaluating the impact of protected culture and plant diversity on pollinator communities   Location: Phoenix Convention Center, 131 C Presenting Author: Robert Francis Lawrence Grosdidier – Purdue University Co-Author: Cristhian Ochoa Rodriguez – Purdue University Co-Author: Laura L. Ingwell – Purdue University

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:12 AM – 8:24 AM MST Evaluating the impact of silicon soil amendments on insect pests of soybean   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Jayvee Santiago Bruno (he/him/his) – Louisiana State University Co-Author: James Villegas – Louisiana State University Co-Author: Saurav Ranabhat (he/him/his) – Louisiana State University Co-Author: Leroy R. Lopez – Louisiana State University Co-Author: O'Neal Edward – Louisiana State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:24 AM – 8:36 AM MST Evaluating trade-offs with the effects of landscape composition on pests and beneficial insects in a commodity crop   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Nicole KucheroV – Kansas State University Co-Author: Tania N. Kim – Kansas State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:36 AM – 8:48 AM MST Fish are friends, shrimp are food: Mosquitofish (<i>Gambusia affinis</i>) as a potential biological control agent for tadpole shrimp (<i>Triops longicaudatus</i>)   Location: Phoenix Convention Center, 131 C Presenting Author: Madison Hendrick – University of California Co-Author: Luis Espino – University of California Co-Author: Ian Grettenberger – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:48 AM – 9:00 AM MST Host plant resistance against Mexican rice borer in rice: Effectiveness, economic benefits and compatibility with other IPM tactics   Location: Phoenix Convention Center, 131 C Presenting Author: Muhammad D. Khan – Louisiana State University Co-Author: Michael Stout (he/him/his) – Louisiana State University Co-Author: Blake E. Wilson – Louisiana State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:00 AM – 9:12 AM MST			

Investigating the effects of excess phosphorus on soil-plant-insect interactions in organic cropping systems  			
Location: Phoenix Convention Center, 131 C, PCC			
Presenting Author: Carly Sharp – University of Georgia			
Co-Author: William E. Snyder – University of Georgia			
Co-Author: Carmen Blubaugh – University of Illinois			
Co-Author: Kate Cassity-Duffey – University of Georgia			
Co-Author: Anny Chung – University of Georgia			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:12 AM – 9:24 AM MST Synergistic biorational strategies for Varroa mite management   Location: Phoenix Convention Center, 131 C Presenting Author: Petra Hafker – Cornell University Co-Author: Christophe Duplais – Cornell University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
9:24 AM – 9:36 AM MST The impact of biofumigation on non-targeted soil arthropods and subsequent host-mediated interactions with aboveground insects   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Usha Panta – Virginia Tech Co-Author: Arash Rashed – Virginia Tech			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Pollinators and Pollination - Honey Bees and Native Pollinators 1 Moderator: Beth E. Ferguson (she/her/hers) – Rutgers University Moderator: Shimat Villanasery V. Joseph – University of Georgia			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:00 AM – 8:12 AM MST Assessing bee movement through varying types of landcover   Location: Phoenix Convention Center, 129 A Presenting Author: Kyle Michael Ruszkowski – Colorado State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
8:12 AM – 8:24 AM MST			

Assessing factors that influence pollinator communities and coffee yield among three coffee production systems in Honduras



Location: Phoenix Convention Center, 129 A

Presenting Author: Martin Alfredo Murillo, Sr. – Indiana University of Pennsylvania

Co-Author: Kelly Diaz – Indiana University of Pennsylvania

Co-Author: Darin J. McNeil, Jr. – University of Kentucky

Co-Author: Emma Keele – Indiana University of Pennsylvania

Co-Author: Marcela Cely-santos – Tulane University

Co-Author: Jeffery Larkin – Indiana University of Pennsylvania

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:24 AM – 8:36 AM MST

Bee community assemblages within a California coastal sage scrub restoration context



Location: Phoenix Convention Center, 129 A, PCC

Presenting Author: Charles N. Thrift (he/him/his) – University of California

Co-Author: Charles A. Braman – University of California

Co-Author: Katja Seltmann – University of California

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:36 AM – 8:48 AM MST

Comparative analysis of pollen viability across hair types on *Osmia cornifrons* (Hymenoptera: Megachilidae)



Location: Phoenix Convention Center, 129 A

Presenting Author: Nellie Heitzman – West Virginia University

Co-Author: Yong-lak Park – West Virginia University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:48 AM – 9:00 AM MST

Determining the value of common turf forbs as insect pollinator resources in the Southeastern United States



Location: Phoenix Convention Center, 129 A

Presenting Author: Sara Scott – Mississippi State University

Co-Author: JoVonn Hill – Mississippi Entomological Museum

Co-Author: Jay D. McCurdy – Mississippi State University

Co-Author: Jeffrey Harris – Mississippi State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:00 AM – 9:12 AM MST

Evaluating plant-pollinator interactions under different land management strategies: A networks-based approach



Location: Phoenix Convention Center, 129 A

Presenting Author: Avery Pearson (she/her/hers) – University of North Texas

Co-Author: Elinor M. Lichtenberg – University of North Texas

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:12 AM – 9:24 AM MST

Factors associated with rusty patched bumble bee (*Bombus affinis*) presence in Central Appalachia: A community analysis approach



Location: Phoenix Convention Center, 129 A, PCC

Presenting Author: Elizabeth Sakulich – The Ohio State University

Co-Author: Grace Avalos – Smithsonian Institution

Co-Author: Cameron Garland – University of Minnesota

Co-Author: Olivia Hager – Appalachian Lab

Co-Author: Andrew Held – Frostburg State University

Co-Author: Rodney Richardson – WEST Environmental & Statistical Consultants

Co-Author: Karen Goodell (she/her/hers) – The Ohio State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:24 AM – 9:36 AM MST

Fuel reduction treatments and their ecological impacts on native bees



Location: Phoenix Convention Center, 129 A

Presenting Author: Kirstie Kandarís (she/her/hers) – USDA-ARS

Co-Author: Kelsey K. Graham – USDA-ARS

Co-Author: Larissa Yocom – Utah State University

Co-Author: Byron Love – USDA-ARS

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:36 AM – 9:48 AM MST

Interspecific variation in floral morphology shapes pathogen transmission dynamics in *Bombus impatiens*



Location: Phoenix Convention Center, 129 A

Presenting Author: Emelia Obodum O. Kusi – University of Massachusetts

Co-Author: Lynn S. Adler – University of Massachusetts

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:48 AM – 10:00 AM MST

Sharing the (fungal) load: Identifying areas of fungal community overlap between bees and flowers in cranberry agroecosystems   Location: Phoenix Convention Center, 129 A, PCC Presenting Author: Celeste Curran Huff (she/her/hers) – University of Wisconsin Co-Author: Leslie Holland – USDA-ARS Co-Author: Shawn A. Steffan – USDA-ARS	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: P-IE, Vectors of Plant Disease 1 Moderator: Daniel Hasegawa – USDA-ARS Moderator: Monique Rivera – Cornell University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 8:12 AM MST Analyses of thrips vector and plant viromes in peanut pathosystem reveal orthotospovirus transmission networks   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Vamsidhar Reddy Netla – University of Georgia Co-Author: Mark R. Abney – University of Georgia Co-Author: Sudeep Bag – University of Georgia Co-Author: Sudeep Pandey – University of Georgia Co-Author: Michael Anthony Catto (he/him/his) – Georgia Institute of Technology Co-Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:12 AM – 8:24 AM MST Aphid vectors of passion fruit woodiness disease in South Florida passion fruit   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Max Gerald-Anthony Gosselin – University of Florida Co-Author: Daniel Carrillo – University of Florida Co-Author: De-fen Mou (she/her/hers) – University of Florida	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:24 AM – 8:36 AM MST Evaluation of systemic insecticide residues in peanuts and cotton in Alabama   Location: Phoenix Convention Center, 128 AB Presenting Author: Maxwell Cavassa – Auburn University Co-Author: Scott H. Graham – Auburn University	

Co-Author: Amanda Strayer-Scherer – Auburn University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:36 AM – 8:48 AM MST Improving methods of landscape analysis for pest management in agroecosystems   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Timothy Martin – Texas A&M University Co-Author: Thomas Chappell – Texas A&M University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:48 AM – 9:00 AM MST Is cannabis aphid a vector of sweet potato feathery mottle virus?   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Reuel Ortiz Pablo (he/him/his) – Louisiana State University Co-Author: Jeffrey Davis – Louisiana State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:00 AM – 9:12 AM MST Disentangling effects of economic distress and landscape characteristics on urban tree health   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Daniel James Rhodes – University of Florida Co-Author: Brian W. Bahder – University of Florida Co-Author: Jacqueline H. Buenrostro (she/her/hers) – University of Florida Co-Author: Carrie Harmon – University of Florida Co-Author: Adam Dale – University of Florida	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Measuring dispersive distance of DayGlo powder marked <i>Euscelidius variegates</i> (Hemiptera: Cicadellidae) in Oregon sweet cherry orchards   Location: Phoenix Convention Center, 128 AB Presenting Author: Yan Yan – Oregon State University Co-Author: Anders Wohler – Oregon State University Co-Author: Maggie Freeman – Oregon State University Co-Author: Ashley Thompson – Oregon State University Co-Author: Kelsey Galimba – Oregon State University Co-Author: Chris Adams – Oregon State University	

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:24 AM – 9:36 AM MST

Microbiome diversity in wheat curl mite genotypes and their role in virus transmission



Location: Phoenix Convention Center, 128 AB

Presenting Author: Nikhitha Gangavarapu – University of Nebraska

Co-Author: Shaun Cross – University of Nebraska

Co-Author: Gary Hein – University of Nebraska

Co-Author: Satyanarayana Tatineni – USDA-ARS

Co-Author: Shaonpius Mondal – University of Nebraska

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:36 AM – 9:48 AM MST

Phenology of *Euscelidius variegatus* reared under controlled conditions



Location: Phoenix Convention Center, 128 AB

Presenting Author: Anders Wohler – Oregon State University

Co-Author: Yan Yan – Oregon State University

Co-Author: Chris Adams – Oregon State University

Co-Author: Kelsey Galimba – Oregon State University

Co-Author: Ashley Thompson – Oregon State University

Co-Author: Maggie Freeman – Oregon State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

9:48 AM – 10:00 AM MST

Tree injection of oxytetracycline and streptomycin reduces phytopathogen titer and transmission by Asian citrus psyllid and improves health of citrus expressing Huanglongbing



Location: Phoenix Convention Center, 128 AB, PCC

Presenting Author: Esmeralda Izabella Martinez (she/her/hers) – University of Florida

Co-Author: Erik L. Roldan – University of Florida

Co-Author: Kirsten Pelz Pelz-Stelinski (she/her/hers) – University of Florida

Co-Author: Lukasz L. Stelinski – University of Florida

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

8:00 AM – 10:00 AM MST

Grad 10-min Competition: PBT, Apiculture

Moderator: Reed M. Johnson – The Ohio State University

Moderator: Scott T. O'Neal – Corteva Agriscience



Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:00 AM – 8:12 AM MST

A step towards understanding the link between honey bee (*Apis mellifera*) worker longevity and Varroa resistance



Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Hasim Hakanoglu (he/him/his) – Louisiana State University

Co-Author: Kate Ihle – USDA-ARS

Co-Author: Qian Sun – Louisiana State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:12 AM – 8:24 AM MST

Beneficial stress in honeybees



Location: Phoenix Convention Center, 126 A

Presenting Author: Jessica C. Webb – University of California

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:24 AM – 8:36 AM MST

Comparative toxicology and transcriptomic response of age-matched honey bee queens and workers



Location: Phoenix Convention Center, 126 A

Presenting Author: Edward Hsieh – University of Illinois

Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:36 AM – 8:48 AM MST

Determining the critical thermal limits of wild and managed honey bees, *Apis mellifera*



Location: Phoenix Convention Center, 126 A

Presenting Author: Myra Dickey – Texas A&M University

Co-Author: Brock Harpur – Purdue University Co-Author: Juliana Rangel – Texas A&M University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:48 AM – 9:00 AM MST Living with the enemy: Parasite tolerance in survivor honeybees   Location: Phoenix Convention Center, 126 A Presenting Author: Genesis G. Chong (she/her/hers) – University of California Co-Author: Boris Baer – University of California Co-Author: Quanqing Zhang – University of California Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 9:12 AM MST Managing adjuvant risk to honey bees: Designing improved risk communication for pesticide applicators   Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Brandon Patrick Shannon – The Ohio State University Co-Author: Robyn S. Wilson – The Ohio State University Co-Author: Reed M. Johnson – The Ohio State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:12 AM – 9:24 AM MST Pesticide detoxification capabilities of virus-infected recovered honey bees   Location: Phoenix Convention Center, 126 A Presenting Author: Vincent Prayugo – University of Illinois Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:24 AM – 9:36 AM MST Rapid increase in the frequency of a novel mutation in the β2-octopamine receptor potentially associated with amitraz resistance in Korean populations of Varroa mites   Location: Phoenix Convention Center, 126 A Presenting Author: Joon Hee Lee – Seoul National University Co-Author: SI Hyeock Lee – Seoul National University	

Co-Author: Susie Cho (she/her/hers) – Seoul National University Co-Author: Young Ho Kim – Kyungpook National University Co-Author: Sanghyeon Kim – University of Florida Co-Author: Euijin You – Kyungpook National University Co-Author: Youngcheon Lim – Seoul National University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:36 AM – 9:48 AM MST Sex, sperm, and survival of honey bees in changing climates   Location: Phoenix Convention Center, 126 A Presenting Author: Christopher Allen – University of California Co-Author: Kylah Phillips – University of California Co-Author: Luis Frausto – University of California Co-Author: Madison Julien – University of California Co-Author: Alison McAfee – North Carolina State University Co-Author: Daniela Zarate – University of California Co-Author: Boris Baer – University of California Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:48 AM – 10:00 AM MST The impacts of field-realistic doses of fipronil and flupyradifurone on the flight physiology of the western honey bee, <i>Apis mellifera</i>   Location: Phoenix Convention Center, 126 A Presenting Author: Susie Cho (she/her/hers) – Seoul National University Co-Author: SI Hyeock Lee – Seoul National University Co-Author: Youngcheon Lim – Seoul National University Co-Author: Joon Hee Lee – Seoul National University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: PBT, Biocontrol and Invasive Species Moderator: Rafia Akhtar Khan (she/her/hers) – Texas A&M University Moderator: Anne Johnson – The Pennsylvania State University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	

8:00 AM – 8:12 AM MST

Assessing the impact of genetic background on homing efficiency of a CRISPR/Cas9 gene drive in spotted-wing drosophila  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Ariel Tarrand – North Carolina State University

Co-Author: Amarish Yadav (he/him/his) – North Carolina State University

Co-Author: Akihiko Yamamoto – North Carolina State University

Co-Author: Maxwell J. Scott (he/him/his) – North Carolina State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:12 AM – 8:24 AM MST

Caught red handed: Parasitoid eggs absorb host lipids  

Location: Phoenix Convention Center, 126 C

Presenting Author: Meagan Ash – University of Arizona

Co-Author: Todd Schlenke – University of Arizona

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:24 AM – 8:36 AM MST

Determining sequestration duration of ailanthone in the spotted lanternfly, *Lycorma delicatula* White  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Brian F. Ruether (he/him/his) – Virginia Tech

Co-Author: Dorothea Tholl – Virginia Tech

Co-Author: Kate Burgiss – Virginia Tech

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:36 AM – 8:48 AM MST

Establishing *Drosophila melanogaster* as a model for mechanistic study of immune priming  

Location: Phoenix Convention Center, 126 C

Presenting Author: Emily Burke – University of Arizona

Co-Author: Todd Schlenke – University of Arizona

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

8:48 AM – 9:00 AM MST

Genome sequencing and transcriptome analysis of the Rocky Mountain wood tick  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Joshua Tompkin (he/him/his) – University of Cincinnati

Co-Author: Susan Noh – USDA-ARS

Co-Author: Perot Saeleo – USDA-ARS

Co-Author: Pia Olafson – USDA-ARS

Co-Author: Kennan Jeannet Oyen – USDA-ARS

Co-Author: Anna K. Childers – USDA-ARS

Co-Author: Sheina B. Sim (she/her/hers) – USDA-ARS

Co-Author: Joshua Benoit – University of Cincinnati

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:00 AM – 9:12 AM MST

Low temperature tolerance of kudzu bug, *Megacopta cribraria*  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Mitchell Adkins – University of Memphis

Co-Author: Leigh Boardman – University of Memphis

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:12 AM – 9:24 AM MST

Polyunsaturated fatty acids stimulate immunity and eicosanoid production in *Drosophila melanogaster*  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Pakeeza Azizpor (she/her/hers) – University of California

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

9:24 AM – 9:36 AM MST

Starving malaria parasites: Transgenic manipulation of vitamin B5 in *Anopheles stephensi* mosquitoes  

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Brendan Riske – University of Arizona

Co-Author: Michael Riehle, Ph.D. – University of Arizona

Co-Author: Jun Isoe – University of Arizona

Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho

Co-Author: Yared Debebe Desta – University of Idaho Co-Author: Hannah L. Kaylor – University of Idaho Co-Author: Zoe Xanthos – University of Arizona Co-Author: Megan E. Dobson – University of Idaho Co-Author: Sydney Pruett – University of Idaho Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
9:36 AM – 9:48 AM MST Symbiotic sabotage: Do aphid endosymbionts influence chemical tolerance and sensitivity to entomopathogens?   Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Ashritha Dorai, Ph.D. – University of Melbourne Co-Author: Joshua Thia – University of Melbourne Co-Author: Ary Hoffmann – Cesar Hoffmann Labs Co-Author: Evatt Chirgwin – Cesar Hoffmann Labs Co-Author: Paul Umina – University of Melbourne Co-Author: Qiong Yang – University of Melbourne Co-Author: Xinyue Gu – University of Melbourne Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Behavior 1 Moderator: Amy Toth – Iowa State University Moderator: Jennifer H. Fewell – Arizona State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 8:12 AM MST Convergent evolution in social arthropods   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Claire S. Bailey (she/her/hers) – New Jersey Institute of Technology Co-Author: Phillip Barden (he/him/his) – New Jersey Institute of Technology Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:12 AM – 8:24 AM MST Effects of thermal stress on ant behavior  	

Location: Phoenix Convention Center, 222 B Presenting Author: Awanti Milind Shastri – George Washington University Co-Author: Sabrina Amador – Smithsonian Institution Co-Author: Adam Smith, Ph.D. – George Washington University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:24 AM – 8:36 AM MST Exploring the chemical ecology of an orchid bee signaling system   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Marissa Celine Sandoval (she/her/hers) – University of California, Davis Co-Author: Janosch Dohrs – Ruhr University Bochum Co-Author: Santiago Ramirez – University of California Co-Author: Thomas Eltz – Ruhr University Bochum Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:36 AM – 8:48 AM MST Investigating fire severity effects on soil arthropod prey for the endangered Jemez Mountains salamander (<i>Plethodon neomexicanus</i>)   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Amber Born – Northern Arizona University Co-Author: Kara S. Gibson (she/her/hers) – Northern Arizona University Co-Author: Derek Uhey – Northern Arizona University Co-Author: Anita J. Antoninka, Ph.D. – Northern Arizona University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:48 AM – 9:00 AM MST Reconsidering the ecological niche of Euceroptres (Hymenoptera: Figitidae) parasites of oak galls using dissection, micro-CT, and genetic barcoding   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Guerin E. Brown (he/him/his) – University of Iowa Co-Author: Andrew A. Forbes – University of Iowa Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 9:12 AM MST	

Scanning dual-baseline Scheimpflug insect lidar for pollinator foraging flight pattern measurements   Location: Phoenix Convention Center, 222 B Presenting Author: Yiyun Li – Texas A&M University Co-Author: Alexei V. Sokolov – Texas A&M University Co-Author: Robert Brick – Texas A&M University Co-Author: Marian Scully – Texas A&M University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
9:12 AM – 9:24 AM MST The fundamental and realized niches of a rare aquatic beetle in an extreme environment   Location: Phoenix Convention Center, 222 B Presenting Author: Audrey Lindsteadt – University of Wyoming Co-Author: Lusha M. Tronstad, Ph.D. – University of Wyoming Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
9:24 AM – 9:36 AM MST The role of bacteria in the Paussus-ant relationship   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Alexandra Lombard – University of Arizona Co-Author: Wendy Moore (she/her/hers) – University of Arizona Co-Author: Andrea Di Giulio – University of Roma Tre Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
9:36 AM – 9:48 AM MST To march or not to march: Quantifying patterns of collective movement across swarming and non-swarming <i>Schistocerca</i> species   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Audélia M.C Mechti (she/her/hers) – Texas A&M University Co-Author: Vishwanath Varma – Max Planck Institute Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Biodiversity 1

Moderator: Robert Orpet – Washington State University Moderator: Ruby Angurana, Ph.D. (she/her/hers) – Lovely Professional University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:00 AM – 8:12 AM MST <i>Hesperotettix speciosus</i> (Orthoptera: Acrididae) new record for Sumter County, Alabama, United States   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Shelby M. Grice (she/her/hers) – Mississippi State University Co-Author: JoVonn Hill – Mississippi Entomological Museum Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:12 AM – 8:24 AM MST Army cutworm moth migration and grizzly bear conservation in the greater Yellowstone ecosystem   Location: Phoenix Convention Center, 222 C Presenting Author: Taylor Kennedy (she/her/hers) – Montana State University Co-Author: Robb Diehl – United States Geological Survey Co-Author: Mark Jankauski – Montana State University Co-Author: Bob K.D. Peterson – Montana State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:24 AM – 8:36 AM MST Can MinION-based DNA barcoding enhance bee survey efforts? An example from Gold Butte National Monument   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Colleen Meidt – Utah State University Co-Author: Terry Griswold – USDA-ARS Co-Author: Joseph Wilson – Utah Valley University Co-Author: Jeremy B. Jensen (he/him/his) – Utah State University Co-Author: Frank Parker – USDA-ARS Co-Author: Jenny Gan – USDA-ARS Co-Author: Michael G. Branstetter – USDA-ARS Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition

8:36 AM – 8:48 AM MST Distance models reveal biases associated with passive trapping methods for measuring wild bee abundance   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Codey L. Mathis (she/her/hers) – The Pennsylvania State University Co-Author: Darin J. McNeil, Jr. – University of Kentucky Co-Author: Melanie Kammerer – USDA-ARS Co-Author: Jeffery Larkin – Indiana University of Pennsylvania Co-Author: Michael J. Skvarla – The Pennsylvania State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
8:48 AM – 9:00 AM MST Do insects host undiscovered specialist eukaryotes?   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Christian Louis Weinrich (he/him/his) – University of Iowa Co-Author: Robin Bagley – The Ohio State University Co-Author: Andrew A. Forbes – University of Iowa Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
9:00 AM – 9:12 AM MST Evolution and biogeography of pygmy mole crickets (Orthoptera: Tridactylidae) in the North American coastal plain   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Brandon Woo – Texas A&M University Co-Author: Jackson Linde, MSc – Texas A&M University Co-Author: Hojun Song – Texas A&M University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
9:12 AM – 9:24 AM MST iNaturalists and EntoNaturalists: A comparison of Lepidoptera biodiversity records in Oklahoma   Location: Phoenix Convention Center, 222 C Presenting Author: Alexander J. Harman (he/him/his) – Oklahoma State University Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
9:24 AM – 9:36 AM MST Potential areas of distribution of the butterflies of Kansas   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Anahi Quezada (she/her/hers) – University of Kansas Co-Author: Claudia Nunez-Penichet – University of Kansas Co-Author: Jorge Soberon – University of Kansas Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
9:36 AM – 9:48 AM MST Short-term impacts of interannual weather variation on insects   Location: Phoenix Convention Center, 222 C Presenting Author: Hadil Elsayed (she/her/hers) – York University Co-Author: Sheila Colla, PhD, Biology; BSc Honours, Zoology (she/her/hers) – York University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
9:48 AM – 10:00 AM MST Spatiotemporal variation of soil dwelling arthropod communities in a postindustrial urban center   Location: Phoenix Convention Center, 222 C Presenting Author: Tierney Shaible – Wayne State University Co-Author: Glen R. Hood – Wayne State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Biogeography Moderator: Sayde Ridling – USDA Forest Service - Forest Health Protection Moderator: Samuel F. Ward (he/him/his) – The Ohio State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
8:00 AM – 8:12 AM MST

A phylogeographic study of the Kentucky endemic cave beetle, *Neaphaenops tellkampfi* Erichson (1844)



Location: Phoenix Convention Center, 225 B

Presenting Author: Mahamad Sayab Miya – Western Kentucky University

Co-Author: Keith Philips – Western Kentucky University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:12 AM – 8:24 AM MST

Elucidating the geographic origins of a Wasmannia parasitoid wasp, *Orasema minutissima* (Chalcidoidea: Eucharitidae), in Hawai'i



Location: Phoenix Convention Center, 225 B

Presenting Author: Ashley Y. Bui – University of California

Co-Author: John Heraty – University of California

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:24 AM – 8:36 AM MST

Evolutionary insights: enhancing pest distribution forecasts in a changing climate



Location: Phoenix Convention Center, 225 B

Presenting Author: Fletcher A. E. Robbins – University of Wisconsin

Co-Author: Emily Bick, BCE-Intern – University of Wisconsin

Co-Author: Mike Howe – USDA-ARS

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:36 AM – 8:48 AM MST

Exploring the evolution of spider beetles within the lomas of coastal Peru



Location: Phoenix Convention Center, 225 B

Presenting Author: Marlena Askren – Western Kentucky University

Co-Author: Keith Philips – Western Kentucky University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:48 AM – 9:00 AM MST

Landscape genomics of *Bombus flavifrons*, a widespread color-polymorphic North American bumblebee



Location: Phoenix Convention Center, 225 B

Presenting Author: Brandon Austin Meadows – University of Alabama

Co-Author: Heather M. Hines – The Pennsylvania State University

Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS

Co-Author: Jeff Lozier (he/him/his) – University of Alabama

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:00 AM – 9:12 AM MST

Origin and diversification of Chlorocyphidae (Odonata: Zygoptera)



Location: Phoenix Convention Center, 225 B, PCC

Presenting Author: Judicael Fomekong-Lontchi – Brigham Young University

Co-Author: Vincent Kalkman – Naturalis Biodiversity Center

Co-Author: Seth M. Bybee – Brigham Young University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:12 AM – 9:24 AM MST

Systematics and biogeography of the widespread dragonfly genus Orthetrum (Odonata: Anisoptera: Libellulidae)



Location: Phoenix Convention Center, 225 B

Presenting Author: Violet Magoma Onsongo, IV – American Museum of Natural History

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:24 AM – 9:36 AM MST

The *Usazoros hubbardi* Caudell (Insecta: Zoraptera) microbiota: Characterizing the bacterial and fungal associates of a rare and cryptic insect



Location: Phoenix Convention Center, 225 B

Presenting Author: Lily Margeson – Texas A&M University

Co-Author: Daniel Malagon – Clemson University

Co-Author: Benjamin Camper – Clemson University

Co-Author: Sharon Bewick – Clemson University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:36 AM – 9:48 AM MST

The evolutionary history of the rainbow ants



Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Chloe Maddison Jelley – Cornell University Co-Author: Corrie S. Moreau – Cornell University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:48 AM – 10:00 AM MST Using UCEs to resolve phylogenetic relationships in the Hydrophilid subfamily Enochrinae   Location: Phoenix Convention Center, 225 B Presenting Author: Peter Willadsen – University of Kansas Co-Author: Andrew E. Short – University of Florida Co-Author: Rob Moyle – University of Kansas Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Morphology and Phylogenetics Moderator: Geoffrey E. Morse – University of San Diego Moderator: István Mikó – University of New Hampshire Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 8:12 AM MST A comprehensive exploration through integrative taxonomic revision of <i>Nylanderia</i> (Hymenoptera, Formicidae, Formicinae) in Vietnam   Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Aswaj Punnnath (he/him/his) – University of Florida Co-Author: Jason Lee Williams – University of Florida Co-Author: John S. LaPolla, Ph.D. – Towson University Co-Author: Andrea Lucky – University of Florida Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:12 AM – 8:24 AM MST A host-driven parasitoid syndrome: Convergent evolution of multiple traits associated with woodboring hosts in Ichneumonidae (Hymenoptera)   Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Davide Dal Pos – University of Central Florida	

Co-Author: barbra J. Sharanowski – University of Central Florida Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:24 AM – 8:36 AM MST Combined UCE and Sanger phylogeny reconstructs the complex evolution of body shape and coloration patterns in the largest plant bug subfamily Mirinae (Heteroptera: Miridae)   Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Veronica Tyts (she/her/hers) – University of California Co-Author: Christiane Weirauch – University of California Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:36 AM – 8:48 AM MST Phylogenetic implications of the metasoma in Platygastroidea   Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Monique Raymond (she/her/hers) – University of New Hampshire Co-Author: Elijah Talamas – Florida State Collection of Arthropods Co-Author: István Mikó – University of New Hampshire Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:48 AM – 9:00 AM MST Phylogenomic analysis of genus <i>Cochliomyia</i> resolves genus relationships and reveals changes in feeding specialization (Diptera: Calliphoridae)   Location: Phoenix Convention Center, 225 A Presenting Author: Ezra Bailey – North Carolina State University Co-Author: Paul Vincent Hickner – USDA-ARS Co-Author: Brian Wiegman – North Carolina State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 9:12 AM MST The impact of body size on response to climate change: A large-scale study in native bees   Location: Phoenix Convention Center, 225 A Presenting Author: Theresa Wolff (she/her/hers) – Auburn University Co-Author: Clint Penick – Auburn University Co-Author: Elsa Youngsteadt (she/her/hers) – North Carolina State University	

Co-Author: Kevin McCluney – Bowling Green State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:12 AM – 9:24 AM MST The larvae of Nearctic Myrmeleon (Neuroptera: Myrmeleontidae: Myrmeleontini) with an emphasis on Texas species   Location: Phoenix Convention Center, 225 A Presenting Author: Yu-Hsiu Lin – Texas A&M University Co-Author: John Oswald – Texas A&M University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:24 AM – 9:36 AM MST Trait scaling and foraging in bumble bees   Location: Phoenix Convention Center, 225 A Presenting Author: Jacquelyn Lee Fitzgerald – Northwestern University Co-Author: Paul CaraDonna – Northwestern University Co-Author: Jane Ogilvie – Rocky Mountain Biological Research Station Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:36 AM – 9:48 AM MST Unlocking an evolutionary chorus: A comprehensive phylogeny of Tettigoniidae (Insecta: Orthoptera)   Location: Phoenix Convention Center, 225 A Presenting Author: Jackson Linde, MSc – Texas A&M University Co-Author: Austin Baker (he/him/his) – Natural History Museum of Los Angeles County Co-Author: Seungwan Shin – Seoul National University Co-Author: Duane D. McKenna – University of Memphis Co-Author: Michael Whiting – Brigham Young University Co-Author: Fernando Montealegre-Z – University of Lincoln Co-Author: Hojun Song – Texas A&M University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Phylogenetics Moderator: Jawwad Qureshi – University of Florida	

Moderator: Zinan Wang (he/him/his) – University of Kentucky Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 8:12 AM MST A phylogeny of <i>Nearctic acmaeoderini</i> (Coleoptera: Buprestidae) reveals new higher-level relationships within   Location: Phoenix Convention Center, 224 B Presenting Author: Joel DuBois – Louisiana State University Co-Author: Nathan Lord – Louisiana State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:12 AM – 8:24 AM MST Evolution and classification of the ant subfamily Dolichoderinae from the phylogenomic perspective   Location: Phoenix Convention Center, 224 B Presenting Author: Ziv Ellis Lieberman – University of California Co-Author: Jill Oberski – Senckenberg Museum and Research Institute Co-Author: Brendon Elias Boudinot – Smithsonian Institution Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:24 AM – 8:36 AM MST Exploring parameter choices in ecological niche modeling: A case study in <i>Bombus</i> niche evolution   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Tatiana Nicole Bush – Washington State University Co-Author: Elizabeth Murray – Washington State University Co-Author: Gengping Zhu – Washington State University Co-Author: Silas Bossert (he/him/his) – Washington State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:36 AM – 8:48 AM MST Molecular data confirms the rediscovery of the greater chestnut weevil (<i>Curculio caryatrypes</i>) in Pennsylvania and Virginia   Location: Phoenix Convention Center, 224 B	

Presenting Author: Michael Alexander Charles (he/him/his) – University of Memphis Co-Author: Duane D. McKenna – University of Memphis	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition	
8:48 AM – 9:00 AM MST Phylogenetic revisions for the order Plecoptera   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Anna Eichert – American Museum of Natural History Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition	
9:00 AM – 9:12 AM MST Phylogenomic systematics of the mining bee subgenus <i>Callandrena</i> (Hymenoptera: Andrenidae) based on ultraconserved elements   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Kayun Lim (she/her/hers) – Utah State University Co-Author: Michael G. Branstetter – USDA-ARS	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition	
9:12 AM – 9:24 AM MST Population genetics and ecological niche of a California woodland scorpion, <i>Uroctonus mordax</i> , in the face of climate change   Location: Phoenix Convention Center, 224 B Presenting Author: Jacob Aaron Gorneau – California Academy of Sciences Co-Author: Katherine O. Montana – California Academy of Sciences Co-Author: Diana Phan – California Academy of Sciences Co-Author: Lauren Esposito – CAS	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition	
9:24 AM – 9:36 AM MST Systematics of emerald and tigertail dragonflies (Anisoptera: Synthemistidae, Corduliidae)   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Aaron M. Goodman – American Museum of Natural History Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History	

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
9:36 AM – 9:48 AM MST The complete mitochondrial genome of frosted elfin (<i>Callophrys irus</i>) and molecular evolution within the Lycaenidae family   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Leonardo C. J Corvalan, MSc – University of Florida Co-Author: Ivone de Bem Oliveira, Ph.D. (she/her/hers) – University of Florida Co-Author: Taylor Pierson (she/her/hers) – University of Florida Co-Author: Rhewter Nunes, Ph.D. – Universidade Estadual de Goiás Co-Author: Jaret C. Daniels, Ph.D. – University of Florida	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
9:48 AM – 10:00 AM MST Updating the global phylogeny and biogeography of the cleptoparasitic bee genus <i>Nomada</i> (Hymenoptera: Apidae)   Location: Phoenix Convention Center, 224 B Presenting Author: Katherine Akemi Odanaka – York University Co-Author: Trevor J. Sless – York University Co-Author: Michael G. Branstetter – USDA-ARS Co-Author: Kerrigan B. Tobin – Marquette University Co-Author: Sandra Rehan (she/her/hers) – York University	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:00 AM – 10:00 AM MST Grad 10-min Competition: SysEB, Systematics and Evolution Moderator: Lacie Newton (she/they) – American Museum of Natural History Moderator: Dowen Jocson (she/her/hers) – Washington State University	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:00 AM – 8:12 AM MST A 1000-year flood affects the form and magnitude of natural selection on an extended phenotype   Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Sarah Black – Wayne State University	

Co-Author: Mattheau Steven Comerford – Rice University

Co-Author: Scott P. Egan – Rice University

Co-Author: Glen R. Hood – Wayne State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:12 AM – 8:24 AM MST

Description of two new Alaskan *Boreus* species (Mecoptera: Boreidae)



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Taylor Kane – University of Alaska

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:24 AM – 8:36 AM MST

Identification of parthenogenesis inducing *Wolbachia* proteins in parasitoid wasps



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Laura Fricke – University of Minnesota

Co-Author: Amelia Lindsey – University of Minnesota

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:36 AM – 8:48 AM MST

Phylogeny and evolution of floral choices in bees of the tribe Emphorini (Hymenoptera: Apidae)



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Nathalia Florez Gomez – Cornell University

Co-Author: Michael G. Branstetter – USDA-ARS

Co-Author: Bryan N. Danforth – Cornell University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

8:48 AM – 9:00 AM MST

Red stripes and splotches: UCE phylogeny of Phylinae (Hemiptera: Miridae) reveals evolution of color patterns



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Sarah Elise Schroeder – University of California

Co-Author: Christiane Weirauch – University of California

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:00 AM – 9:12 AM MST

Revealing new horizons: Unraveling palaeotropical Eucharitidae (Chalcidoidea) and a novel genus discovery



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Alejandra Rocha – University of California

Co-Author: John Heraty – University of California

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:12 AM – 9:24 AM MST

Selection dynamics and efficacy of insecticide resistance management in knock-down resistant *Aedes aegypti*



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Brook Jensen – Arizona State University

Co-Author: Alden Estep – USDA-ARS

Co-Author: Silvie Huijben – Arizona State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:24 AM – 9:36 AM MST

The evolutionary trajectory of *Metarhizium robertsii* endophytic capability and entomopathogenicity



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Huiyu Sheng (she/her/hers) – University of Maryland College Park

Co-Author: Raymond St. Leger – University of Maryland

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

9:36 AM – 9:48 AM MST

The pickled past: Tropical brown dog tick distribution over time using ancient DNA



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Mara Short – University of Arizona

Co-Author: Wendy Moore (she/her/hers) – University of Arizona

Co-Author: Kathleen Walker – University of Arizona

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 10:00 AM MST Undergrad 10-min Competition: MUVE and PBT, Behavior, Pollinators, and Chemical Ecology Moderator: Colin R. Wong (he/him/his) – USDA Moderator: Wizzie Brown, BCE – Texas A&M University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology Student Student Competition	^
8:00 AM – 8:12 AM MST Aging and warmer temperatures interactively weaken intestinal barrier integrity in the mosquito   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Seokin Yang (he/him/his) – Vanderbilt University Co-Author: Lindsay E. Martin (she/her/hers) – Vanderbilt University Co-Author: Julian F. Hillyer – Vanderbilt University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
8:12 AM – 8:24 AM MST Do bumble bees bioaccumulate stormwater pollutants found in urban rain gardens?   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: David Narayanan – The Ohio State University Co-Author: Michelle Pham – The Ohio State University Co-Author: Dante J. Centuori (he/him/his) – The Ohio State University Co-Author: James P. Strange (he/him/his) – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
8:24 AM – 8:36 AM MST Essential oils: Are they essential for German cockroach control?   Location: Phoenix Convention Center, 226 C Presenting Author: Daniela Jackson – University of Kentucky Co-Author: Zachary DeVries – University of Kentucky Co-Author: Angela Sierras – University of Kentucky	

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
8:36 AM – 8:48 AM MST Indirect suppression of paraaoh ant colonies via horizontal transmission of bait toxicants targeting German cockroaches   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Xingwei Feng (he/him/his) – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Michael K. Rust – University of California Co-Author: Chow-Yang Lee, BCE – University of California Co-Author: Allen Yixing Zhao – University of California Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
8:48 AM – 9:00 AM MST Oviposition attractiveness and toxicity of the insecticide fipronil for <i>Culex</i> mosquitoes in Northern Kentucky   Location: Phoenix Convention Center, 226 C Presenting Author: Abilene Morgan – Northern Kentucky University Co-Author: Allison Therese Parker – Northern Kentucky University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 9:12 AM MST Size matters: Micronutrient supplementation impacts development of <i>Hermetia illucens</i> (Diptera: Stratiomyidae) and <i>Cochliomyia macellaria</i> (Diptera: Calliphoridae)   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Kiley Stout – Texas A&M University Co-Author: Erin Harris – Texas A&M University Co-Author: Jeffery Tomberlin – Texas A&M University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
9:12 AM – 9:24 AM MST The effects of a fungicide on honeybee queen egg laying rates   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Rebecca Smalley – Arizona State University	

Co-Author: Jon F. Harrison – Arizona State University Co-Author: Adrian L. Fisher II – Arizona State University	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition	
9:24 AM – 9:36 AM MST The mite light project: Using fluorescent and light microscopy to better understand <i>Varroa destructor</i> reproductive mechanisms   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Justin Hein (he/him/his) – University of Colorado Co-Author: Samuel Ramsey – University of Colorado	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition	
9:36 AM – 9:48 AM MST Utilizing museum records for historical and ecological insights into blow fly (Diptera: Calliphoridae) populations in California   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Indigo R. Talley – University of California Co-Author: Hannah Chu (she/her/hers) – University of California Co-Author: Amy C. Murillo – University of California	
Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Competition	
8:00 AM – 10:00 AM MST Undergrad 10-min Competition: P-IE, IPM and Ecology Moderator: Ramandeep Sandhi – FMC Corporation Moderator: Sally Nelson (she/her/hers) – University of Minnesota Extension	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:00 AM – 8:12 AM MST Applying technology to wing patterns and morphometrics to improve Plusiinae (Lepidoptera: Noctuidae) species identification   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Karina M. Torres (she/her/hers) – University of Florida Co-Author: Silvana V. Paula-Moraes – University of Florida Co-Author: Allan H. Smith-Pardo – USDA-APHIS Co-Author: Kayla Mollet – USDA-APHIS Co-Author: Rui Xu – University of Florida	

Co-Author: Charlie Li – University of Florida	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:12 AM – 8:24 AM MST Aquatic insect faunal changes along Mill Creek (OR-WA): Insight into causative factors   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Quinn Erik Miller (he/him/his) – Whitman College Co-Author: Heidi Dobson – Whitman College Co-Author: Lucien Rochelois – Whitman College	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:24 AM – 8:36 AM MST Assessing resistance to spotted-wing drosophila across populations of wild and domesticated blueberries   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Toviah T. Bass (he/him/his) – Rutgers University Co-Author: Jae E. Kerstetter (they/them/theirs) – Rutgers University Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:36 AM – 8:48 AM MST Does plant diversity predict soil arthropod diversity? A preliminary assessment using long-term monitoring plots at the University of Mississippi field station   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Caden Noonan – University of Mississippi Co-Author: Ryan Garrick – University of Mississippi Co-Author: Marjorie Holland – University of Mississippi	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
8:48 AM – 9:00 AM MST Effectiveness of biobased and chemical insecticide in controlling hemipteran pests in California almond orchards   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Chang Vue – University of California Co-Author: Mahesh Ghimire – University of California Co-Author: Jhalendra P. Rijal (he/him/his) – University of California	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 9:12 AM MST	

Impact of pollinator habitat on yield and fruit quality of 'Early Girl' tomato (<i>Lycopersicon esculentum</i>) and 'Early Jalapeno' (<i>Capsicum annuum</i>) in urban community vegetable gardens   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Julian Jose Cordo (he/him/his) – Indiana Wesleyan University Co-Author: Jennifer Noseworthy – Indiana Wesleyan University Co-Author: Margaret Martens – Indiana Wesleyan University Co-Author: Taryn Van Wyngarden – Indiana Wesleyan University Co-Author: Jacob Buck – Indiana Wesleyan University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:12 AM – 9:24 AM MST Individual and colony-level impacts of systemic pesticide contamination on bumble bee (<i>Bombus impatiens</i>) foraging behavior   Location: Phoenix Convention Center, 226 B Presenting Author: Emma Knezevic – University of Nebraska Co-Author: Paige Myers – University of Nebraska Co-Author: Autumn Smart – University of Nebraska Co-Author: Judy Wu-Smart – University of Nebraska Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:24 AM – 9:36 AM MST Phytochemical changes in maples induced by overspray from two commonly applied herbicides and resulting effects on <i>Chrysobothris</i> sp. preference   Location: Phoenix Convention Center, 226 B Presenting Author: Melanie Amber Eichler – Ashland University Co-Author: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University Co-Author: Karla Michele Addesso – Tennessee State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
9:36 AM – 9:48 AM MST The behavioral influence of fungal endophytes on yellow fever mosquitoes (<i>Aedes aegypti</i>)   Location: Phoenix Convention Center, 226 B Presenting Author: Sofia Isabel Ayala (she/her/hers) – University of Texas Co-Author: Emily Medelez – University of Texas Co-Author: Christopher J. Vitek – University of Texas Co-Author: Pushpa Soti – University of Texas Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
8:00 AM – 10:00 AM MST

Undergrad 10-min Competition: SysEB, General 1 Moderator: Mary Liz Liz Jameson – Wichita State University Moderator: Brittany Kohler – University of California Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:00 AM – 8:12 AM MST Assembly and evaluation of the first reference genome of a webspinner insect, <i>Aposthonia ceylonica</i>   Location: Phoenix Convention Center, 223 Presenting Author: Lillian Davis – Brigham Young University Co-Author: Daniel Darwin Davis – Brigham Young University Co-Author: Paul Bryan Frandsen – Brigham Young University Co-Author: Janice Edgerly-Rooks (she/her/hers) – Santa Clara University Co-Author: Sam Standring – Brigham Young University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:12 AM – 8:24 AM MST De novo genome assembly and annotation of <i>Curculio nanulus</i> (Coleoptera: Curculionidae)   Location: Phoenix Convention Center, 223 Presenting Author: Daniel Darwin Davis – Brigham Young University Co-Author: Paul Bryan Frandsen – Brigham Young University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:24 AM – 8:36 AM MST Detection of the <i>Hylaeus</i> genus as pollinators in high UV conditions   Location: Phoenix Convention Center, 223, PCC Presenting Author: Keleni Kuualoha Faanunu (she/her/hers) – University of Hawaii Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
8:36 AM – 8:48 AM MST Do elevation, habitat, and environmental heterogeneity influence bee (Hymenoptera: Apoidea) community composition in three Madrean sky islands of the southwest US?   Location: Phoenix Convention Center, 223

Presenting Author: Kelsie Lauren Phelps – Texas State University Co-Author: Robinson Sudan – Texas State University	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition	
8:48 AM – 9:00 AM MST Field-deployed passive trap methodology determines quality of insect molecular data  	
Location: Phoenix Convention Center, 223 Presenting Author: Ian Nelson – New Mexico State University Co-Author: Scarlet Sellers – New Mexico State University Co-Author: Brook Milligan – New Mexico State University	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
9:00 AM – 9:12 AM MST Local rearing of lacewings as biological controls  	
Location: Phoenix Convention Center, 223, PCC Presenting Author: Dani Bosse (she/her/hers) – University of Colorado Co-Author: Samuel Ramsey – University of Colorado	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
9:12 AM – 9:24 AM MST Observational analysis of native bee pollinators in both rural and urban landscapes  	
Location: Phoenix Convention Center, 223 Presenting Author: Kathryn Juliet Marra – Rutgers University Co-Author: Jumana Hayat – Rutgers University Co-Author: Chloe Hawkings (she/her/hers) – Rutgers University	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
9:24 AM – 9:36 AM MST Vertical stratification of Coleoptera assemblages in pecan (<i>Carya illinoensis</i>) canopies  	
Location: Phoenix Convention Center, 223, PCC Presenting Author: Winston W. Cornish – University of Georgia Co-Author: Pedro FS Toledo – University of Georgia Co-Author: Joseph V. McHugh – University of Georgia Co-Author: Jason M. Schmidt – University of Georgia	

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:00 AM – 10:00 AM MST Undergrad 10-min Competition: SysEB, General 2 Moderator: Ben Bechade (he/him/his) – University of Texas Moderator: Anwar Green	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:00 AM – 8:12 AM MST 3D reconstruction of the hissing organ of <i>Grompadorhina portentosa</i> (Blattodea: Blaberidae)  	
Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Samuel Thomas Jupin – University of New Hampshire Co-Author: István Mikó – University of New Hampshire Co-Author: Mark Townley – University of New Hampshire	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:12 AM – 8:24 AM MST Identification of Chrysopidae species as potential biological control agents in banana agroecosystems in Costa Rica  	
Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jenni D. García Quiceno (she/her/hers) – University of California, Riverside Co-Author: José Antonio Balcárcel-Milián – EARTH University Co-Author: Ndonkeu Walter – EARTH University Co-Author: Bert Kohlmann – BioAlfa Barcoding Project Co-Author: Rossy Morera-Montoya – Universidad de Costa Rica	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student	
Student Competition	
8:24 AM – 8:36 AM MST Species delimitation in the genus <i>Stenaptinus</i> (Coleoptera: Carabidae: Brachininae) from Korea using quantitative morphological and molecular data  	
Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Dogyun Han (he/him/his) – Kangwon National University Co-Author: Sam-Kyu Kim – Kangwon National University	

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:36 AM – 8:48 AM MST Taxonomic revision of Nylanderia (Hymenoptera: Formicidae) from the Galápagos Islands   Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Corbin James Puckett – University of Florida Co-Author: Jason Lee Williams – University of Florida Co-Author: Maria C. Tocora (she/her/hers) – University of Toronto Co-Author: Fernando Fernandez – Universidad Nacional de Colombia Co-Author: Gianpiero Fiorentino – New Jersey Institute of Technology Co-Author: Henri Herrera – Escuela Superior Politecnica de Chimborazo (ESPOCH) Co-Author: Andrea Lucky – University of Florida	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:48 AM – 9:00 AM MST Taxonomic revision of the planthopper genus <i>Melanoliarus</i> Fennah, 1945 (Hemiptera: Delphacoidea: Cixiidae) north of Mexico   Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Solomon V. Hendrix (he/him/his) – University of Delaware Co-Author: Charles R. Bartlett – University of Delaware	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 9:12 AM MST Untangling the ant claws: The army ant <i>Labidus mars</i> is a Neivamyrmex   Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Megan E. DuVal (she/her/hers) – University of Utah Co-Author: Rodolfo S. Probst – University of Utah Co-Author: John T. Longino (he/him/his) – University of Utah	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
9:12 AM – 9:24 AM MST Why exodont? Head morphology of hymenopterans with outward facing mandibles (Hymenoptera: Mymarommatidae, Vanhorniidae, Ichneumonidae, Braconidae)   Location: Phoenix Convention Center, 224 A, PCC	

Presenting Author: Aaron Jotham Hoag – University of New Hampshire Co-Author: Monique Raymond (she/her/hers) – University of New Hampshire Co-Author: Mark Townley – University of New Hampshire Co-Author: Thomas van de Kamp – Karlsruhe Institute of Technology Co-Author: István Mikó – University of New Hampshire	
Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
8:00 AM – 5:00 PM MST Speaker Practice Room Location: Phoenix Convention Center, 121 B	
General Speaker Practice Room	
8:30 AM – 11:30 AM MST Tour: Biocollections at Arizona State University  Location: Phoenix Convention Center, North Ballroom Foyer	
Functions/Events/Meetings	
9:00 AM – 1:00 PM MST Tour: Private Wallace Desert Garden Tour at the Boyce Thompson Arboretum  Location: Phoenix Convention Center, North Ballroom Foyer	
Functions/Events/Meetings	
9:00 AM – 1:00 PM MST Tour: Private Discovery Tour of the Boyce Thompson Arboretum  Location: Phoenix Convention Center, North Ballroom Foyer	
Functions/Events/Meetings	
9:00 AM – 5:00 PM MST Juried Art Show Location: Phoenix Convention Center, Exhibit Hall 6 Organizer: Cindy E. Myers – Entomological Society of America	
Functions/Events/Meetings Exhibit Hall	
9:00 AM – 5:00 PM MST Exhibit Hall Location: Phoenix Convention Center, Exhibit Hall 6	
General Exhibit Hall	

9:00 AM – 5:00 PM MST Grad Poster Competition: MUVE, Vector Control, Urban and Structural Pests, and Social Insects Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3022: Alternative methods of generating carbon dioxide to enhance mosquito trapping with CDC light traps   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kaylin Susanne Lewandowski (she/her/hers) – North Carolina State University Co-Author: Michael H. Reiskind – North Carolina State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3024: Insect microbiomes and insecticide resistance: Lessons from agricultural entomology for vector biology   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Sonja Savic (she/her/hers) – Arizona State University Co-Author: Nsa Dada – Arizona State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3025: On-host flea phenology and flea-borne pathogen surveillance among mammalian wildlife of the pineywoods of East Texas   Location: Exhibit Hall 6 Presenting Author: Jordan Salomon – Texas A&M University Co-Author: Emily Leeke – Texas A&M University Co-Author: Haydee Montemayor – Texas A&M University Co-Author: Cassandra Durden, M.S. (she/her/hers) – Centers for Disease Control and Prevention Co-Author: Lisa Auckland – Texas A&M University Co-Author: Sujata Balasubramanian – Texas A&M University Co-Author: Gabriel L. Hamer (he/him/his) – Texas A&M University Co-Author: Sarah A. Hamer – Texas A&M University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3026: Phenology and pathogen risk presented by tick and tabanid vectors in agriculture   Location: Phoenix Convention Center, Exhibit Hall 6, PCC	

Presenting Author: Benjamin S. Zeiger (he/him/his) – The Ohio State University Co-Author: Timothy McDermott – The Ohio State University Co-Author: Risa Pesapane, Ph.D. – The Ohio State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3027: Surveillance for three emerging tick-borne pathogens in Kentucky   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Callista Wayde Vandegriff – University of Kentucky Co-Author: Jun Seok Ryoo – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST Grad Poster Competition: MUVE, Medical and Veterinary Entomology Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3007: Assessing Lyme disease risk in dynamic ecotonal communities   Location: Exhibit Hall 6 Presenting Author: Gerardo Ramos – San Francisco State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3008: Assessing the relationship between entomological surveillance indices and West Nile virus transmission, United States: Systematic review   Location: Exhibit Hall 6 Presenting Author: Thomas Christopher Moore – University of Arizona Co-Author: Xin Tang – University of Arizona Co-Author: Heidi Brown – University of Arizona Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition	
9:00 AM – 5:00 PM MST D3009: Comparing insecticide resistance in <i>Culex quinquefasciatus</i> mosquitoes throughout Arizona   Location: Exhibit Hall 6 Presenting Author: Bailey Payne – University of Arizona	

Co-Author: Kathleen Walker – University of Arizona Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3010: Developing and validating modular surveys for vector-borne diseases: Study protocol   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Skyler Eve Finucane (she/her/hers) – University of Arizona Co-Author: Alexandria Renault – University of Arizona Co-Author: Kacey Ernst – University of Arizona Co-Author: Mary Hayden – University of Mississippi Co-Author: Sarah Yeo – University of Arizona Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3011: Diversity matters: Exploring the genetic variation of <i>Borrelia burgdorferi</i> outer surface proteins in relation to tick and host species interactions   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Anahei Natalie Lara – San Francisco State University Co-Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3012: Efficacy of reservoir targeted vaccine in eliciting a protective immune response against Lyme Borreliosis in California-endemic reservoir host, <i>Peromyscus maniculatus</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Alexander Esquivel, B.S. – San Francisco State University Co-Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University Co-Author: Jennifer Louie – San Francisco State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3013: Experiments to assess immune responses of blow flies for medical purposes   Location: Exhibit Hall 6 Presenting Author: Wan-Hsuan Li – Texas A&M University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST

D3014: Investigating the impact of host blood meal identity on <i>Ixodes pacificus</i> microbiome composition using a multi-species analysis of small mammals and reptiles   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mariah Angel Dinglasan Cuyson (she/her/hers) – San Francisco State University Co-Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3015: Phenotypic and genotypic insecticide resistance against pyrethroids in the Hawaiian <i>Aedes</i> mosquitoes   Location: Exhibit Hall 6 Presenting Author: Sangwoo Seok – University of Florida Co-Author: Miles McCollum – University of Florida Co-Author: Christopher Jacobsen – Hawaii Department of Health Co-Author: Derrick Mathias – University of Florida Co-Author: Yoosook Lee – University of Florida Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3016: Plants extract as a novel control mechanism for container breeding mosquitoes <i>Aedes aegypti</i> and <i>Aedes albopictus</i>   Location: Exhibit Hall 6 Presenting Author: Ilsa Flores – University of Texas Co-Author: Debasish Bandyopadhyay – University of Texas Co-Author: Christopher J. Vitek – University of Texas Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3017: Repelling <i>Aedes aegypti</i> mosquitoes with electric fields using insulated conductor wires   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Michael Erickson – Arizona State University Co-Author: Krijn Paaijmans – Arizona State University Co-Author: Ndey Jobe – Arizona State University Co-Author: Autumn Roberts (she/her/hers) – Arizona State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST

D3018: Seasonal microbial succession in beetles and soil during carrion decomposition   Location: Exhibit Hall 6 Presenting Author: Kelly Waters – Michigan State University Co-Author: Anthony Grigsby – Michigan State University Co-Author: Bethany Mikles – Michigan State University Co-Author: Jennifer Pechal – Michigan State University Co-Author: M. Eric Benbow – Michigan State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3019: Simulated larval control in laboratory mesocosms leads to overcompensation in the yellow fever mosquito, <i>Aedes aegypti</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Nicole A. Scavo, M.S. (she/her/hers) – Indiana University Co-Author: Gabriel L. Hamer (he/him/his) – Texas A&M University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3020: The effect of juvenile hormone analogues (Juvenoids) in Turkestan cockroaches (<i>Periplaneta lateralis</i>)   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Isha Budha Magar (she/her/hers) – New Mexico State University Co-Author: Alvaro Romero – New Mexico State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3021: Tick and mosquito surveillance in Kentucky rural counties   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jun Seok Ryoo – University of Kentucky Co-Author: Wayne Sanderson – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: MUVE, Behavior, Biocontrol, and Biodiversity Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition 

9:00 AM – 5:00 PM MST D3000: Assessing the efficacy of cedarwood oil-based minimum risk pesticides for controlling blacklegged ticks in residential settings   Location: Exhibit Hall 6 Presenting Author: Sophia Chiaia – Western Connecticut State University Co-Author: Neeta P. Connally – Western Connecticut State University Co-Author: Victoria L. Hornbostel (she/her/hers) – Medical University of South Carolina Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3001: Can ants help forensic investigators locate clandestine graves?   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Tammy Lee Bouldin (she/her/hers) – Texas A&M University Co-Author: Nadya Kandel – Texas A&M University Co-Author: Aaron Tarone – Texas A&M University Co-Author: Edward L. Vargo – Texas A&M University Co-Author: Robert Puckett – Texas A&M University Co-Author: Micky Eubanks – Colorado State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3002: Don't let the bed bugs bite: Chemical trials for bed bugs from poultry facilities   Location: Exhibit Hall 6 Presenting Author: Valeria Lee – The Pennsylvania State University Co-Author: Hannah Tiffin – The Pennsylvania State University Co-Author: Erika T. Machtinger (she/her/hers) – The Pennsylvania State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3003: Evaluation of life cycle, behavior, and nutritional value of black soldier fly (<i>Hermetia illucens</i>) on varied diets   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jacquez Robert Daniels – Florida A&M University Co-Author: Anamika Sharma (she/her/hers) – Florida A&M University Co-Author: Alexander Gaffke – USDA-ARS Co-Author: Ayodeji Aderibigbe – Florida A&M University Co-Author: Lambert Kanga – Florida A&M University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3004: Expression patterns of salivary gland genes in *Ixodes pacificus* ticks feeding on *Sceloporus occidentalis* (Western Fence Lizard)  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Yuri Mahmoud – San Francisco State University

Co-Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3005: Interactions of larvae of the black soldier fly with other Diptera co-colonizing developmental media  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Natalie M. Johnston (she/her/hers) – University of Nebraska

Co-Author: Georgina Victoria Bingham, Ph.D. – University of Nebraska

Co-Author: Gary Brewer – University of Nebraska

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3006: Tick terrains: Unraveling how geography shapes the questing strategies of western black-legged ticks  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Timara Nicole Vereen – San Francisco State University

Co-Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

Grad Poster Competition: P-IE, Ecology and Vector Control

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3093: Developing an RNAi-based functional genomics tool in beet leafhopper for targeted vector control  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Maria Paula Mejia – Colorado State University

Co-Author: Jinlong Han – Colorado State University

Co-Author: Vamsi Nalam – Colorado State University

Co-Author: Punya Nachappa – Colorado State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3094: Do plants respond differentially to insect-mediated virus infection and insect feeding?  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Sudeep Pandey – University of Georgia

Co-Author: Michael Anthony Catto (he/him/his) – Georgia Institute of Technology

Co-Author: Sudeep Bag – University of Georgia

Co-Author: Phillip Roberts – University of Georgia

Co-Author: Alana Lynn Jacobson – Auburn University

Co-Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3095: Evaluating impacts of soil quality and crop rotation on arthropod assemblages in northwestern Washington  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Adriana Barsan (they/them/theirs) – Washington State University

Co-Author: Deirdre Griffin LaHue – Washington State University

Co-Author: Louis Nottingham – Washington State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3096: Herbivory of *Malacothamnus* spp. in coastal sage scrub ecosystems  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Molly Ann May Barber (she/her/hers) – University of California, Riverside

Co-Author: Erin Rankin – University of California

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3097: The effect of weather on the accuracy of phenological predictions for European spongy moth  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Grace E. Amponsah – The Ohio State University

Co-Author: Samuel F. Ward (he/him/his) – The Ohio State University

Co-Author: Andrew Liebhold – USDA-Forest Service

Co-Author: Ksenia Onufrieva (she/her/hers) – Virginia Tech

Co-Author: Patrick C. Tobin – University of Washington

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3098: The impact of soil moisture on soybean gall midge (*Resseliella maxima* Gagné) adult emergence



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Kristin Stark – University of Nebraska
Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska
Co-Author: Anthony J. McMechan – University of Nebraska

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3099: Unbinding the bindweed psyllid (*Bactericera maculipennis*) from its bindweed host exposes it to a novel bacterial symbiont



Location: Exhibit Hall 6

Presenting Author: Mona Tran – University of California, Riverside
Co-Author: Jaimie Rae Kenney – University of California
Co-Author: Marco Gebiola – University of California
Co-Author: Kerry Elizabeth Mauck – University of California

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
Grad Poster Competition: P-IE, IPM - General

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3124: Comparing the efficacy of mating disruption techniques on diamondback moth in Virginia



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Taylore Sydnor – Virginia Tech
Co-Author: Thomas P. Kuhar – Virginia Tech
Co-Author: Alejandro Del-Pozo – Virginia Tech
Co-Author: Brent Short – Trece Inc.
Co-Author: Ashley Edwards – Virginia Cooperative Extension

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3125: Don't panic, it's organic: Building resilient pest management strategies for organic hemp systems



Location: Exhibit Hall 6

Presenting Author: Max R. Schmidtbauer – Colorado State University

Co-Author: Jessica Prenni – Colorado State University
Co-Author: Adrianna Szczepaniec – Colorado State University
Co-Author: Mark Uchanski – Colorado State University
Co-Author: Punya Nachappa – Colorado State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3126: Effect of silencing *Thrips palmi* (Thysanoptera: Thripidae) Btk29A and COL3A1 on fitness and virus acquisition



Location: Exhibit Hall 6

Presenting Author: Rajesh Vavilapalli – University of Georgia
Co-Author: Sumit Jangra (he/him/his) – University of Florida
Co-Author: Amalendu Ghosh (he/him/his) – Indian Council of Agricultural Research
Co-Author: Shimat Villanasery V. Joseph – University of Georgia

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3127: Smart orchards: Using AI photo traps to investigate environmental influences on moth flight patterns in Pennsylvania



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tyler Michael Seutter (he/him/his) – The Pennsylvania State University
Co-Author: Greg Krawczyk – The Pennsylvania State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3128: Evaluating the Impact and Interactions of soybean gall midge, Dectes stem borer, and plant diseases in soybean



Location: Exhibit Hall 6

Presenting Author: Thales Rodrigues da Silva – University of Nebraska
Co-Author: Dylan Mangel – University of Nebraska
Co-Author: Anthony J. McMechan – University of Nebraska

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3129: Evaluating the impacts of biorational pesticides on twospotted spider (*Tetranychus urticae* K.) and predatory mites in high tunnels



Location: Exhibit Hall 6

Presenting Author: Leslie A. Aviles Lopez – Purdue University
Co-Author: Laura L. Ingwell – Purdue University

Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3130: Linking 9-lipoxygenase enzymes to WCR resistance Location: Exhibit Hall 6 Presenting Author: John Michael Grunseich – Texas A&M University Co-Author: Pei-Cheng Huang – Texas A&M University Co-Author: Peiguo Yuan – Texas A&M University Co-Author: Julio Bernal – Texas A&M University Co-Author: Michael Kolomiets – Texas A&M University	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3132: Refuge realities: On-plant movement of western bean cutworm, <i>Striacosta albicosta</i>, in structured and integrated refuges in Ontario, Canada Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Natasha May Weppler (she/her/hers) – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Yasmine Farhan – University of Guelph Co-Author: Alisson Da Silva – University of Nebraska	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3133: Insect marking technologies for examining pear psylla behavior Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Molly Sayles (she/her/hers) – Washington State University Co-Author: Louis Nottingham – Washington State University Co-Author: Robert Orpet – Washington State University Co-Author: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, Host-Plant Resistance Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3100: Antibiosis host plant resistance to <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) in St. Augustinegrass and Bahiagrass breeding lines	

Location: Exhibit Hall 6 Presenting Author: Nimra Altaf – West Florida Research and Education Center Co-Author: Silvana V. Paula-Moraes – University of Florida Co-Author: Eduardo S. Soares – University of Florida Co-Author: Ashley Gamble – University of Florida Co-Author: Bryan Unruh – West Florida Research and Education Center Co-Author: Kevin Kenworthy – University of Florida	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3101: Battle of the bites: How fall armyworm secretions shape sorghum defenses Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Sanket Shinde – University of Nebraska Co-Author: Pritha Kundu – University of Nebraska Co-Author: Joe Louis – University of Nebraska	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3102: Beet armyworm in peanut: Pest origin, predominance of occurrence, and insecticide susceptibility Location: Exhibit Hall 6 Presenting Author: Joao Gabriel Tardin de Moraes – University of Florida Co-Author: Silvana V. Paula-Moraes – University of Florida Co-Author: Eliseu José Guedes Pereira – Universidade Federal de Vicosa Co-Author: Isaac L. Esquivel – North Florida Research and Education Center Co-Author: Eduardo S. Soares – University of Florida	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3103: Elucidating the key volatiles involved in rice-rice stink bug interactions Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Laila Gabriella Araujo Santos (she/her/hers) – Louisiana State University Co-Author: Michael Stout (he/him/his) – Louisiana State University	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3104: Improvement of peanut breeding programs by screening antibiosis resistance to lepidopteran pests Location: Exhibit Hall 6	

Presenting Author: Lorrana F. Oliveira Almeida – University of Florida

Co-Author: Silvana V. Paula-Moraes – University of Florida

Co-Author: Eduardo S. Soares – University of Florida

Co-Author: Ashley Gamble – University of Florida

Co-Author: Barry Tillman – University of Florida

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3105: Integrating host plant resistance for *Helicoverpa zea* management in hemp  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Samikshya Pandey (she/her/hers) – Oregon State University

Co-Author: Govinda Shrestha – Oregon State University

Co-Author: Stephen Baluch – Oregon State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3106: Investigating the impact of epicuticular waxes and silicon on rice defense against fall armyworm using epicuticular wax mutants  

Location: Exhibit Hall 6

Presenting Author: Jyoti Sharma – Louisiana State University

Co-Author: Thomas Tai – USDA-ARS

Co-Author: Michael Stout (he/him/his) – Louisiana State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3107: Potential of biochar as a sustainable pest management strategy against Western flower thrips (*Frankliniella occidentalis*) and lettuce aphids (*Nasonovia ribisnigri*) in controlled environment agriculture  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Soumya Unnikrishnan – University of Arkansas

Co-Author: Rupesh Kariyat – University of Arkansas

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3108: Utilizing resistant rootstocks for the management of peachtree borer (*Synanthedon exitiosa*) in peach  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Adam Schacherer – University of Georgia

Co-Author: Brett R. Blaauw – University of Georgia

Co-Author: Ted E. Cottrell – USDA-ARS

Co-Author: Dario Chavez – University of Georgia

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

Grad Poster Competition: P-IE, Climate Change and Pollinators 

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3084: Assessing the relationship between bee visitation rate and crop pollination in apple, cranberry, and squash in Wisconsin (USA)  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Sumikshya K.C. (she/her/hers) – University of Wisconsin

Co-Author: Hannah Gaines Day – University of Wisconsin

Co-Author: Olivia Marie Bernauer, Ph.D. (she/her/hers) – University of Wisconsin-Eau Claire

Co-Author: Jess Gambel (she/her/hers) – USDA-ARS

Co-Author: Claudio Gratton – University of Wisconsin

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3085: Bumble bee parasites in spring queens across an elevational gradient  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lincoln Nian Taylor (he/him/his) – University of Colorado Boulder

Co-Author: Samuel Ramsey – University of Colorado

Co-Author: Julian Resasco – University of Colorado

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3086: Comparative observation of honey production behavior of worker bees (*Apis mellifera*) in Langstroth hives raised with and without a queen excluder  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Romario Versanne (he/him/his) – Universidade Federal de Lavras

Co-Author: Chrisnel Dortilus

Co-Author: Liliana Padro – Universidade Federal de Lavras

Co-Author: khalid Haddi – Universidade Federal de Lavras

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3087: Does trait-matching predict plant-pollinator interactions across urban gradients?  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mia Eve Alikhan – University of Central Arkansas Co-Author: Mary Margaret McSpadden – University of Central Arkansas Co-Author: Opeyemi Adedaja, Ph.D. – University of Central Arkansas	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3088: Effects of herbivory on pollinator success and reproduction   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Anna Goates – Utah State University Co-Author: Moria Robinson – Utah State University Co-Author: Lindsie M. McCabe (she/her/hers) – USDA-ARS	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3089: Relative humidity effects on butterfly fitness   Location: Exhibit Hall 6 Presenting Author: Marnesha Nicole Jones – University of Arizona Co-Author: Natasha Tigreros – University of Arizona Co-Author: Goggy Davidowitz (he/him/his) – University of Arizona	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3090: The effects of management actions on pollinator population dynamics within the Northern Great Plains National Parks   Location: Exhibit Hall 6 Presenting Author: Nina Crawford – University of Wyoming Co-Author: Lusha M. Tronstad, Ph.D. – University of Wyoming	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3091: Transmission dynamics of honey bee associated viruses in flowers, pollen, and honeybees (<i>Apis mellifera</i>) during the pollination of California almonds   Location: Exhibit Hall 6 Presenting Author: Sara Herrejon Chavez – University of California Co-Author: Nina Ariadne Sokolov (she/her/hers) – University of California Co-Author: Michael Boots – University of California	Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST D3092: Unveiling the spatial and temporal dynamics of <i>Spodoptera frugiperda</i> in an arid agricultural landscape   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Daiane Dalla Nora – University of Puerto Rico Co-Author: Ricardo Rubin Balardin (he/him/his) – University of Puerto Rico Co-Author: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, Chemical Ecology and Behavior  Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3075: Assessing the impacts of bottom-up effect on larval development and reproductive ecology of two species of longhorn beetles   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Chiranjivi Sharma – Louisiana State University Co-Author: Todd David Johnson (he/him/his) – Louisiana State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3076: Assessing the presence of kleptopharmacophagy in <i>Danaus plexippus</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Richard Scot Wagner (he/him/his) – Wright State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3077: Effects of cold acclimation on movement patterns in the lesser grain borer, <i>Rhyzopertha dominica</i> F.   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Dawson Christensen – Kansas State University Co-Author: Erin D. Scully – USDA-ARS Co-Author: Travis Rusch – USDA-ARS Co-Author: Yoonseong Park – Kansas State University Co-Author: Alison R. Gerken – USDA-ARS	Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST D3078: Evaluating the oviposition behavior of corn earworm on hemp   Location: Exhibit Hall 6 Presenting Author: Asim A. Ahmed, Sr. – University of Maryland Co-Author: Tigist A. Tolosa – University of Maryland Co-Author: Brandon AO Jackson – University of Maryland Co-Author: Shellyann A. Henry – University of Maryland Co-Author: Simon Zebelo – University of Maryland Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3079: How attractive are tomato plants recovering from flooding stress to larval and adult herbivorous insects?   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Minxing Zhu – University of Illinois Co-Author: Esther N. Ngumbi – University of Illinois Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3080: Impacts on inoculum kinetics: Environmental variation influencing arthropod vector feeding behavior   Location: Exhibit Hall 6 Presenting Author: Ashley Zavala – Texas A&M University Co-Author: Manjari Mukherjee – Texas A&M University Co-Author: Thomas Chappell – Texas A&M University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3081: Monitoring of <i>Lobesia botrana</i> using attractive semiochemicals and LED-UV in vineyards of Central Chile and Catalonia, Northeastern Spain   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Yasir Islam, Ph.D. – Centro de Ecología Molecular y Funcional Co-Author: Michele Preti – ASTRA Innovazione e Sviluppo Test Facility Co-Author: Alan Knight – Instar Biologicals Co-Author: Esteban Basoalto – Universidad Austral de Chile Co-Author: Dolors Bosch – Institute for Agrifood Research and Technology Co-Author: Ainara Peñalver-Cruz – Institute for Agrifood Research and Technology Co-Author: Marcela Rodríguez – Universidad de Concepción Co-Author: Eduardo Fuentes-Contreras – Centro de Ecología Molecular y Funcional

Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3083: Vector competence and effect of hop latent viroid infection on cannabis aphids and western flower thrips in hemp (<i>Cannabis sativa</i>)   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Olivia Grace Carter – Colorado State University Co-Author: Punya Nachappa – Colorado State University Co-Author: Jinlong Han – Colorado State University Co-Author: Jacob MacWilliams – Colorado State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, Invasive Species  Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3109: Comparing visual surveys and two trap designs for spotted lanternfly at different stages of invasion   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Timothy R. Harrison (he/him/his) – Michigan State University Co-Author: Deborah G. McCullough – Michigan State University Co-Author: Phillip A. Lewis – USDA-APHIS Co-Author: Matthew Ginzel – Purdue University Co-Author: Amy Stone – The Ohio State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3110: Crape myrtle bark scale (Coccidae: Eriococcidae) seasonally alters the abundance and composition of insect assemblages on infested trees   Location: Exhibit Hall 6 Presenting Author: Elijah Paul Carroll – Auburn University Co-Author: David Held – Auburn University Co-Author: Selina Bruckner (she/her/hers) – The Pennsylvania State University Co-Author: Nash Turley – The Pennsylvania State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST

D3112: Evaluation of monitoring and management strategies for pepper weevil (<i>Anthonomus eugenii</i>) in North Florida and South Georgia   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Stanley Brendon Northe, Jr. – Florida A&M University Co-Author: Muhammad Haseeb – Florida A&M University Co-Author: Chinemenma Okoroji – Florida A&M University Co-Author: Lambert Kanga – Florida A&M University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3113: Integrated pest management of chilli thrips in Alabama nurseries   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Aerianna Littler – Auburn University Co-Author: David Held – Auburn University Co-Author: Jeremy Pickens – Auburn University Co-Author: Kyle Owsley – Auburn University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3114: The responses of native insect herbivores to invasive shrubs   Location: Exhibit Hall 6 Presenting Author: Logan W. Huber – Wright State University Co-Author: John O. Stireman, III – Wright State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3115: The spotted lanternfly's ability to reproduce is significantly reduced when fed exclusively on grapevines   Location: Exhibit Hall 6 Presenting Author: Sukhman Singh – The Pennsylvania State University Co-Author: Cecil Smith – The Pennsylvania State University Co-Author: Taran Rowles – The Pennsylvania State University Co-Author: Michela Centinari – The Pennsylvania State University Co-Author: Flor Edith Acevedo – The Pennsylvania State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE and FIT, Biodiversity and Conservation



Student Poster Display Plant-Insect Ecosystems Formal and Informal Teaching Student Student Competition
9:00 AM – 5:00 PM MST D3048: Assessing the performance of a 3D printed Pennsylvania-style black light moth trap   Location: Exhibit Hall 6 Presenting Author: Christopher B. Brown (he/him/his) – Michigan State University Co-Author: Peter JT White – Michigan State University Student Poster Display Formal and Informal Teaching Student Student Competition
9:00 AM – 5:00 PM MST D3049: Assessment of twelve-year old pollinator plantings reveal an upward trend in wild bee abundance, but a downward trend in bee diversity, as the plant community shifts from the original seed mix to more aggressive native species   Location: Exhibit Hall 6 Presenting Author: Lilia S. Stemet, M.S. (she/her/hers) – University of Arkansas Co-Author: David J. Biddinger (he/him/his) – The Pennsylvania State University Co-Author: Kusum Naithani – University of Arkansas Co-Author: Neelendra K. Joshi – University of Arkansas Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3050: Biodiversity of bees (Anthophila) among riparian and upland habitats in the upper Llano River Basin (Texas, USA)   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jack Reid Carlin (he/him/his) – Texas Tech University Co-Author: Annie Catlett – Texas Tech University Co-Author: Jenelle E. Lovejoy (she/her/hers) – Texas Tech University Co-Author: Scott Longing – Texas Tech University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3051: Cross-kingdom community responses to wildflower enhancements in an agrivoltaic system   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Joshua Adams Grant – University of Georgia Co-Author: Jason M. Schmidt – University of Georgia Co-Author: Svoboda Pennisi – University of Georgia Co-Author: Craig Kvien – University of Georgia

Co-Author: Jordan Macknick – National Renewable Energy Laboratory Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3052: Evaluating the impact of non-chemical management approaches on thrips and natural enemies in peppers   Location: Exhibit Hall 6 Presenting Author: Arnold Ariel Gomez (he/him/his) – The Ohio State University Co-Author: Ashley B. Leach – The Ohio State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3053: Long-term effects of alternative agroecosystem management practices on soil arthropod communities   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Keiran Roy HYTE – North Dakota State University Co-Author: Deirdre A. Prischmann-Voldseth – North Dakota State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3054: Plant-pollinator community and network structures using citizen science data and conventional sampling   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jenelle E. Lovejoy (she/her/hers) – Texas Tech University Co-Author: Scott Longing – Texas Tech University Co-Author: Catherine Galley – Texas Tech University Co-Author: Annie Catlett – Texas Tech University Co-Author: Jack Reid Carlin (he/him/his) – Texas Tech University Co-Author: Shelby Hernandez (she/her/hers) – Texas Tech University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3055: Refuge lawn: Promoting pollinators in urban greenspace   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Casey O'Neal (he/him/his) – Auburn University Co-Author: David Held – Auburn University Co-Author: Jay D. McCurdy – Mississippi State University Co-Author: Gerald M. Henry – University of Georgia

Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3056: Spider dynamics in restored prairie ecosystems   Location: Exhibit Hall 6 Presenting Author: Jenna Byrne – Michigan State University Co-Author: Cynthia Fiser – Michigan State University Co-Author: Doug A. Landis – Michigan State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, IPM - Field Crops  Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3116: Artificial neural networks as a tool for predicting <i>Striacosta albicosta</i> infestations in corn   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kayo Heberth de Brito Reis (he/him/his) – University of Nebraska Co-Author: Alisson Santana (he/him/his) – University of Nebraska Co-Author: Jhersyca Paes – Federal University of Viçosa Co-Author: Marcelo Coutinho Picanço – Federal University of Viçosa Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Renato Sarmento – Federal University of Tocantins Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3117: Assessing the impact of pigweed flea beetle in <i>Amaranth viridis</i> Linn yield and evaluating their management strategies   Location: Exhibit Hall 6 Presenting Author: Zachary Williams – University of Maryland Co-Author: Simon Zebelo – University of Maryland Co-Author: Corrie Cotton – University of Maryland Co-Author: Megan Reid – University of Maryland Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3118: Comparative efficacy of aerial application and chemigation for controlling western bean cutworm  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Emile Dayara Rabelo Santana, Ph.D. (she/her/hers) – University of Nebraska Co-Author: Andrea Rilakovic – University of Nebraska - Lincoln Co-Author: Jeffrey A. Golus – University of Nebraska Co-Author: Milos Zaric – University of Nebraska Co-Author: Julie Ann Peterson – University of Nebraska	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3119: Effect of cover crops on pest resistance in rice   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Christine Gambino – Louisiana State University Co-Author: Michael Stout (he/him/his) – Louisiana State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3120: Effect of soybean seeding rate on fissure size and the laying preference of soybean gall midge (Diptera: Cecidomyiidae)   Location: Exhibit Hall 6 Presenting Author: Elizabeth Buchholz – University of Nebraska Co-Author: Anthony J. McMechan – University of Nebraska	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3121: Effects of hail netting on a variety of apple pests in 3 Michigan orchards   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Martin Brubaker Salcedo – Michigan State University Co-Author: Julianna Wilson – Michigan State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3122: Risk assessment models for predicting seedcorn maggot (<i>Delia platura</i>) emergence and distribution in New York State   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Chloe Yi-Luo Cho (she/her/hers) – Cornell University Co-Author: Anna DiPaola – Cornell University Co-Author: Shea Crowther – Cornell University Co-Author: Dan Olmstead – Cornell University Co-Author: Katja A. Poveda – Cornell University	

Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3123: Survival and development of western bean cutworm under field-realistic Vip3A integrated refuge feeding scenarios   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Bhawana Regmi (she/her/hers) – University of Nebraska Co-Author: Alisson Santana (he/him/his) – University of Nebraska Co-Author: Julie Ann Peterson – University of Nebraska	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, Biocontrol - General  Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3057: A tough egg to crack: Developing improved methods for mass rearing the navel orangeworm, <i>Amyelois transitella</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ethan Stahura – ACRPC - USDA Co-Author: Jeanbaptiste Quirino – ACRPC Co-Author: Jonah Kenneth Brosemann – USDA-APHIS Co-Author: Earl Andress – USDA-APHIS Co-Author: Yves Carriere – University of Arizona Co-Author: Michael A. Garvey (he/him/his) – USDA	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3058: Assessing seasonal hosts and transmission of beet curly top virus (BCTV) in the Columbia Basin   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Camille Wagstaff – Washington State University Co-Author: David Crowder – Washington State University	
Student Poster Display Plant-Insect Ecosystems Student Student Competition	
9:00 AM – 5:00 PM MST D3059: Can the combined interaction of insecticides and plant traits alter the abundance and distribution of <i>Bemisia tabaci</i> and its biocontrol communities?   Location: Phoenix Convention Center, Exhibit Hall 6, PCC	

Presenting Author: Itohan Aigbedion-Atalor – University of Georgia Co-Author: Albertha J. Parkins – University of Georgia Co-Author: Arash Kheirodin – Texas A&M University Co-Author: Jermaine D. Perier (he/him/his) – University of Georgia Co-Author: Paulo Cremonex, Ph.D. (he/him/his) – Auburn University Co-Author: David G. Riley – University of Georgia Co-Author: Alvin M. Simmons – USDA-ARS Co-Author: Jason M. Schmidt – University of Georgia	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3060: Effects of jasmonate and salicylate defenses on arthropod community structure in squash (<i>Cucurbita pepo</i>)   Location: Exhibit Hall 6 Presenting Author: Nina Garcia Devine (she/her/hers) – The Pennsylvania State University Co-Author: Bijay Subedi – The Pennsylvania State University Co-Author: Danilo Ferreira Borges dos Santos – The Pennsylvania State University Co-Author: Monica Kersch-Becker – The Pennsylvania State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3061: Entomopathogenic nematodes reduce cotton plant resistance to fall armyworm herbivory   Location: Exhibit Hall 6 Presenting Author: Adriane Fifield (she/her/hers) – Texas A&M University Co-Author: Adriane Fifield (she/her/hers) – Texas A&M University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3062: Further development of sampling protocols for <i>Melanaphis sorghi</i> in grain sorghum   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Nina Vázquez – Oklahoma State University Co-Author: Kristopher Giles – Oklahoma State University Co-Author: Norman Elliott – USDA-ARS Co-Author: Michael J. Brewer, Ph.D. – Texas A&M University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST	

D3064: The impact of corn earworm on the transcriptional levels of cannabinoid synthase genes in hemp plant   Location: Exhibit Hall 6 Presenting Author: Freweyni Michael Abrha – University of Maryland Co-Author: Tigist A. Tolosa – University of Maryland Co-Author: Simon Zebelo – University of Maryland	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3065: The impact of pollen and nectar availability on insect communities of cultivated sunflowers   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Grace Marion Lewis – North Dakota State University Co-Author: Deirdre A. Prischmann-Voldseth – North Dakota State University Co-Author: Jarrad R. Prasifka – USDA-ARS	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3066: What drives a thrips to thrive? investigating abiotic factors influencing <i>Pseudophilothrips ichini</i> (Thysanoptera: Phlaeothripidae) persistence in the field   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Emily Le Falchier (she/her/hers) – University of Florida Co-Author: Carey Minteer – University of Florida Co-Author: Eloïse Lamie – University of Florida Co-Author: Simon S. Riley – University of Florida	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: P-IE, Biocontrol - Parasitoids and Pathogens 	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3067: A <i>Braunsia</i> species (Hymenoptera: Braconidae: Agathidinae) from Korea has been confirmed as a natural enemy for <i>Cydalima perspectalis</i> (Lepidoptera: Crambidae)   Location: Exhibit Hall 6 Presenting Author: Soohyun Kim – Kyungpook National University Co-Author: Jongbong Choi – Kyungpook National University Co-Author: Hwal-Su Hwang – Kyungpook National University Co-Author: Mark Kenis – Centre for Agriculture and Biosciences International	

Co-Author: Lukas Seehausen – Centre for Agriculture and Biosciences International Co-Author: Keyong-Yeoll Lee – Kyungpook National University Co-Author: Jin-Kyung Choi – Daegu National University of Education Co-Author: Michael Sharkey – The Hymenoptera Institute Co-Author: Ilgoo Kang (he/him/his) – Kyungpook National University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3068: Biocontrol potential of local isolates of <i>Metarhizium anisopliae</i> against cotton leafworm <i>Spodoptera litura</i> Fabricius   Location: Exhibit Hall 6 Presenting Author: Muhammad Riaz – National Pingtung University of Science and Technology Co-Author: Wen- Hua Chen – National Pingtung University of Science and Technology	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3069: Characterization and evaluation of novel entomopathogenic fungi, <i>Fusarium</i> spp. efficacy against wheat stem sawfly   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Venkatesh Padimi – Colorado State University Co-Author: Adam Osterholzer – Colorado State University Co-Author: Ana Cristina Fulladolsa Palma – Colorado State University Co-Author: Jacob MacWilliams – Colorado State University Co-Author: Jinlong Han – Colorado State University Co-Author: Grace Ganter – Colorado State University Co-Author: Jorge Ibarra Caballero – Colorado State University Co-Author: Jane Stewart – Colorado State University Co-Author: Punya Nachappa – Colorado State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3070: Double trouble? Evaluating the effects of lady beetle predator odor cues on aphids and their parasitoids   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ayax Del Valle Sanchez (he/him/his) – Montana State University Co-Author: Sara Hermann – The Pennsylvania State University Co-Author: Jessica Kansman (she/her/hers) – Montana State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST	

D3071: Investigating the impact of drought stress on trophic interactions and biological control   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Abigail Noel – Montana State University Co-Author: Jessica Kansman (she/her/hers) – Montana State University	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3072: Natural parasitism of <i>Spodoptera frugiperda</i> in maize fields in northeastern Mexico   Location: Exhibit Hall 6 Presenting Author: Viridiana A. Martinez-Ponce – Universidad Autonoma Agraria Antonio Narro Co-Author: Maria del Carmen Guijon-Torres – Universidad Autonoma Agraria Antonio Narro Co-Author: Sergio R. Sanchez-Pena – Universidad Autonoma Agraria Antonio Narro Co-Author: Alexis A. Vazquez-Perez – Universidad Autonoma Agraria Antonio Narro	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3073: Populations of <i>Plutella xylostella</i> and parasitism by <i>Diadegma insulare</i> on cultivated and weedy Brassicaceae   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Guadalupe Maythe Morales Galvez (she/her/hers) – Universidad Autónoma Agraria Antonio Narro Co-Author: Maria del Carmen Guijon-Torres – Universidad Autonoma Agraria Antonio Narro Co-Author: Viridiana A. Martinez-Ponce – Universidad Autonoma Agraria Antonio Narro Co-Author: Lizeth Almendra-Paxtian, Ph.D. – Universidad Autonoma Agraria Antonio Narro Co-Author: Sergio R. Sanchez-Pena – Universidad Autonoma Agraria Antonio Narro	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3074: Reducing aphids on barley by exploiting beneficial species interactions with rhizobacteria and natural enemies   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Megan Elizabeth Parker (she/her/hers) – University of Liverpool Co-Author: Sharon Zytynska – University of Liverpool	Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: PBT, Apiculture, Behavior, Biochemistry, and Insecticides	Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST D3029: Assessing the impact of fungicide-contaminated pollen on reproductive health and nursing behavior in the western honey bee, <i>Apis mellifera</i>   Location: Exhibit Hall 6 Presenting Author: Wen-Yen Wu (he/him/his) – University of Illinois Co-Author: Ling-Hsiu Liao – University of Illinois Co-Author: May R. Berenbaum, Ph.D. (she/her/hers) – University of Illinois Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3030: Developing a bioassay to evaluate soybean gall midge (Diptera: Cecidomyiidae) susceptibility to imidacloprid   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Natasha Hiromi Umezu – University of Nebraska Co-Author: Anthony J. McMechan – University of Nebraska Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3031: Evaluating variation of sorghum protein contents on <i>Rhyzopertha dominica</i> L. (Coleoptera: Bostrichidae) and <i>Sitophilus oryzae</i> L. (Coleoptera: Curculionidae) development   Location: Exhibit Hall 6 Presenting Author: Tanner John Liba (he/him/his) – Kansas State University Co-Author: Deanna S. Scheff (she/her/hers) – USDA-ARS Co-Author: Kun Yan Zhu – Kansas State University Co-Author: Thomas W. Phillips, Ph.D. – Kansas State University Co-Author: Scott Bean – USDA-ARS Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3032: Honey bee sampling methods and evaluation of European foulbrood   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mckaela E. Whilden (she/her/hers) – Mississippi State University Co-Author: Ramesh Reddy Sagili (he/him/his) – Oregon State University Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST

D3033: Identification of bioactive peptides using a GPCR system for western flower thrips   Location: Exhibit Hall 6 Presenting Author: Ryssa Parks (she/her/hers) – Oregon State University Co-Author: Isis Lima Caetano – USDA-ARS Co-Author: Daniel Hasegawa – USDA-ARS Co-Author: Seung-Hwan Yun – Gyeonggi-do Agricultural Research and Extension Services Co-Author: Man-Yeon Choi – USDA-ARS Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3034: Mechanisms underlying the efficacy of commonly used insect repellents against <i>Anopheles</i> mosquitoes   Location: Exhibit Hall 6 Presenting Author: Minh Nguyet Nguyen – Johns Hopkins University Co-Author: Christopher Potter (he/him/his) – Johns Hopkins University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3035: Neural correlations of sleep behavior in <i>Apis mellifera</i> in the context of olfactory learning   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Angelica Ellis – Arizona State University Co-Author: Hong Lei – Arizona State University Co-Author: Brian H. Smith – Arizona State University Co-Author: Anirudh Manjesh – Arizona State University Co-Author: Maksim Bazhenov – University of California Co-Author: Theodore P. Pavlic, Ph.D. (he/him/his) – Arizona State University Co-Author: Jinyung Hong – Arizona State University Co-Author: Adithi Muruganandam – Arizona State University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3036: Predicting nutrient content for edible insects using machine learning   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Rebecca P. Barone – University of Hawaii Co-Author: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST

D3037: The cytochrome P450 gene CYP4g1 driven by high temperatures confers abamectin tolerance on <i>Liriomyza trifolii</i> through promoting cuticular hydrocarbons biosynthesis   Location: Exhibit Hall 6 Presenting Author: Yucheng Wang – Yangzhou University Co-Author: Fei Yang – University of Minnesota Co-Author: Yuzhou Du – Yangzhou University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: PBT, Genetics and Molecular and Cellular Biology  Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3038: Assessment of reference gene stability in a <i>Diabrotica undecimpunctata</i> cell line for quantitative real-time PCR analysis   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Festus Kehinde Ajibefun – Kansas State University Co-Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska Co-Author: Xiufeng Zhang (he/him/his) – Kansas State University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3039: Conserved splicing of sex-determination isoforms in Diptera   Location: Exhibit Hall 6 Presenting Author: Tyler Forrest Chan – Texas A&M University Co-Author: Zach N. Adelman – Texas A&M University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3040: CANCELLED: Effect of bacterial condition on the transcriptome of <i>Rhodnius prolixus</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Liam Ash – University of Georgia Co-Author: Kevin J. Vogel – University of Georgia Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST

D3041: Epigenetic regulation of development and reproduction in the yellow fever mosquito, <i>Aedes aegypti</i>: Identification and characterization of histone methyltransferases and demethylases   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Masti Venugopal Srihari Sharma – University of Kentucky Co-Author: Sundararajan Balasubramani – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3042: Exploring vivo-morpholino knockdown of piRNA associated genes Argonaute3 and Zucchini as an alternative to traditional dsRNAi in <i>Aedes aegypti</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Connor Gaul – University of North Texas Co-Author: Vanessa Macias – University of North Texas Co-Author: Matthew Carrel – University of North Texas Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3043: MicroRNA expression profiling of <i>Spodoptera frugiperda</i> under chlorantraniliprole, indoxacarb, and thiamethoxam exposure   Location: Exhibit Hall 6 Presenting Author: Junwon Shin – Chungnam National University Co-Author: Rashmi M. Mahalle – Chungnam national university Co-Author: Keon Mook Seong – Michigan State University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3044: Revisiting the detoxification repertoire of the corn earworm, <i>Helicoverpa zea</i>   Location: Exhibit Hall 6 Presenting Author: Courtney Nicole Wynn (she/her/hers) – Mississippi State University Co-Author: Seung-Joon Ahn – Mississippi State University Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition
9:00 AM – 5:00 PM MST D3045: Transcriptome profiling reveals differential gene expression of detoxification and mitochondrial-related enzymes in <i>Tribolium castaneum</i> responding to carbonyl sulfide   Location: Exhibit Hall 6

Presenting Author: Na Ri Shin – Chungnam National University Co-Author: Keon Mook Seong – Michigan State University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3046: Transgene elimination through utilization of the single-strand annealing dsDNA repair pathway in the model organism <i>Tribolium castaneum</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Collin Valentin (he/him/his) – Texas A&M University Co-Author: Musa Isah – Texas A&M University Co-Author: Zach N. Adelman – Texas A&M University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3047: Utilizing RNA microspheres to improve the RNAi efficiency in the diamondback moth, <i>Plutella xylostella</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Rachel Leigh Johnson – Kansas State University Co-Author: Amie Elizabeth Norton – Kansas State University Co-Author: Kun Yan Zhu – Kansas State University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST Grad Poster Competition: SysEB, Applied Ecology, Pollinators, and Genetics	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3158: Comparing symbiont mediated detoxification of Brassicaceous and Solanaceous plant toxins by gut microbes of herbivorous Insects   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Rachel C. Vargas (she/her/hers) – University of Texas Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3159: Evaluation of developmental stages of the parasitoid <i>Habrobracon hebetor</i> for interactions with entomopathogenic nematodes   Location: Exhibit Hall 6 Presenting Author: Jamilatu Tiymba Issah – Fort Valley State University	

Co-Author: Sanower Warsi, Ph.D. – Fort Valley State University Co-Author: James K. Danso – Fort Valley State University Co-Author: George N. Mbata – Fort Valley State University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3160: Immune priming against <i>Varimorpha (Nosema) ceranae</i> infections in honey bee queens   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Hannah M. Griesmer (she/her/hers) – University of California Co-Author: James C. Nieh, Ph.D. – University of California	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3161: Live-bearing cockroaches as a model system to understand heat impacts on pregnancy   Location: Exhibit Hall 6 Presenting Author: Sofia Samoylova – University of Bristol Co-Author: Sinead English – University of Bristol Co-Author: Joshua Benoit – University of Cincinnati Co-Author: John Terblanche – Stellenbosch University Co-Author: Kate Birchenall – University of Bristol Co-Author: Eunice Lo – University of Bristol	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3162: The recent invasion of southern California by the big-headed ant (<i>Pheidole megacephala</i>): Implications for future expansion   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mandy Frazer, M.S. – Recent UC San Diego Grad Co-Author: David A. Holway – University of California	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3163: Uncovering the American burying beetle, <i>Nicrophorus americanus</i>, genome   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Samantha Hittson – Oklahoma State University Co-Author: Manpreet Kohli – City University of New York Co-Author: Paul Bryan Frandsen – Brigham Young University	

Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3164: Pollinator community response to urban development in central Arkansas   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mary Margaret McSpadden – University of Central Arkansas Co-Author: Opeyemi Adedaja, Ph.D. – University of Central Arkansas	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3165: Using molecular techniques to study pollen provisioning breadth among species in the bee subgenus <i>Macrotera</i> (<i>Macroteropsis</i>) Timberlake (Hymenoptera: Andrenidae)   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Tanner Bland – University of Arizona Co-Author: Wendy Moore (she/her/hers) – University of Arizona	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: SysEB, Ecology, Evolution, and Systematics 	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3150: Diversification of the ant genus <i>Strumigenys</i> and evolution of power-amplified trap-jaw mechanism   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Wilfred Tang (he/him/his) – University of Illinois Urbana-Champaign Co-Author: Douglas Booher – USDA-Forest Service Co-Author: Joshua Caleb Gibson – Beckman Institute, UIUC Co-Author: Philip Anderson – University of Illinois Co-Author: Andrew Suarez – University of Illinois	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3151: Exploring the bimodal latitudinal diversity gradient in bees: Are tropical bees more frequently social, above-ground nesters?   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Lena Heinrich – University of Michigan	

Co-Author: Thais Vaconcelos – University of Michigan Co-Author: Aline C. Martins, Ph.D. (she/her/hers) – University of Michigan	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3152: Holobiont genomics for exploring the roles of small RNA in mosquito-microbe communication   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Scott Evan Brothers, Jr. – University of North Texas Co-Author: Vanessa Macias – University of North Texas Co-Author: Umberto Palatini – Rockefeller University Co-Author: Andrew Gregory – University of North Texas Co-Author: Holly J.R Popham – University of North Texas	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3153: Incomplete barriers to heterospecific mating among <i>Somatochlora</i> species (Odonata: Corduliidae) as revealed in multi-gene phylogenies   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jordy Hernandez (he/him/his) – Michigan State University Co-Author: Anthony I. Cognato – Michigan State University	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3154: Phylogenomic systematics of club-horned wasps (Hymenoptera: Sapygidae), an important parasitoid of managed bees   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jeremy B. Jensen (he/him/his) – Utah State University Co-Author: Michael G. Branstetter – USDA-ARS Co-Author: James P. Pitts – Utah State University	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3155: Preliminary assessment of palatability, degradability, and in vitro inclusion optimization of black soldier fly larvae when added as a substitute for soybean meal in dairy cattle   Location: Exhibit Hall 6 Presenting Author: Helen Craig (she/her/hers) – University of Maryland Co-Author: Anand Tiwari – University of Maryland Co-Author: Rick Kohn – University of Maryland	

Co-Author: Eduardo Rico – University of Pennsylvania Co-Author: Bill O. Lamp – University of Maryland	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3156: Review of <i>Lychnocolax</i> (Strepsiptera: Lychnocolacidae) with descriptions of two new species   Location: Exhibit Hall 6 Presenting Author: Wyatt J. Zabinski – University of Kansas Co-Author: Jerry L. Cook – Sam Houston State University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3157: Simulating and understanding trait evolution using insect phylogeny case studies   Location: Exhibit Hall 6 Presenting Author: Jenniffer Roa – University of Arkansas Co-Author: Mataya Duncan – University of Arkansas Co-Author: Duane D. McKenna – University of Memphis Co-Author: Todd Castoe – University of Texas Co-Author: Michael DeGiorgio – Florida Atlantic University Co-Author: Rich H. Adams – University of Arkansas	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST Grad Poster Competition: SysEB, Ecology and Behavior	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3142: Characterizing the heat tolerance of non-native ambrosia beetles   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jessi A. Raubenolt – The Ohio State University Co-Author: Samuel F. Ward (he/him/his) – The Ohio State University Co-Author: Kayla I. Perry (she/her/hers) – The Ohio State University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3143: Determining the migrational patterns of North American hoverflies (Diptera: Syrphidae) through stable isotope analysis   Location: Exhibit Hall 6	

Presenting Author: Tessa Fortnum – University of Western Ontario Co-Author: Jackson Kusack – University of Western Ontario Co-Author: Keith Hobson – University of Western Ontario	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3144: Effects of co-infecting bacterial symbionts on host spider fitness   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jordyn Dawn Proctor – University of Kentucky Co-Author: Jen A. White (she/her/hers) – University of Kentucky Co-Author: Becca Rain Robertson (she/her/hers) – University of Kentucky Co-Author: Allie Reagan – University of Kentucky	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3145: Foraging and nesting activity of bees and other pollinators during a total lunar eclipse   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Andres Felipe Herrera Motta (he/him/his) – University of Kansas Co-Author: Víctor Hugo González (he/him/his) – University of Kansas Co-Author: Anna Dreusicke – University of Kansas Co-Author: Natalie Herbison – University of Kansas Co-Author: Favizia Freitas De Oliveira	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3146: Learning behavior in fungus-gardening ants   Location: Exhibit Hall 6 Presenting Author: Elizabeth Danielle Boshers (she/her/hers) – University of Texas Co-Author: Katrin Kellner (she/her/hers) – University of Texas Co-Author: Jon Nicholas Seal – University of Texas	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3147: Nest shape does not affect ant colony performance against a nest invader despite altered worker movement and communication   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Emiliano Calvo Alcaniz (he/him/his) – University of Arizona Co-Author: Greg Chism – University of Arizona	

Co-Author: Alann Rathery – University of Roehampton Co-Author: Anna Dornhaus – University of Arizona	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3148: The impact of uneven topography on waggle dance learning in <i>Apis mellifera</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Brandi Rene Sanchez (she/her/hers) – University of California Co-Author: James C. Nieh, Ph.D. – University of California	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3149: Wild pollinator functional diversity across landscapes in Quebec’s cranberry agroecosystems   Location: Exhibit Hall 6 Presenting Author: Alexa Brunet – McGill University Co-Author: Jessica Paula Gillung (she/her/hers) – McGill University	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST Grad Poster Competition: SysEB, Biodiversity and Conservation	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3134: Biodiversity of Peruvian stingless bees (Apidae: Meliponini) and their associated melittophiles   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kathryn Isabella Naherny – University of Colorado Co-Author: Samuel Ramsey – University of Colorado	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3135: Connecting generations and finding new putative species in oak gall wasps (Hymenoptera: Cynipidae)   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: MaKella Jo Steffensen – University of Iowa Co-Author: Guerin E. Brown (he/him/his) – University of Iowa Co-Author: Adam Kranz – Gallformers.org Co-Author: Andrew A. Forbes – University of Iowa	

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3136: Coupled impacts of variable precipitation patterns and habitat fragmentation on native bee assemblages in a biodiversity hotspot   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jessica L. Mullins – University of California Co-Author: Keng-Lou James Hung (he/him/his) – University of Oklahoma Co-Author: John S. Ascher (he/him/his) – National University of Singapore Co-Author: David A. Holway – University of California	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3137: Does land use surrounding prairie strips (CP-43) affect the community of pollinators that respond to this conservation practice?   Location: Exhibit Hall 6 Presenting Author: Abigail Miller – Iowa State University Co-Author: Matthew E. O’Neal – Iowa State University Co-Author: Tim Youngquist – Iowa State University	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3138: Contributions to Phoridae, Apocephalus parasitoid biology: Host association, superparasitism, and genetic detection of host in parasitoid tissue   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mattie Gose (she/her/hers) – University of Iowa Co-Author: Amil Brown – University of Iowa Co-Author: Carter Leerhoff – University of Iowa Co-Author: Brian Brown – Natural History Museum of Los Angeles County Co-Author: Andrew A. Forbes – University of Iowa	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3139: Invertebrate diversity and abundance among Rio Grande wild turkey habitats in the Edwards plateau ecoregion   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Joseph Richards – Texas Tech University Co-Author: Scott Longing – Texas Tech University Co-Author: William Stewart – Texas Tech University	

Co-Author: Ian Mack – Texas Tech University
Co-Author: Warren Conway – Texas Tech University
Co-Author: Blake Grisham – Texas Tech University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST
D3140: Lepidopterans under our noses: The first standardized lepidopteran survey of Orange County, Florida, with special emphasis on Microlepidoptera  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Christina L. Watkins – University of Central Florida
Co-Author: Luke Smith
Co-Author: barbra J. Sharanowski – University of Central Florida

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST
Undergrad Poster Competition: P-IE, General Ecology, Behavior, and Chemical Ecology 
Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3207: Abundance and diversity of true bugs (Hemiptera) associated with three species of ash (Oleaceae: Fraxinus) in Southeastern Louisiana  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Ridley Graugnard (he/him/his) – Louisiana State University
Co-Author: Andrew P. Sanford – Louisiana State University
Co-Author: Todd David Johnson (he/him/his) – Louisiana State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3208: Exploring resistance transfer: Insights from agricultural insect hybridization in field environments  
Location: Exhibit Hall 6

Presenting Author: Millie Sethi – Johnston High School
Co-Author: Relanie Humpal – Corteva Agriscience
Co-Author: Benchie Ortegon – Corteva Agriscience
Co-Author: Sefriyani Johan – Corteva Agriscience
Co-Author: Matt Wihlm – Corteva Agriscience
Co-Author: Margit Ross – Corteva Agriscience
Co-Author: Amit Sethi – Corteva Agriscience

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3209: Pre- and post-digestive cues of the crapemyrtle aphid (*Tinocallis kahawaluokalani*) relating to anti-nutritive constituents  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jaelyn Noel Palmer – Ashland University
Co-Author: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University
Co-Author: Karla Michele Addesso – Tennessee State University
Co-Author: Kripa Dhakal – Tennessee State University

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3210: Influence of relative humidity and diet on *Podisus maculiventris* growth and survival  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Gabriel Pearson – University of Arizona
Co-Author: Chloé Chabaud – University of Arizona
Co-Author: Natasha Tigreros – University of Arizona

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3211: The potential to use multi-modal light and pheromone stimuli for maize weevil and larger grain borer  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Kealani Simpson – USDA-ARS
Co-Author: Jennifer Abshire – USDA-ARS
Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST
D3212: Using plant allelochemicals and microbiome characterization to investigate symbiont-mediated detoxification through developmental stages in a herbivorous beetle  

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tanner Dabbert – University of Texas
Co-Author: Kaisy Martinez – University of Texas
Co-Author: Rachel C. Vargas (she/her/hers) – University of Texas
Co-Author: Ben Bechade (he/him/his) – University of Texas
Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3213: Wireworm populations in Vermont   Location: Exhibit Hall 6 Presenting Author: Kit A. Eller – University of Vermont Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Undergrad Poster Competition: P-IE, Biocontrol and IPM Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3200: Comparison of flasks and mass rear containers for the production of <i>Leptopilina japonica</i> on <i>Drosophila suzukii</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Keeley Q. Robel – Michigan State University Co-Author: Steven Van Timmeren – Michigan State University Co-Author: Rufus Isaacs – Michigan State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3201: Effect of pre-plant calcium silicate on soybean gall midge (Diptera: Cecidomyiidae) abundance and plant injury   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ricardo Fuchs de Pinho – University of Nebraska Co-Author: Anthony J. McMechan – University of Nebraska Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3202: Evaluation of the effects of bokashi fermentation of feedstocks on black soldier fly (<i>Hermetia illucens</i>) gut microbiomes   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jaden Kim – University of California Co-Author: Kerry Elizabeth Mauck – University of California Co-Author: Marco Gebiola – University of California Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3203: Impact of sorghum pericarp color on progeny production capacity of warehouse beetle, <i>Trogoderma variabile</i>  

Location: Exhibit Hall 6 Presenting Author: Justin Castaldi – USDA-ARS Co-Author: Rupinder Singh (he/him/his) – Kansas State University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3204: Management of crapemyrtle aphid (Hemiptera: Aphididae) on crapemyrtle (Myrtales: Lythraceae) in greenhouses   Location: Exhibit Hall 6 Presenting Author: Yejoo Oh – Ashland University Co-Author: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3205: Species specific HIPVs influence foraging of both generalist and specialist herbivores as well as natural enemies   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Anthony Mendoza (he/him/his) – University of Texas Rio Grande Valley Co-Author: John Michael Grunseich – Texas A&M University Co-Author: Scott Monahan – Texas A&M University Co-Author: Anjel Helms – Texas A&M University Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST D3206: The impact of soybean planting depth on soybean gall midge (Diptera: Cecidomyiidae) infestation and plant injury   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Julia Pinzon Backes – University of Nebraska Co-Author: Anthony J. McMechan – University of Nebraska Student Poster Display Plant-Insect Ecosystems Student Student Competition
9:00 AM – 5:00 PM MST Undergrad Poster Competition: P-IE and FIT, Conservation, Education, and Outreach Student Poster Display Plant-Insect Ecosystems Formal and Informal Teaching Student Student Competition
9:00 AM – 5:00 PM MST

D3193: Community science sheds light on interspecific differences in bumble bee floral visitation



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lillian Cruz Landre (they/them/theirs) – University of California, San Diego

Co-Author: Jessica L. Mullins – University of California

Co-Author: David A. Holway – University of California

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3194: Impact of flower temperature fluctuation on pollinator visitation and behavior



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Avery Beaune Roe – University of Florida

Co-Author: Víctor Hugo González (he/him/his) – University of Kansas

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3195: Improving insect management decisions and resource use efficiency through UNL-TAPS, an innovative farm management competition



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Otavio Xavier – University of Nebraska-Lincoln

Co-Author: Julie Ann Peterson – University of Nebraska

Co-Author: Chuck Burr – University of Nebraska

Co-Author: Milos Zaric – University of Nebraska

Co-Author: Christopher Proctor – University of Nebraska

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3196: Insect community composition as an indicator of habitat quality



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Zabreya Okyere – Smith College

Co-Author: Mariana Abarca – Smith College

Co-Author: Adline Dely – Smith College

Co-Author: Susie Hodson – Smith College

Co-Author: Cynthia Arguijo – Smith College

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3197: Intersecting worlds: Exploring local insect diversity through art and science



Location: Exhibit Hall 6

Presenting Author: Charley Williams – Augustana College

Co-Author: Tierney R. Brosius (she/her/hers) – Augustana College

Student Poster Display Formal and Informal Teaching Student Student Competition

9:00 AM – 5:00 PM MST

D3198: Malaise traps as tools for assessing abundance and biomass of Lepidoptera



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Madison Wojcik – McDaniel College

Co-Author: Beakon Forest-Russell (they/them/he/him) – McDaniel College

Co-Author: Holly Martinson – McDaniel College

Student Poster Display Plant-Insect Ecosystems Student Student Competition

9:00 AM – 5:00 PM MST

D3199: Teaching the teachers: Outreach to promote entomology learning experiences in Texas' High Schools



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jillian C. Forrest (she/her/hers) – Texas Tech University

Co-Author: Scott Longing – Texas Tech University

Co-Author: Jennifer Girón – Texas Tech University

Co-Author: Lillian Prescott – Texas Tech University

Student Poster Display Formal and Informal Teaching Student Student Competition

9:00 AM – 5:00 PM MST

Undergrad Poster Competition: PBT, Behavior, Social Insects, and Pollinators



Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST

D3181: Effects of chronic chromium exposure on bombus buzz response



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Brianne Marie Annette Symak (she/her/hers) – University of Saskatchewan

Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan

Co-Author: Caleb B. Bryan – University of Saskatchewan

Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST

D3182: The effect of the glutamate antagonist, memantine, on the development and extinction of drug-seeking behavior in *Camponotus floridanus*



Location: Exhibit Hall 6

Presenting Author: Noah Abdulqawi – University of Scranton Co-Author: Marc Seid – University of Scranton Co-Author: Joe Brague – University of Scranton	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3183: The impact of benzodiazepines on learning in <i>Camponotus floridanus</i>   Location: Exhibit Hall 6 Presenting Author: Abigail Charneski – University of Scranton Co-Author: Marc Seid – University of Scranton	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3184: The study of how genetic backgrounds affect the queen honeybee's egg laying behavior   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Heaven Maxine Strachan – Central State University Co-Author: Xaryn Cleare – Central State University Co-Author: Danielle Kroh – Central State University Co-Author: Hongmei Li-Byarlay – Central State University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3185: Understanding the role of antimicrobial peptides in honey bee (<i>Apis mellifera</i>) innate immune system   Location: Exhibit Hall 6 Presenting Author: Astrid Elizabeth Gomez – University of Southern Mississippi Co-Author: John J. Adamczyk, Jr. – USDA-ARS Co-Author: Michael Goblirsch – University of Minnesota Co-Author: Deepak Kumar – University of Southern Mississippi Co-Author: Michael Edward Oeth – University of Southern Mississippi Co-Author: Shahid Karim – University of Southern Mississippi	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3186: Unveiling the honeybee flight ability and behavior in mite-resistant bee stocks   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Laverne Ambrister – Central State University Co-Author: Kritan Major – Central State University	

Co-Author: Danielle Kroh – Central State University Co-Author: Hongmei Li-Byarlay – Central State University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST Undergrad Poster Competition: PBT, Genetics, Molecular Biology, and Toxicology 	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3187: Biotic stress of honey bee viruses in wild small carpenter bees among different agricultural landscapes   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Camiyah Woods – Central State University Co-Author: Zixiao Zhao – Central State University Co-Author: Sandra Rehan (she/her/hers) – York University Co-Author: Hongmei Li-Byarlay – Central State University	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3188: Evaluating the impact of soil applied insecticides on soybean gall midge (Diptera: Cecidomyiidae) emergence   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Gabriel Henrique dos Santos Costa (he/him/his) – University of Nebraska Co-Author: Anthony J. McMechan – University of Nebraska	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	
9:00 AM – 5:00 PM MST D3189: System calibration for toluene exposure to <i>Drosophila melanogaster</i>   Location: Exhibit Hall 6 Presenting Author: Ella Grace Mullins – University of St. Thomas Co-Author: Robert Chhea – University of St. Thomas Co-Author: Ellie Salsman – University of St. Thomas Co-Author: Emma Kubeczka – University of St. Thomas Co-Author: Catherine Duong – University of St. Thomas Co-Author: Merissa Dias – University of St. Thomas Co-Author: Giselle Lopez – University of St. Thomas Co-Author: Rosmarie Rosell – University of St. Thomas	
Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition	

9:00 AM – 5:00 PM MST

D3190: The effect of gut microbiota absence on *Drosophila melanogaster*'s blood-brain barrier



Location: Exhibit Hall 6

Presenting Author: Russel Taiyo Shiga – University of Florida

Co-Author: Adam C.N. Wong (he/him/his) – University of Florida

Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST

D3191: Time course Pro/PO activity in desert locusts, *Schistocerca gregoria*, infected with fungal *Metarhizium* biopesticide



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tamir Lichaa (he/him/his) – Arizona State University

Co-Author: Syeda Mehreen Tahir (she/her/hers) – Arizona State University

Co-Author: Stefan T. Jaronksi (Me/Me/Mine) – USDA-ARS

Co-Author: Jon F. Harrison – Arizona State University

Co-Author: Arianne Cease – Arizona State University

Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST

D3192: *Tribolium castaneum* embryonic microinjection and inverse PCR



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Abigail Grace Truman – Texas A&M University

Co-Author: Musa Isah – Texas A&M University

Co-Author: Collin Valentin (he/him/his) – Texas A&M University

Co-Author: Zach N. Adelman – Texas A&M University

Student Poster Display Physiology, Biochemistry, and Toxicology Student Student Competition

9:00 AM – 5:00 PM MST

Undergrad Poster Competition: SysEB, Social Insects, Genetics, and Molecular Biology

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition



9:00 AM – 5:00 PM MST

D3230: Heat-balling and thermal responses to aggression in honey bees



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Emily Rose Lippman – University of California

Co-Author: James C. Nieh, Ph.D. – University of California

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3231: Infecting citrus mealybugs with *Sodalis praecaptivus* HS



Location: Exhibit Hall 6

Presenting Author: Nicole Valenzuela – Arizona State University

Co-Author: Arkadiy Garber – Arizona State University

Co-Author: John McCutcheon – Arizona State University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3232: Mayfly wing wonders: Uncovering genetic threads



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Melissa A. Rangel (she/her/hers) – Utah Valley University

Co-Author: Heath Ogden – Utah Valley University

Co-Author: Tabitha Weir – Utah Valley University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3233: Phylogenomics and morphology reciprocally delimit species in the aquatic *Suphisellus nigrinus* complex (Coleoptera: Noteridae)



Location: Exhibit Hall 6

Presenting Author: Liam Alexander Wrixon – University of Kansas

Co-Author: Stephen Baca – University of Kansas

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3234: Pipeline development to accelerate repetitive element analysis in long-read assemblies



Location: Exhibit Hall 6

Presenting Author: Gage Boman – Brigham Young University

Co-Author: Patrick Steven Wynn – Brigham Young University

Co-Author: John Sproul (he/him/his) – Brigham Young University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3235: The effects of chronic morphine exposure on neural structure, chemistry, and development in <i>Camponotus floridanus</i> Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Stephen J. Butler – University of Scranton Co-Author: Joe Brague – University of Scranton Co-Author: Marc Seid – University of Scranton	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST Undergrad Poster Competition: SysEB, Evolution, Phylogenetics, and Systematics	Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST D3222: An outline of genus <i>Sphaeroderus</i> taxonomy and an updated identification key Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Aimee Fraser (she/her/hers) – McGill University Co-Author: Jessica Paula Gillung (she/her/hers) – McGill University Co-Author: Curt Harden – Clemson University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3223: Analyses of the fine structures in Membracidae (Hemiptera: Auchenorrhyncha) Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Elizabeth Carlson – Oklahoma State University Co-Author: Laura Gonzalez – Rutgers University Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3224: Converging evolution: Madagascar’s novel <i>Saicini</i> genus mirrors traits of <i>Emesini</i> Location: Exhibit Hall 6 Presenting Author: Troy Nelson Manzano – University of California Co-Author: Christiane Weirauch – University of California	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	

9:00 AM – 5:00 PM MST D3225: Decoding Diptera: Unraveling chromosome evolution across fly families Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Barbara Jetton (she/her/hers) – Utah Valley University Co-Author: Carl Hjelman (he/him/his) – Utah Valley University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3226: Description of <i>Kofoidia repleta</i>, n. sp., and an analysis of 18S rRNA gene sequence variability, expression, and transmission Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ezhan Mirza – Arizona State University Co-Author: Gillian Gile (she/her/hers) – Arizona State University Co-Author: Daniel Jasso-Selles – Arizona State University Co-Author: Nobuaki Mizumoto (he/him/his) – Auburn University	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3227: Forgotten specimens find a home: Descriptions of new species in the Australian plant bug genus <i>Wallabicoris</i> (Hemiptera: Heteroptera: Miridae) Location: Exhibit Hall 6 Presenting Author: Greety Wuysang – University of California Co-Author: Christiane Weirauch – University of California	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	
9:00 AM – 5:00 PM MST D3228: Houston mosquito-transmitted viruses identified by metagenomics Location: Exhibit Hall 6 Presenting Author: Angelika Jordan – University of St. Thomas Co-Author: William Maldonado – University of St. Thomas Co-Author: Alessia Barandiaran – University of St. Thomas Co-Author: Diego Valenzuela – University of St. Thomas Co-Author: Emilio Parker – University of St. Thomas Co-Author: Alexandria McGhee – University of St. Thomas Co-Author: Rosmarie Rosell – University of St. Thomas Co-Author: Maia Larios-Sanz – University of St. Thomas	
Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition	

9:00 AM – 5:00 PM MST

D3229: Taxonomic revision of the *Nylanderia austroccidua* (Hymenoptera: Formicidae) species complex



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: John (Jack) Williams – University of Florida

Co-Author: Jason Lee Williams – University of Florida

Co-Author: Andrea Lucky – University of Florida

Co-Author: John S. LaPolla, Ph.D. – Towson University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

Undergrad Poster Competition: SysEB, Ecology, Biodiversity, and Conservation

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3214: A model of resource allocation in eusocial insects

Location: Exhibit Hall 6

Presenting Author: Miriam Michelle Van de Water – University of Scranton

Co-Author: Marc Seid – University of Scranton

Co-Author: Maxwell Greene – University of Scranton

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3215: A taxonomic review of the assassin bug genus *Phyja* Distant, 1919 (Hemiptera: Reduviidae: Reduviinae)

Location: Exhibit Hall 6

Presenting Author: Michael Zelun Lee – University of California

Co-Author: Christiane Weirauch – University of California

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3217: Global characterization of endosymbiont meta-communities associated with *Bemisia tabaci* mitotypes

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Ella Monet Randolph – Saginaw Valley State University

Co-Author: Olivia Konsdorf (she/her/hers) – Saginaw Valley State University

Co-Author: Guido Galarza – Escuela Superior Politécnica del Litoral

Co-Author: Michael J. Carter – Saginaw Valley State University

Co-Author: Lisbeth Espinoza – Escuela Superior Politécnica del Litoral

Co-Author: Judith K. Brown (she/her/hers) – University of Arizona

Co-Author: Jorge Paredes – Saginaw Valley State University

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3218: Modeling habitat suitability for the endangered rusty patched bumble bee (*Bombus affinis*): Insights for conservation and management

Location: Exhibit Hall 6

Presenting Author: Dakota Serra – Augustana College

Co-Author: Tierney R. Brosius (she/her/hers) – Augustana College

Co-Author: Charley Williams – Augustana College

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3219: Species discovery in Southern African bee flies: A new species in the revised genus *Enica*

Location: Exhibit Hall 6

Presenting Author: Lisa Nicole Rollinson – Texas A&M University

Co-Author: Allan Cabrero – Smithsonian Institution

Co-Author: Torsten Dikow – Smithsonian Institution

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3220: The effects of aposematic patterns and coloration on foraging behavior in *Habronattus* and *Phidippus* jumping spiders (Araneae: Salticidae)

Location: Exhibit Hall 6

Presenting Author: Avril Rosano – University of Florida

Co-Author: Robert El-Rassy – University of Florida

Co-Author: Aiden Fitzgibbons – University of Florida

Co-Author: Thaleia Roda – University of Florida

Co-Author: Amanda Lichter – University of Florida

Co-Author: Yichen Li – University of Florida

Co-Author: Anthony Auletta – University of Florida

Co-Author: Laurel Lietzenmayer (she/her/hers) – University of Florida

Co-Author: Lisa Taylor – University of Florida

Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition

9:00 AM – 5:00 PM MST

D3221: Using community science to access traditional ecological knowledge and generate community-led scientific investigations   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: David Hassan Canseco Vielma – University of California Co-Author: Eric O. Stiner – California Academy of Sciences Co-Author: Lauren Esposito – CAS Student Poster Display Systematics, Evolution, and Biodiversity Student Student Competition
9:00 AM – 5:00 PM MST Undergrad Poster Competition: MUVE, Biodiversity, Ecology, and Behavior Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3166: Assessment of artificial light and urbanization on moth assemblages in North-Central Texas   Location: Exhibit Hall 6 Presenting Author: Abigail Simpson – Tarleton State University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3167: Effects of common body soaps on host-seeking behavior of bed bugs   Location: Exhibit Hall 6 Presenting Author: Allen Yixing Zhao – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Michael K. Rust – University of California Co-Author: Chow-Yang Lee, BCE – University of California Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3168: Preliminary survey of blow fly species (Diptera: Calliphoridae) across Utah   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Haylee R. Beck (she/her/hers) – Utah Valley University Co-Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Co-Author: Carl Hjelman (he/him/his) – Utah Valley University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST

D3169: Sugar lockdown: The effects of the COVID-19 pandemic on the honeybee's trophic dynamics   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: João Pedro Vieira Fornasari (he/him/his) – University of Georgia Co-Author: Lewis Bartlett (they/them/theirs) – University of Georgia Co-Author: Vladimir Eliodoro Costa – São Paulo State University Co-Author: Raul Costa Pereira – State University of Campinas Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3170: The effectiveness of alpha-cypermethrin and pyriproxyfen treated long-lasting insecticidal netting on flying insects   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jamie Beach (she/her/hers) – University of Florida Co-Author: Philip Koehler – University of Florida Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3171: Tick species distribution and seasonality in the Northern Kentucky region   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Trey Zinsmeister (He/They) – Northern Kentucky University Co-Author: Nancy Le – Northern Kentucky University Co-Author: Allison Therese Parker – Northern Kentucky University Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST D3172: Understanding sterility in genetically engineered male <i>Drosophila suzukii</i>   Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Avery Witherbee – Agragene/University of Minnesota Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST Undergrad Poster Competition: MUVE, Forensic, Medical, and Veterinary Entomology and Vector Biology and Management Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
9:00 AM – 5:00 PM MST

D3173: A developmental and genomic study to strengthen forensic entomology baseline data



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Gracie S. Thompson (she/her/hers) – Arizona State University

Co-Author: Gracie S. Thompson (she/her/hers) – Arizona State University

Co-Author: Alexandier Brossia (he/him/his) – Arizona State University

Co-Author: Jonathan Parrott (he/him/his) – Arizona State University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3174: A genetic survey of Phoenix, AZ, blow fly (Diptera: Calliphoridae) populations



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Alexandier Brossia (he/him/his) – Arizona State University

Co-Author: Alexandier Brossia (he/him/his) – Arizona State University

Co-Author: Gracie S. Thompson (she/her/hers) – Arizona State University

Co-Author: Jonathan Parrott (he/him/his) – Arizona State University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3175: Assessment of the efficacy of ovillanta tire traps for mosquito control in forest habitats and residential neighborhoods



Location: Exhibit Hall 6

Presenting Author: Ethan G. Waddle – Northern Kentucky University

Co-Author: Allison Therese Parker – Northern Kentucky University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3176: Differences in activity and sleep levels revealed across multiple lines in the yellow fever mosquito,

Aedes aegypti



Location: Exhibit Hall 6

Presenting Author: Jasmine Kennedy – University of Cincinnati

Co-Author: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati

Co-Author: Joshua Benoit – University of Cincinnati

Co-Author: Emily Susanto – University of Cincinnati

Co-Author: Noah Rose – University of Cincinnati

Co-Author: Clement Vinauger, Ph.D. – Virginia Tech

Co-Author: Lyn Wang – University of Cincinnati

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3177: Evaluating natural products as repellents and insecticide synergists for *Aedes aegypti*



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Haley Rebecca Dabbs (she/her/hers) – USDA-ARS

Co-Author: Robert L. Aldridge (he/him/his) – USDA-ARS

Co-Author: Jedidiah Kline – USDA-ARS

Co-Author: Adam Bowman – USDA-ARS

Co-Author: Seth Gibson – USDA-ARS

Co-Author: Daniel L. Kline – USDA-ARS

Co-Author: Kenneth J. Linthicum, BCE – USDA-ARS

Co-Author: Edmund Norris – USDA-ARS

Co-Author: Vilheim Piowawarek – USDA-ARS

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3178: Masculinization of the female *Aedes aegypti* proboscis for vector-born disease control



Location: Exhibit Hall 6

Presenting Author: Makayla V. D. Roberts – Texas A&M University

Co-Author: Esmé Cope – Texas A&M University

Co-Author: Zach N. Adelman – Texas A&M University

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3179: Phylogeography and potential current and future distribution of *Culex tarsalis* (Diptera: Culicidae), a mosquito involved in the spread of West Nile virus



Location: Exhibit Hall 6

Presenting Author: Juan Jose Trujillo González, Sr. – University of Quindio

Co-Author: Estefania Mejia Jurado – University of Quindio

Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition

9:00 AM – 5:00 PM MST

D3180: The influence of larval habitat characteristics on malaria vectors abundance: Implication for larval source management



Location: Exhibit Hall 6

Presenting Author: Simeon Kaunda – Mzuzu University

Co-Author: Yankho Chapeta – Mzuzu University

Co-Author: Rosheen Mthawanji – Malawi Liverpool Welcome Research Program

Co-Author: Martin Chiumia – Malaria Alert Centre Student Poster Display Medical, Urban, and Veterinary Entomology Student Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: MUVE, Behavior, Insecticide Resistance, and Forensic Entomology Moderator: Charity Owings – University of Tennessee Moderator: Chih-Chung Lee (he/him/his) – Procter & Gamble Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
10:30 AM – 10:42 AM MST Characterizing the resting behavior of <i>Aedes aegypti</i> to advance vector control   Location: Phoenix Convention Center, 222 A Presenting Author: David C. Jimenez-Vallejo – Emory University Co-Author: Gabriela González Olvera – Autonomous University of Yucatan Co-Author: Azael Che-Mendoza – Autonomous University of Yucatan Co-Author: Anuar Medina-Barreiro – Autonomous University of Yucatan Co-Author: Juan Sebastian Duran-Ahumada – Emory University Co-Author: Pablo Manrique-Saide – Autonomous University of Yucatan Co-Author: Gonzalo Vazquez-Prokopec – Emory University Co-Author: Guillermo Chan – Autonomous University of Yucatan Co-Author: Felipe Del Castillo-Centeno – Autonomous University of Yucatan Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
10:42 AM – 10:54 AM MST Drawn into the decay: An extended two-summer examination of the effectiveness of Calliphoridae (Diptera) bait   Location: Phoenix Convention Center, 222 A Presenting Author: Paige S. Alexander (she/her/hers) – The Pennsylvania State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
10:54 AM – 11:06 AM MST Effects of the juvenile hormone analogue (S)-methoprene on the Argentine ant, <i>Linepithema humile</i> Mayr (Hymenoptera: Formicidae)   Location: Phoenix Convention Center, 222 A Presenting Author: Tobias Lawrence Moynour – University of California Co-Author: Dong-Hwan Choe – University of California

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
11:06 AM – 11:18 AM MST Evaluation of sustained efficacy against filth flies in response to increased levels of insect growth regulators delivered directly through beef cattle   Location: Phoenix Convention Center, 222 A Presenting Author: Connor Alexander Cavett – New Mexico State University Co-Author: Luisa Oroz-Sonoqui – New Mexico State University Co-Author: Brandon Smythe – New Mexico State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
11:18 AM – 11:30 AM MST Fire ants abandon the foraging when their pheromone trail is perturbed   Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Chinmay Hemant Joshi (he/him/his) – University of Arizona Co-Author: Anna Dornhaus – University of Arizona Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
11:30 AM – 11:42 AM MST Microclimatic conditions associated with mosquito resting sites in an urban desert environment   Location: Phoenix Convention Center, 222 A Presenting Author: Annika J. Avery – Arizona State University Co-Author: Joshua K. Kalmouni – Arizona State University Co-Author: Krijn Paaijmans – Arizona State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition
11:42 AM – 11:54 AM MST Synergistic potential of a delayed piperonyl butoxide treatment on permethrin containing pour-on products applied to beef cattle   Location: Phoenix Convention Center, 222 A Presenting Author: Luisa Oroz-Sonoqui – New Mexico State University Co-Author: Connor Alexander Cavett – New Mexico State University Co-Author: Brandon Smythe – New Mexico State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:54 AM – 12:06 PM MST The relationship between insecticide resistance and insecticide product performance in the German cockroach (Blattodea: Ectobiidae)   Location: Phoenix Convention Center, 222 A Presenting Author: Rattanan Chungswat – University of California Co-Author: Michael K. Rust – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Chow-Yang Lee, BCE – University of California Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
12:06 PM – 12:18 PM MST Thermal consequences of pyrethroid knockdown resistance in the house fly, <i>Musca domestica</i>   Location: Phoenix Convention Center, 222 A Presenting Author: Oshneil S. Baker – University of Florida Co-Author: Dana Nayduch – USDA-ARS Co-Author: Chris J. Geden – USDA-ARS Co-Author: Edwin R. Burgess, IV – University of Florida Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: MUVE, Ecology and Vector Biology and Management Moderator: Kim Hung, BCE – Coachella Valley Mosquito and Vector Control District Moderator: John W. Mahas – Cornell University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:30 AM – 10:42 AM MST A walk in the park: Assessing the role of urbanization in New Jersey's tick-borne disease landscape   Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Zoe Narvaez (she/her/hers) – Rutgers University Co-Author: Andrea Egizi (she/her/hers) – Monmouth County Tick-borne Disease Program Co-Author: Alvaro Toledo – Rutgers University	

Co-Author: Dana Price – Rutgers University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:42 AM – 10:54 AM MST Biological parameters of the Triatomine bug, <i>Triatoma rubida</i> (Hemiptera: Reduviidae) reared in an artificial feeding system   Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Kavita Adhikari – New Mexico State University Co-Author: Alvaro Romero – New Mexico State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:54 AM – 11:06 AM MST Disruption of humidity detection impairs tick survival by increasing the use of lipid reserves   Location: Phoenix Convention Center, 221 B Presenting Author: Kosisochukwu Dematus Onyeagba – University of Cincinnati Co-Author: Melissa R. Uhran – University of Cincinnati Co-Author: Melissa Kelley – University of Cincinnati Co-Author: Kennan Jeannet Oyen – USDA-ARS Co-Author: Syeda Hoque – University of Cincinnati Co-Author: Ayesha Benton – University of Cincinnati Co-Author: Jasmine Kenedy – University of Cincinnati Co-Author: Ronja Aleksandra Frigard (she/her/hers) – University of Cincinnati Co-Author: Pia Olafson – USDA-ARS Co-Author: Joshua Benoit – University of Cincinnati Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:06 AM – 11:18 AM MST Enduring effects of soil throughout the mosquito life cycle   Location: Phoenix Convention Center, 221 B Presenting Author: Kellen Pautzke (she/her/hers) – Washington State University Co-Author: Jeb P. Owen – Washington State University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:18 AM – 11:30 AM MST	

From single to multiple generation experiments: Ecological and environmental factors influencing population dynamics in wAlbB-carrying *Aedes aegypti*



Location: Phoenix Convention Center, 221 B

Presenting Author: Juan Sebastian Duran – Emory University

Co-Author: Maria Fernanda Torres-Burgos – Autonomous University of Yucatan

Co-Author: Chun Cheng – Emory University

Co-Author: Isabella Roeske – Emory University

Co-Author: Gabriela Gonzalez-Olvera – Autonomous University of Yucatan

Co-Author: Abdiel Martin-Park – Autonomous University of Yucatan

Co-Author: Yamili Contreras-Perera – Autonomous University of Yucatan

Co-Author: Henry Nelson Puerta-Guardo – Autonomous University of Yucatan

Co-Author: Pablo Manrique-Saide – Autonomous University of Yucatan

Co-Author: Gonzalo Vazquez-Prokopec – Emory University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:30 AM – 11:42 AM MST

Impacts of pantothenate supplementation on *Anopheles stephensi* life history traits



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Megan E. Dobson – University of Idaho

Co-Author: Hannah L. Kaylor – University of Idaho

Co-Author: Abigail Fellows – University of Idaho

Co-Author: Kayla Savoie-Penton – University of Idaho

Co-Author: Sydney Pruett – University of Idaho

Co-Author: Jessica Brady – University of Idaho

Co-Author: Brendan Riske – University of Arizona

Co-Author: Yared Debebe Desta – University of Idaho

Co-Author: Michael Riehle, Ph.D. – University of Arizona

Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:42 AM – 11:54 AM MST

Micronutrient supplementation impact the black soldier fly, *Hermetia illucens*, (Diptera: Stratiomyidae) development and production



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Erin Harris – Texas A&M University

Co-Author: Jeffery Tomberlin – Texas A&M University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:54 AM – 12:06 PM MST

Pathogen control in insects as food and feed: Interactions between black soldier fly larvae (*Hermetia illucens*) and *Escherichia coli* O157:H7



Location: Phoenix Convention Center, 221 B

Presenting Author: Rachel Ann McNeal – Texas A&M University

Co-Author: Tawni Crippen – USDA-ARS

Co-Author: Aaron Tarone – Texas A&M University

Co-Author: Jeffery Tomberlin – Texas A&M University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

12:06 PM – 12:18 PM MST

Plant sugar feeding preferences in Florida *Culex quinquefasciatus*



Location: Phoenix Convention Center, 221 B

Presenting Author: Mba-tihssommah Mosore – University of Florida

Co-Author: Shova Mishra – University of Florida

Co-Author: Alden Estep – USDA-ARS

Co-Author: Edwin R. Burgess, IV – University of Florida

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

12:18 PM – 12:30 PM MST

Systematic review as a method of evaluating the host associations and optimal sampling strategies of *Amblyomma americanum* and *Dermacentor variabilis* ticks



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Dayvion Adams – North Carolina State University

Co-Author: Kaylin Susanne Lewandowski (she/her/hers) – North Carolina State University

Co-Author: Michael H. Reiskind – North Carolina State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: MUVE, Medical and Veterinary Entomology and Vector Biology and Management

Moderator: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati

Moderator: Joel R. Coats, Ph.D. – Iowa State University



Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

10:30 AM – 10:42 AM MST

Determining the effect of climate on dengue outbreak variability in the Sonoran Desert



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Josh Ambrister – University of Arizona

Co-Author: Kathleen Walker – University of Arizona

Co-Author: Pablo Reyes-Castro – El Colegio de Sonora

Co-Author: Kacey Ernst – University of Arizona

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

10:42 AM – 10:54 AM MST

Enhancing S.M.A.R.T. surveillance to improve pest detection on beef cattle



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Katy V. Smith (she/her/hers) – University of Tennessee

Co-Author: Hao Gan – University of Tennessee

Co-Author: Amin Nasiri – University of Tennessee

Co-Author: Karen DeLong – University of Tennessee

Co-Author: Rebecca Butler – University of Tennessee

Co-Author: Jennifer Chandler – University of Tennessee

Co-Author: Vishvapali C. Kobbekaduwa, Ph.D. (she/her/hers) – University of Tennessee/Department of Entomology and Plant Pathology

Co-Author: Rebecca T. Trout Fryxell (she/her/hers) – University of Tennessee

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

10:54 AM – 11:06 AM MST

Evaluating the changes in questing behavior of lone star ticks (*Amblyomma americanum*) following a sublethal exposure to a pyrethroid-neonicotinoid product



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Regan Daniels (she/they) – North Carolina State University

Co-Author: Sydney Crawley – Rentokil-Terminix

Co-Author: Christopher C. Hayes – North Carolina State University

Co-Author: Michael H. Reiskind – North Carolina State University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:06 AM – 11:18 AM MST

Influence of the northern fowl mite (Acari: Macronyssidae) infestation level on cage-free laying hen welfare



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Hayley L. Sutherland (she/her/hers) – Purdue University

Co-Author: Luiz F. Brito – Purdue University

Co-Author: Amy C. Murillo – University of California

Co-Author: Marisa A. Erasmus – Purdue University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:18 AM – 11:30 AM MST

Mosquitoes in the fall: Effects of age and photoperiod on the transcriptome of *Culex pipiens*



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Grayson Tung – Rutgers University

Co-Author: Dina M. Fonseca (she/her/hers) – Rutgers University

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:30 AM – 11:42 AM MST

The effects of sublethal larvicide exposure on *Culicoides* biting midge vector competence for bluetongue virus



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Blythe Emily Lawson – University of Arkansas

Co-Author: Emily McDermott – University of Arkansas

Co-Author: Bethany McGregor (she/her/hers) – USDA

Co-Author: Barbara S. Drolet (she/her/hers) – USDA-ARS

Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student
Student Competition

11:42 AM – 11:54 AM MST

Tick control by the pros: Effectiveness of PMPs' practices to suppress nymphal *Ixodes scapularis* populations in backyards



Location: Phoenix Convention Center, 221 A, PCC

Presenting Author: Zackary J. Sieb, PHE, BCE-Intern (he/him/his) – University of Wisconsin-Madison

Co-Author: Zackary J. Sieb, PHE, BCE-Intern (he/him/his) – University of Wisconsin-Madison

Co-Author: Tela Zembsch – University of Wisconsin

Co-Author: Bradley Tucker – University of Wisconsin Co-Author: Alex Blahnik – Rentokil-Terminix Co-Author: Cassie Krejci, BCE – Rentokil-Terminix Co-Author: Lyric Bartholomay – University of Wisconsin Co-Author: Susan M. Paskewitz (she/her/hers) – University of Wisconsin Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: MUVE, Urban and Structural Pests 2 Moderator: Anna I. Berry, BCE (she/her/hers) – Pelsis Moderator: Nina Jenkins – ConidioTec LLC Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	^
10:30 AM – 10:42 AM MST Behavioral responses of the German cockroach, <i>Blattella germanica</i> (L.) to insecticide treatments   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Emily L. Ta (she/her/hers) – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Michael K. Rust – University of California Co-Author: Chow-Yang Lee, BCE – University of California Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:42 AM – 10:54 AM MST Cockroach connoisseurs: How contamination of insecticidal baits affects German cockroach, <i>Blattella germanica</i>, behavior   Location: Phoenix Convention Center, 221 C Presenting Author: Benjamin Ronald Grady – University of Kentucky Co-Author: Zachary DeVries – University of Kentucky Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:54 AM – 11:06 AM MST Effects of resources and conspecifics on harborage selection in the German cockroach (<i>Blatella germanica</i>)   Location: Phoenix Convention Center, 221 C	

Presenting Author: Allison Lopina – University of Kentucky Co-Author: Zachary DeVries – University of Kentucky Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:06 AM – 11:18 AM MST Evaluating insecticide susceptibility of bed bug (<i>Cimex lectularius</i> L.) eggs during key embryonic stages   Location: Phoenix Convention Center, 221 C Presenting Author: Morgan Martin Wilson (she/her/hers) – Virginia Tech Co-Author: Dini M. Miller, Ph.D. (she/her/hers) – Virginia Tech Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:18 AM – 11:30 AM MST Multiple mechanisms of deltamethrin resistance in the common bed bug (<i>Cimex lectularius</i>) populations and the efficacy of insecticide synergists   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Jin-Jia Yu – Rutgers University Co-Author: Shao-Hung Dennis Lee (he/him/his) – University of California Co-Author: Changlu Wang – Rutgers University Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:30 AM – 11:42 AM MST Neonicotinoid resistance in the German cockroach (Dictyoptera: Blattellidae)   Location: Phoenix Convention Center, 221 C Presenting Author: Hannah Faith Blevins – University of Kentucky Co-Author: Hannah Faith Blevins – University of Kentucky Co-Author: Zachary DeVries – University of Kentucky Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:42 AM – 11:54 AM MST Performance of gel baits against the brown-banded cockroach (<i>Supella longipalpa</i>) and the German cockroach (<i>Blattella germanica</i>)   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Jun-Yin Lum – University of California	

Co-Author: Rattanan Chungsawat – University of California Co-Author: Emily L. Ta (she/her/hers) – University of California Co-Author: Chow-Yang Lee, BCE – University of California	
Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
11:54 AM – 12:06 PM MST Virus-induced feeding behavior changes reduce baiting efficiency in red imported fire ants   Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Fang-Ling Chloe Liu – Virginia Tech Co-Author: Wei-Jun Lin – National Taiwan University Co-Author: Chin-Cheng Scotty Yang – Virginia Tech	
Student 10-Minute Presentation Medical, Urban, and Veterinary Entomology Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Behavior Moderator: Amanuel Tamiru – International Center of Insect Physiology and Ecology Moderator: Jay Keche Goldberg – John Innes Centre	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 10:42 AM MST Artificial eggs of <i>Halyomorpha halys</i> for host selection behavioral research of <i>Trissolcus japonicus</i>   Location: Phoenix Convention Center, 122 C Presenting Author: Claire K. Donahoo, MSc (she/her/hers) – Oregon State University Co-Author: Nik Wiman – Oregon State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:42 AM – 10:54 AM MST Assessing the impact of physiological condition on the response of two biological control agents of the emerald ash borer to a known attractant   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Vanshika Jindal – Louisiana State University Co-Author: Todd David Johnson (he/him/his) – Louisiana State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:54 AM – 11:06 AM MST	

Differential effects of plant age and seed treatment in rice (<i>Oryza sativa</i>) on gut microbial community of fall armyworm (<i>Spodoptera frugiperda</i>)   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Devi Balakrishnan – University of Arkansas Co-Author: Stephanie Cromwell – University of Omaha Co-Author: Paul Akwetey Ayayee (he/him/his) – University of Omaha Co-Author: Nick Bateman – University of Arkansas Co-Author: Rupesh Kariyat – University of Arkansas	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:06 AM – 11:18 AM MST Efficacy of nano-formulated azadirachtin in controlling green peach aphid (<i>Myzus persicae</i>)   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Celeste Maria Mejia-Gonzalez (she/her/hers) – Louisiana State University Co-Author: Jeffrey Davis – Louisiana State University Co-Author: Carlos E. Astete – Louisiana State University Co-Author: Cristina M. Sabliov – Louisiana State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:18 AM – 11:30 AM MST Interactions between <i>Drosophila suzukii</i>, its parasitoid <i>Ganaspis kimorum</i>, and the environment   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Ryan Chave – Oregon State University Co-Author: Chisom Irene Molokwu – Oregon State University Co-Author: Ryan Turner (he/him/his) – Oregon State University Co-Author: Kyoo Park – Oregon State University Co-Author: Vaughn Walton – Oregon State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:30 AM – 11:42 AM MST Murder in their hearts: Sibling cannibalism and its consequences for cytoplasmic incompatibility in a spider host   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Becca Rain Robertson (she/her/hers) – University of Kentucky Co-Author: Jen A. White (she/her/hers) – University of Kentucky	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:42 AM – 11:54 AM MST	

Nectar chemistry alters plant fitness by manipulating pollinator behavior   Location: Phoenix Convention Center, 122 C Presenting Author: Ari Grele – University of Nevada Co-Author: Lora Richards – University of Nevada Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:54 AM – 12:06 PM MST Non-target effects of the phagostimulant Combi-protec on <i>Ganaspis brasiliensis</i>, a parasitoid of <i>Drosophila suzukii</i>   Location: Phoenix Convention Center, 122 C Presenting Author: Jack Stephen Collins – Rutgers University Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:06 PM – 12:18 PM MST Only cool beetles reproduce: American burying beetles require a period of cold for reproduction   Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Amelea Jones (she/her/hers) – Oklahoma State University Co-Author: Shane McMurry – Oklahoma State University Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:18 PM – 12:30 PM MST Sniff and shout and let it all out: Investigating the ability of SCM larval olfaction   Location: Phoenix Convention Center, 122 C Presenting Author: Lilly V. Elliott-Vidaurri – Cornell University Co-Author: Lucas Seybert – Cornell University Co-Author: Christophe Duplais – Cornell University Co-Author: Katja A. Poveda – Cornell University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Behavior and Pollinators Moderator: Bri Price (she/her/hers) – Washington State University Moderator: Christelle Guedot – University of Wisconsin Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	

10:30 AM – 10:42 AM MST Automated deep learning approaches for classifying whitefly pest populations in cotton leaves during scouting operations   Location: Phoenix Convention Center, 130 Presenting Author: Denis Olgen Kiobia – University of Georgia Co-Author: Canicius Joseph Mwita – University of Georgia Co-Author: Jason M. Schmidt – University of Georgia Co-Author: Guoyu Lu – University of Georgia Co-Author: Haijian Sun – University of Georgia Co-Author: Mehmet Kurum – University of Georgia Co-Author: Glen Rains – University of Georgia Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:42 AM – 10:54 AM MST Behavioral effects of hemicellulose on <i>Drosophila suzukii</i> compared with other attractants   Location: Phoenix Convention Center, 130, PCC Presenting Author: Ho Jung Yoon (she/her/hers) – Oregon State University Co-Author: Ryan Chave – Oregon State University Co-Author: Kyoo Park – Oregon State University Co-Author: Vaughn Walton – Oregon State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:54 AM – 11:06 AM MST Comparative transcriptomics reveals how domestication of blueberries has shaped herbivore-induced gene expression   Location: Phoenix Convention Center, 130 Presenting Author: Jae E. Kerstetter (they/them/theirs) – Rutgers University Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Co-Author: James Polashock – USDA-ARS Co-Author: Joseph Kawash – USDA-ARS Co-Author: Chloe Hawkings (she/her/hers) – Rutgers University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:06 AM – 11:18 AM MST Do blue orchard bees (<i>Osmia lignaria</i>) exhibit plastic behavior in response to parasitism by the non-native houdini fly (<i>Cacoxenus indagator</i>)?   Location: Phoenix Convention Center, 130, PCC Presenting Author: Abigail M. Lehner (she/her/hers) – University of California, Davis Co-Author: Neal M. Williams – University of California

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:18 AM – 11:30 AM MST			
Effect of season-long insect injury on sour rot severity in ripening wine grapes  			
Location: Phoenix Convention Center, 130			
Presenting Author: Rekha Bhandari (she/her/hers) – Michigan State University			
Co-Author: Sydney Chrome – Northern Michigan University			
Co-Author: Joshua Striegler – Michigan State University			
Co-Author: Rufus Isaacs – Michigan State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:30 AM – 11:42 AM MST			
Would you like Mustard on that? <i>Brassica juncea</i> as a late season cover crop for bumble bees  			
Location: Phoenix Convention Center, 130			
Presenting Author: Brooke R. Donzelli – The Ohio State University			
Co-Author: James P. Strange (he/him/his) – The Ohio State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:42 AM – 11:54 AM MST			
Enhancing pollination services on urban farms through research and outreach  			
Location: Phoenix Convention Center, 130			
Presenting Author: Jennifer Roedel (she/her/hers) – Michigan State University			
Co-Author: Zsafia Szendrei – Michigan State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:54 AM – 12:06 PM MST			
Evaluating 3 species of mason bees for berry crop pollination  			
Location: Phoenix Convention Center, 130, PCC			
Presenting Author: Miranda Jones – Utah State University			
Co-Author: Kelsey K. Graham – USDA-ARS			
Co-Author: Robert Schaeffer – Utah State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
12:06 PM – 12:18 PM MST			
Enhancing biodiversity understanding through collaborative bee surveys: Combining research and community science for undergraduate experiences  			
Location: Phoenix Convention Center, 130, PCC			

Presenting Author: Ashley Y. Kim – University of California			
Co-Author: Keng-Lou James Hung (he/him/his) – University of Oklahoma			
Co-Author: Patricia Simpson – National Park Service			
Co-Author: Keith Lombardo – National Park Service			
Co-Author: Jessica L. Mullins – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 12:30 PM MST			
Grad 10-min Competition: P-IE, Biocontrol - General 2			
Moderator: Matthew VanWeelden – University of Florida			
Moderator: Christopher Hedstrom – Pacific Biocontrol			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 10:42 AM MST			
A big data approach to characterizing impacts of climate warming on agricultural arthropod populations  			
Location: Phoenix Convention Center, 127 A			
Presenting Author: Mia Kanako Lippey (she/her/hers) – University of California			
Co-Author: Jay A. Rosenheim – University of California			
Co-Author: Emily K. Meineke – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:42 AM – 10:54 AM MST			
Bacterial metabolites as alternative pest management agents in pecan  			
Location: Phoenix Convention Center, 127 A, PCC			
Presenting Author: Shane Moran (he/him/his) – The Ohio State University			
Co-Author: Shaohui Wu – The Ohio State University			
Co-Author: David I. Shapiro-Ilan – USDA-ARS			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:54 AM – 11:06 AM MST			
Determining insect predator-prey interactions in high tunnels through molecular gut-content analysis  			
Location: Phoenix Convention Center, 127 A			
Presenting Author: Eleanor L. Meys (she/her/hers) – University of Illinois			
Co-Author: Kacie Jo Athey – University of Illinois			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:06 AM – 11:18 AM MST			

Evaluating the impact of biocontrol with entomopathogenic nematodes on non-target arthropods in Texas cornfields   Location: Phoenix Convention Center, 127 A Presenting Author: Pragya Gupta (she/her/hers) – Texas A&M University Co-Author: Jose Santiago Gonzalez – Texas A&M University Co-Author: Dalton Ludwick (he/him/his) – USDA-ARS Co-Author: Anjel Helms – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:18 AM – 11:30 AM MST Gall observations and DNA sequencing uncover structural features and habitat modulators of a hidden arthropod community   Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Pedro FS Toledo – University of Georgia Co-Author: Winston W. Cornish – University of Georgia Co-Author: Ted E. Cottrell – USDA-ARS Co-Author: Clive Bock – USDA-ARS Co-Author: Cristina Pisani – USDA-ARS Co-Author: Marina Querejeta – University of Oviedo Co-Author: Jason M. Schmidt – University of Georgia Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:30 AM – 11:42 AM MST Re-evaluation of biocontrol agents released for <i>Schinus terebinthifolia</i> (Anacardiaceae) in Hawai'i 70 years later   Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa Co-Author: Mark G. Wright – University of Hawaii Co-Author: Juliana Elizabeth Salehi (she/her/hers) – University of Hawaii Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:42 AM – 11:54 AM MST Sustainable pest management for Alfalfa mosaic virus in chile peppers   Location: Phoenix Convention Center, 127 A Presenting Author: Lara Maria Amiri-Kazaz – Colorado State University Co-Author: Adrianna Szczepaniec – Colorado State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:54 AM – 12:06 PM MST

Utilizing niche overlap to improve predictive modeling in biological control strategies   Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Jasleen Kaur (she/her/hers) – University of Florida Co-Author: Lindsay Campbell – University of Florida Co-Author: Robert Guralnick – Florida Museum of Natural History Co-Author: Taliesin Kinser – University of Florida Co-Author: Philip G. Hahn – University of Florida Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Biocontrol - Predators Moderator: Bill Hendrix – Valent Biosciences Corporation Moderator: Erica Moretti (she/her/hers) – USDA-ARS Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:30 AM – 10:42 AM MST Alternative food source attractiveness to predatory augmentative biological control agents   Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Amber Stiller (she/her/hers) – The Ohio State University Co-Author: Jeremy Slone – Bartlett Tree Experts Co-Author: Kevin Daniel Chase – Bartlett Tree Experts Co-Author: Samuel F. Ward (he/him/his) – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:42 AM – 10:54 AM MST Assessing natural enemy and life-stage diversity on alfalfa aphid suppression   Location: Phoenix Convention Center, 127 B Presenting Author: Luis Alberto Ochoa Cadena (he/him/his) – New Mexico State University Co-Author: Ricardo A. Ramirez – New Mexico State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:54 AM – 11:06 AM MST Ecological interactions of the predatory warehouse pirate bug, <i>Xylocoris flavipes</i> (Hemiptera: Anthocoridae), and prey, <i>Liposcelis decolor</i> (Psocodea: Liposcelididae), under different thermo-hygrometric regimes   Location: Phoenix Convention Center, 127 B Presenting Author: Augustine Bosomtwe (he/him/his) – Oklahoma State University Co-Author: George Opit – Oklahoma State University Co-Author: Kristopher Giles – Oklahoma State University

Co-Author: Brad Kard – Oklahoma State University Co-Author: Carla Goad – Oklahoma State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:06 AM – 11:18 AM MST Evaluating the ecological impact of synthetic predator pheromone on pest and non-target species in a potato field Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Laura K. Martinez (she/her/hers) – Cornell University Co-Author: Jennifer Thaler – Cornell University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:18 AM – 11:30 AM MST Interactive effects of cover crops and native plantings on beneficial and pest insects in soybean Location: Phoenix Convention Center, 127 B Presenting Author: Leah Gastonguay (she/her/hers) – University of Missouri Co-Author: Deborah Finke – University of Missouri Co-Author: Tim Reinbott – University of Missouri Co-Author: Robert Pierce – University of Missouri	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:30 AM – 11:42 AM MST Investigating the functional roles of ants in no-till agricultural systems Location: Phoenix Convention Center, 127 B Presenting Author: Adegboyega Oluwamayowa Fajemisin – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:42 AM – 11:54 AM MST Multi-trophic interactions and niche partitioning of the hemlock woolly adelgid predator-prey community in their native western North American range Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Nicholas J. Dietschler – Cornell University Co-Author: Anurag Agarwal, Ph.D. – Cornell University Co-Author: Fangzhou Liu – Cornell University Co-Author: Sabrina L. Celis (she/her/hers) – University of Minnesota Co-Author: Tonya Bittner, Ph.D. – Cornell University Co-Author: Mark Whitmore – Cornell University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	11:54 AM – 12:06 PM MST Non-target effects of a novel insect growth regulator, novaluron, on beneficial arthropods in cool-season turfgrass ecosystems Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Stokes A. Aker – The Pennsylvania State University Co-Author: Ben A. McGraw – The Pennsylvania State University
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	12:06 PM – 12:18 PM MST Operation bug drop: In-field drone releases of natural enemies to control lettuce aphid (<i>Nasonovia ribisnigr</i>) and western flower thrips (<i>Frankliniella occidentallis</i>) in California lettuce Location: Phoenix Convention Center, 127 B Presenting Author: Adelaine Abrams – University of California Co-Author: Daniel Hasegawa – USDA-ARS Co-Author: Ian Grettenberger – University of California
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	12:18 PM – 12:30 PM MST Predator population and predation in adjacent row crop and grassland fields Location: Phoenix Convention Center, 127 B Presenting Author: Hannah Stowe – University of Nebraska Co-Author: Julie Ann Peterson – University of Nebraska
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Chemical Ecology Moderator: Benjamin L. Aigner (he/him/his) – Virginia Tech Moderator: Brent Short – Trece Inc.
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	10:30 AM – 10:42 AM MST Do flood stressed maize plants offer better food for insect herbivores? A test for plant stress hypothesis Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Satinderpal Kaur (she/her/hers) – University of Illinois Co-Author: Esther N. Ngumbi – University of Illinois

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:42 AM – 10:54 AM MST Effects of intraspecific plant defense diversity on aphid population growth and predation   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Rowda Altamimi (she/her/hers) – The Pennsylvania State University Co-Author: Bijay Subedi – The Pennsylvania State University Co-Author: Danilo Ferreira Borges dos Santos – The Pennsylvania State University Co-Author: Monica Kersch-Becker – The Pennsylvania State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:54 AM – 11:06 AM MST Insect herbivory induces plant volatile emissions to a greater extent aboveground than belowground, but both depend on plant-herbivore coexistence history   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Morgan Thompson (she/her/hers) – Texas A&M University Co-Author: Zachary Cohen – USDA-ARS Co-Author: Danielle C. Merrell – Texas A&M University Co-Author: Anjel Helms – Texas A&M University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:06 AM – 11:18 AM MST Multispecies lepidopteran trapping: Altered trap capture and exploration of uses in IPM   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Kelly McIntyre (she/her/hers) – Virginia Tech Co-Author: Alejandro Del-Pozo – Virginia Tech Co-Author: Erin W. Hodgson (she/her/hers) – Iowa State University Co-Author: Arash Rashed – Virginia Tech Co-Author: Kevin B. Rice – Virginia Tech			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:18 AM – 11:30 AM MST Quantifying the active space of the repellent verbenone to enhance management of non-native ambrosia beetles   Location: Phoenix Convention Center, 127 C Presenting Author: Delaney Frances Jones – Purdue University Co-Author: Matthew Ginzel – Purdue University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition

11:30 AM – 11:42 AM MST Rapid induction and seasonal response of phenolic compounds in black walnut to <i>Geosmithia morbida</i>, the causal agent of thousand cankers disease   Location: Phoenix Convention Center, 127 C Presenting Author: Scott Gula – Purdue University Co-Author: John Couture – Purdue University Co-Author: Matthew Ginzel – Purdue University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:42 AM – 11:54 AM MST The smell of danger: The odor of a gall-inducing herbivore primes expression of defense genes in its host plant   Location: Phoenix Convention Center, 127 C Presenting Author: Robert Witkowski – The Pennsylvania State University Co-Author: Lily Sudol – The Pennsylvania State University Co-Author: Eric C. Yip – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University Co-Author: Tanya Renner – The Pennsylvania State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:54 AM – 12:06 PM MST Timing is everything: Plant response to sequential and combinatorial stressors of herbivores and flooding   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Erinn R. Dady (she/her/hers) – University of Illinois Co-Author: Esther N. Ngumbi – University of Illinois			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
12:06 PM – 12:18 PM MST Unveiling the role of cover crop mixtures: Implications for maize resistance to pests and pathogens   Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Alison Hayes Jennings (she/her/hers) – The Pennsylvania State University Co-Author: Jared G. Ali – The Pennsylvania State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Climate Change Moderator: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University			

Moderator: Morgan E. Christman – USDA-ARS



Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 10:42 AM MST

Effects of temperature on the reproduction, development, and survival of pea aphids (*Acyrtosiphon pisum*)  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Tyler Hartl – University of Saskatchewan

Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan

Co-Author: Tyler Wist – Agriculture and Agri-Food Canada

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:42 AM – 10:54 AM MST

Experimental heat waves alter floral resources for pollinators  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Nina Gropp (she/her/hers) – The Pennsylvania State University

Co-Author: Michelle Lee – The Pennsylvania State University

Co-Author: Christina M. Grozinger – The Pennsylvania State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:54 AM – 11:06 AM MST

Herbarium specimens faithfully capture changing plant-insect interactions over years  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Marielle S. Hansel Friedman (she/her/hers) – University of California, Davis

Co-Author: Alison E. L. Colwell – University of California

Co-Author: Elizeth Cinto Mejía – University of California

Co-Author: Grace M. Horne (she/her/hers) – University of California

Co-Author: Ian S. Pearse – United States Geological Survey

Co-Author: Emily K. Meineke – University of California

Co-Author: Paul D. Pratt – USDA-ARS

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:06 AM – 11:18 AM MST

Influence of irrigation variability on stink bug performance in North Carolina corn  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Kevin Orta – North Carolina State University

Co-Author: Dominic Reisig – North Carolina State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:18 AM – 11:30 AM MST

Monitoring the diversity and abundance of bark beetles (Coleoptera: Scolytidae) in Florida  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Ann Marie Shanae Robinson-Baker (she/her/hers) – Florida A&M University

Co-Author: Muhammad Haseeb – Florida A&M University

Co-Author: Paul E. Skelley – Florida State Collection of Arthropods

Co-Author: Lambert Kanga – Florida A&M University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:30 AM – 11:42 AM MST

Overcompensation of physiological traits under drought and herbivory has functional consequences for fitness in soybean (*Glycine max* (L.) Merrill)  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Manish Gautam – University of Arkansas

Co-Author: Insha Shafi – University of Arkansas

Co-Author: Rupesh Kariyat – University of Arkansas

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:42 AM – 11:54 AM MST

Prairie bee community composition along a precipitation gradient in Kansas  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: August Brunette – Kansas State University

Co-Author: Tania N. Kim – Kansas State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:54 AM – 12:06 PM MST

Response of insect pollinator guilds to winter heatwaves  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Jackson Wingert – University of Oklahoma

Co-Author: Samuel O'Dell – University of Oklahoma

Co-Author: Ben Turnley – University of Oklahoma

Co-Author: Miriam H. Richards (she/her/hers) – Brock University

Co-Author: Keng-Lou James Hung (he/him/his) – University of Oklahoma

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

12:06 PM – 12:18 PM MST

Traits of a bee assemblage are linked to aridity  

Location: Phoenix Convention Center, 122 B, PCC

Presenting Author: Benjamin Turnley – University of Oklahoma Co-Author: Melanie Kazenel – Earlham College Co-Author: Karen Wright – Washington State Department of Agriculture Co-Author: Terry Griswold – USDA-ARS Co-Author: Jennifer A. Rudgers – University of New Mexico Co-Author: Kenneth D. Whitney – University of New Mexico	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Ecology Moderator: Rishi Bhandari – USDA-ARS Moderator: Katlyn A. Catron (she/her/hers) – Virginia Tech	
10:30 AM – 10:42 AM MST Assessing the community-level impacts of neonicotinoids on plants and arthropods in restoration prairie ecosystems	 
Location: Phoenix Convention Center, 122 A Presenting Author: Jonathan Rice Tettie – University of Illinois Co-Author: Alexandra Harmon-Threatt – University of Illinois	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:42 AM – 10:54 AM MST Do herbivores use chemical camouflage against their plant prey?	 
Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Eirette Santiago (she/her/hers) – University of Rhode Island	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:54 AM – 11:06 AM MST Herbivore diet and plant damage-associated-compounds alter seed germination, growth, and herbivory	 
Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Katherine Overstrum (she/her/hers) – University of Rhode Island Co-Author: Eirette Santiago (she/her/hers) – University of Rhode Island Co-Author: Brooke Pellegrini – University of Rhode Island Co-Author: Evan Preisser (he/him/his) – University of Rhode Island	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:06 AM – 11:18 AM MST	

Influence of groundcover substrate below urban trees on ant (Hymenoptera: Formicidae) establishment and mutualistic interactions with soft scales (Hemiptera: Coccidae)	 
Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Zoë Katelyn York – University of Kentucky Co-Author: Caleb J. Wilson – University of Kentucky	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:18 AM – 11:30 AM MST Nicotine influences <i>Manduca sexta</i> performance and gut microbiota composition	 
Location: Phoenix Convention Center, 122 A Presenting Author: Danilo Ferreira Borges dos Santos – The Pennsylvania State University Co-Author: Monica Kersch-Becker – The Pennsylvania State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:30 AM – 11:42 AM MST Potential impacts of the invasive Joro spider in Southern US	 
Location: Phoenix Convention Center, 122 A Presenting Author: Brittany Barnes – University of Georgia Co-Author: Matt Elliot – Georgia Department of Natural Resources Co-Author: Rhys Eshleman – University of Georgia Co-Author: Erin Grabarczyk – Valdosta Univesity Co-Author: Colton Meinecke – University of Georgia Co-Author: Jason M. Schmidt – University of Georgia Co-Author: Caterina Villari – University of Georgia Co-Author: Kamal J.K. Gandhi – University of Georgia	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:42 AM – 11:54 AM MST Presence of disease vector <i>Bursaphelenchus xylophilus</i> in Monochamus beetles as a function of spatial and temporal distance to fire	 
Location: Phoenix Convention Center, 122 A Presenting Author: Hailee Amethyst Nolan – Colorado State University Co-Author: Seth Seth Davis – Colorado State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:54 AM – 12:06 PM MST Reforestation strategies to expand the urban forest in a legacy city	 
Location: Phoenix Convention Center, 122 A, PCC	

Presenting Author: Erika Wright (she/her/hers) – The Ohio State University Co-Author: Chris Riley – Bartlett Tree Experts Co-Author: Ellen Danford – The Ohio State University Co-Author: Kayla I. Perry (she/her/hers) – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:06 PM – 12:18 PM MST The influence of early season stimuli on late season communities in <i>Solidago altissima</i>   Location: Phoenix Convention Center, 122 A Presenting Author: Alexela Hoyt – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University Co-Author: Eric C. Yip – The Pennsylvania State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:18 PM – 12:30 PM MST The influence of interdecadal variation of temporally variable demographic drivers on population dynamics   Location: Phoenix Convention Center, 122 A Presenting Author: Laurent Duverglas – University of South Carolina Co-Author: Carol L. Boggs – University of South Carolina	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: PBT, Chemical Ecology and Toxicology Moderator: Colin R. Wong (he/him/his) – USDA Moderator: Monique Rivera – Cornell University	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
10:30 AM – 10:42 AM MST ABC transporter drugs modulate IRS and ITN insecticide activity to malaria mosquitoes   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Heather Marie Hernandez – University of Nebraska Co-Author: Leslie Rault – University of Nebraska Co-Author: Grey Raven Smith – University of Nebraska Co-Author: Haley Fleetwood – University of Nebraska Co-Author: Troy Anderson – University of Nebraska	

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
10:42 AM – 10:54 AM MST Assessing the toxicity and risk of newer conventional and biological pesticides on monarch butterflies   Location: Phoenix Convention Center, 126 B Presenting Author: Michael Adu-Brew – University of Maryland Co-Author: Jillian Mae Stewart – University of Maryland Co-Author: Niranjana Krishnan – University of Maryland	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
10:54 AM – 11:06 AM MST Effects of <i>Nasonia vitripennis</i> venom on different organs of <i>Sarcophaga bullata</i>   Location: Phoenix Convention Center, 126 B Presenting Author: Shannon Rollins – University of New Mexico Co-Author: Ellen O. Martinson – University of New Mexico	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
11:06 AM – 11:18 AM MST Field-evolved resistance of <i>Spodoptera frugiperda</i> (J.E. Smith) (Lepidoptera: Noctuidae) to emamectin benzoate in Puerto Rico   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Shatrughan Shiva (he/him/his) – Michigan State University Co-Author: David Mota-Sanchez, Ph.D. – Michigan State University Co-Author: Omar Alejandro Posos-Parra, Sr. – Michigan State University Co-Author: Christina DiFonzo – Michigan State University Co-Author: Eric Patterson – Michigan State University	
Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
11:18 AM – 11:30 AM MST High protein diet increases susceptibility of desert locust, <i>Schistocerca gregaria</i> , to <i>Metarhizium</i> biopesticide infection   Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Syeda Mehreen Tahir (she/her/hers) – Arizona State University	

Co-Author: Tamir Lichaa (he/him/his) – Arizona State University

Co-Author: Jon F. Harrison – Arizona State University

Co-Author: Reid Shniderman – Arizona State University

Co-Author: Rick Overson – Arizona State University

Co-Author: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS

Co-Author: Arianne Cease – Arizona State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:30 AM – 11:42 AM MST

Insecticide susceptibility of *Helicoverpa zea* (Lepidoptera: Noctuidae) on a continental scale in the U.S.

and implications for IPM and pest invasive survey programs



Location: Phoenix Convention Center, 126 B

Presenting Author: Amina Angella Twaibu (she/her/hers) – University of Florida

Co-Author: Silvana V. Paula-Moraes – University of Florida

Co-Author: Eliseu Pereira – University of Florida

Co-Author: Julien Beuzelin – University of Florida

Co-Author: Isaac L. Esquivel – North Florida Research and Education Center

Co-Author: Fei Yang – University of Minnesota

Co-Author: Kelly A. Hamby – University of Maryland

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:42 AM – 11:54 AM MST

Synergistic interaction between plant allelochemical flavone and Bt toxin Cry1Ac in *Helicoverpa armigera*



Location: Phoenix Convention Center, 126 B

Presenting Author: Shan Wang – Zhengzhou University

Co-Author: Xianchun Li, Ph.D. (he/him/his) – University of Arizona

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:54 AM – 12:06 PM MST

The effects of sicklepod extracts on honey bees



Location: Phoenix Convention Center, 126 B, PCC

Presenting Author: Mckaela E. Whilden (she/her/hers) – Mississippi State University

Co-Author: Ziming Yue – Mississippi State University

Co-Author: Paul Tseng – Mississippi State University

Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

12:06 PM – 12:18 PM MST

The identification of pheromones and attractants for several species of Elateridae native to the American

Midwest



Location: Phoenix Convention Center, 126 B

Presenting Author: Rachel Rusen (she/her/hers) – University of Illinois

Co-Author: Jocelyn Millar – University of California

Co-Author: Thomas C. McElrath – Illinois Natural History Survey

Co-Author: Lawrence Hanks – University of Illinois

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: PBT, Genetics and Molecular and Cellular Biology

Moderator: David S. Kang – USDA-ARS

Moderator: Megan Meuti – The Ohio State University



Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 10:42 AM MST

Decoding Mycangia: Gene expression at the interfaces of two beetle-fungus symbioses



Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Miranda Guinevere Barnes – University of Florida

Co-Author: Jiri Hulcr – University of Florida

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:42 AM – 10:54 AM MST

Estimating the frequency of alleles associated with pyrethroid resistance in *Aphis glycines*



Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Matthew Ryan Pfab (he/him/his) – Iowa State University

Co-Author: Matthew E. O'Neal – Iowa State University

Co-Author: Brad S. Coates – USDA-ARS

Co-Author: Ivair Valmorbida – University of Missouri

Co-Author: Erin W. Hodgson (she/her/hers) – Iowa State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:54 AM – 11:06 AM MST

Exploring the molecular mechanisms of pyrethroid resistance in *Hypera postica* (Coleoptera:

Curculionidae) across the Western United States



Location: Phoenix Convention Center, 124 AB

Presenting Author: Muhammad Umer Masood – Montana State University

Co-Author: Erika A. Rodbell – Montana State University

Co-Author: Kevin Wanner – Montana State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:06 AM – 11:18 AM MST

Functional analysis of virus-like particles produced by ancestral machinery in parasitoid wasps, *Venturia*

canescens



Location: Phoenix Convention Center, 124 AB

Presenting Author: Alexandra Nicole Morales – University of Georgia

Co-Author: Gaelen R. Burke – University of Georgia

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:18 AM – 11:30 AM MST

Modifying phytosterol profiles in upland cotton reduces the performance of cotton aphids



Location: Phoenix Convention Center, 124 AB

Presenting Author: Mason Clark – Texas A&M University

Co-Author: Greg Sword – Texas A&M University

Co-Author: Spencer Behmer – Texas A&M University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:30 AM – 11:42 AM MST

Now you see me, now you don't: Using CRISPR/Cas9 to delete engineered genes in the yellow fever

mosquito



Location: Phoenix Convention Center, 124 AB

Presenting Author: Joseph Romanowski – Texas A&M University

Co-Author: Keun Chae – Texas A&M University

Co-Author: Kevin Myles – Texas A&M University

Co-Author: Zach N. Adelman – Texas A&M University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:42 AM – 11:54 AM MST

Resistance mechanisms to diamides in the soybean looper, *Chrysodeixis includens*



Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Sena Isbilir – Mississippi State University

Co-Author: Lauren Catchot – Mississippi State University

Co-Author: Fred R. Musser (he/him/his) – Mississippi State University

Co-Author: Seung-Joon Ahn – Mississippi State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:54 AM – 12:06 PM MST

The role of wasp cellular processes in bracovirus production



Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Nicholas Arnold Furlong – University of Georgia

Co-Author: Michael R. Strand – University of Georgia

Co-Author: Gaelen R. Burke – University of Georgia

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

12:06 PM – 12:18 PM MST

Molecular regulation of age polyethism in the Formosan subterranean termite, *Coptotermes formosanus*



Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Arjun Khadka – Louisiana State University

Co-Author: Hasim Hakanoglu (he/him/his) – Louisiana State University

Co-Author: Sang-Bin Lee – University of California

Co-Author: Qian Sun – Louisiana State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: PBT, IPM, Insecticide Resistance, and Pollinators and Pollination

Moderator: David S. Wangila – University of Minnesota

Moderator: Boris A. Castro (he/him/his) – Corteva Agriscience



Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 10:42 AM MST
Tropilaelaps mercedesae management: Combining cultural and chemical control methods  
Location: Phoenix Convention Center, 125 AB, PCC
Presenting Author: Rogan Tokach (he/him/his) – Auburn University
Co-Author: Bajaree Chuttong – Chiang Mai University
Co-Author: Dan Aurell (he/him/his) – Auburn University
Co-Author: Lakkhika Panyaraksa – Chiang Mai University
Co-Author: Geoffrey Williams – Auburn University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:42 AM – 10:54 AM MST
Depletion of phagocytic hemocytes with clodronate liposomes attenuates the innate immune system of western honey bee (*Apis mellifera*)  
Location: Phoenix Convention Center, 125 AB
Presenting Author: Michael Edward Oeth – University of Southern Mississippi
Co-Author: Shahid Karim – University of Southern Mississippi

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:54 AM – 11:06 AM MST
Efficacy of droplets and compatibility toxicants with attract and kill strategy in managing *Drosophila suzukii*  
Location: Phoenix Convention Center, 125 AB, PCC
Presenting Author: Chisom Irene Molokwu – Oregon State University
Co-Author: Kyoo Park – Oregon State University
Co-Author: Vaughn Walton – Oregon State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:06 AM – 11:18 AM MST
Exploring the role of cytochrome P450s in insecticide resistance using RNA interference in *Bemisia tabaci* (Gennadius) populations from Georgia, USA  
Location: Phoenix Convention Center, 125 AB, PCC
Presenting Author: Md Abdullah Al Baki – University of Georgia

Co-Author: Jermaine D. Perier (he/him/his) – University of Georgia
Co-Author: Thomas Patrick Dunn – University of Georgia
Co-Author: Paulo Cremonex, Ph.D. (he/him/his) – Auburn University
Co-Author: David G. Riley – University of Georgia
Co-Author: Donald Champagne – University of Georgia

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:18 AM – 11:30 AM MST
Impact of mutations in the voltage-gated sodium channel on insecticide resistance in the soybean aphid *Aphis glycines* (Hemiptera: Aphididae)  
Location: Phoenix Convention Center, 125 AB
Presenting Author: Bruna Wojahn (she/her/hers) – Iowa State University
Co-Author: Jonas A. Arnemann – Universidade Federal de Santa Maria
Co-Author: Brad S. Coates – USDA-ARS
Co-Author: Matthew E. O'Neal – Iowa State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:30 AM – 11:42 AM MST
The bumble battle: A survey of viral landscapes across imperiled and common species in the Midwestern USA  
Location: Phoenix Convention Center, 125 AB, PCC
Presenting Author: Morgan Moore (she/her/hers) – Iowa State University
Co-Author: Alex Christopher Kurtt – Iowa State University
Co-Author: Haley Curtis – Iowa State University
Co-Author: Amy Toth – Iowa State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:42 AM – 11:54 AM MST
The potential role of detoxification enzymes in diamide insecticide-resistant diamondback moth populations from Georgia, USA  
Location: Phoenix Convention Center, 125 AB
Presenting Author: Thomas Patrick Dunn – University of Georgia
Co-Author: Abdullah Al Baki – University of Georgia
Co-Author: Donald Champagne – University of Georgia
Co-Author: David G. Riley – University of Georgia

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	
11:54 AM – 12:06 PM MST Transgenerational effects of a dsRNA-based insecticide on the Colorado potato beetle Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Morgan Weissner (she/her/hers) – University of Wisconsin Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition	 
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Host-Plant Resistance Moderator: Joe Louis – University of Nebraska Moderator: Hillary Fischer – Michigan State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 10:42 AM MST Characterization of cool- and warm-season turfgrass host suitability to annual bluegrass weevil (<i>Listronotus maculicollis</i> Kirby) Location: Phoenix Convention Center, 121 C Presenting Author: Audrey Simard – The Pennsylvania State University Co-Author: Ben A. McGraw – The Pennsylvania State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	 
10:42 AM – 10:54 AM MST Characterization of the relationship between whiteheads and yield loss at different seeding rates in rice (<i>Oryza sativa</i> L.) Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Maria Luiza Mambu Osako (she/her/hers) – Texas A&M University Co-Author: Lina Bernaola – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	 
10:54 AM – 11:06 AM MST Determining the yield loss/injury relationship between the rice billbug (<i>Sphenophorus pertinax</i> Olivier) and rice (<i>Oryza sativa</i> L.) as influenced by rice cultivar Location: Phoenix Convention Center, 121 C Presenting Author: Tyler Ray Tagle Musgrove – Louisiana State University	 

Co-Author: James Villegas – Louisiana State University Co-Author: Michael Stout (he/him/his) – Louisiana State University Co-Author: Blake E. Wilson – Louisiana State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:06 AM – 11:18 AM MST Effects of arbuscular mycorrhizal fungi colonization and entomopathogenic nematode exposure on plant systemic defenses in <i>Cucurbita pepo</i> Location: Phoenix Convention Center, 121 C Presenting Author: Skai Peterson – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	 
11:18 AM – 11:30 AM MST Effects of intermittent and sequential herbivory on herbivore traits and plant fitness in soybean (<i>Glycine max</i>) Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Insha Shafi – University of Arkansas Co-Author: Rupesh Kariyat – University of Arkansas Co-Author: Manish Gautam – University of Arkansas Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	 
11:30 AM – 11:42 AM MST Invasive fall armyworm herbivory upregulates maize defense genes relative to resident stemborers <i>Busseola fusca</i> and <i>Chilo partellus</i> Location: Phoenix Convention Center, 121 C Presenting Author: Johnstone Mutiso Mutua, II – International Center of Insect Physiology and Ecology Co-Author: Daniel Mutyambai, Ph.D. – International Center of Insect Physiology and Ecology Co-Author: Sevgan Subramanian – International Center of Insect Physiology and Ecology Co-Author: George Asudi – Kenyatta University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	 
11:42 AM – 11:54 AM MST Investigating plant defenses on Lepidopteran pests: The impact of maysin on fall armyworm in early corn growth stages Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Solo Arman Peralta Mercene (he/him/his) – Michigan State University Co-Author: Aytug Ulutas – Michigan State University Co-Author: Omar Alejandro Posos-Parra, Sr. – Michigan State University Co-Author: Christina DiFonzo – Michigan State University	 

Co-Author: Erich Grotewold – Michigan State University Co-Author: David Mota-Sanchez, Ph.D. – Michigan State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:54 AM – 12:06 PM MST Population dynamics of the Mexican rice borer, <i>Eoreuma loftini</i> (Dyar), in commercial Louisiana sugarcane   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Schyler Lee Thibodeaux – Louisiana State University Co-Author: Schyler Lee Thibodeaux – Louisiana State University Co-Author: Blake E. Wilson – Louisiana State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:06 PM – 12:18 PM MST The differential effects of pulsating drought and insect herbivory on soybean (<i>Glycine max</i>)   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Jessica Ayala (she/her/hers) – University of Arkansas Co-Author: Rupesh Kariyat – University of Arkansas Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:18 PM – 12:30 PM MST Treating rice (<i>Oryza sativa</i>) with atmospheric cold plasma alters plant traits and negatively affects the growth and development of fall armyworm, <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae)   Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Deepak Dilip – University of Arkansas Co-Author: Nikitha Modupalli – University of Arkansas Co-Author: Mahfuzur Rahman – University of Arkansas Co-Author: Rupesh Kariyat – University of Arkansas Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Insecticide Resistance Moderator: Roger Lawrie – University of Puerto Rico Moderator: Man P. Huynh (he/him/his) – University of Missouri Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 10:42 AM MST	

Development of an autodissemination device for spreading entomopathogenic fungi, <i>Beauveria bassiana</i>, to fruit flies (Diptera: Tephritidae)   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Sarah K. Pennington – University of Hawaii Co-Author: Dara G. Stockton, Ph.D. – USDA-APHIS Co-Author: James Snyder – Florida Department of Agriculture and Consumer Services Co-Author: Katherine Fairbanks – Florida Department of Agriculture and Consumer Services Co-Author: Katrina Leah Dickens – Florida Department of Agriculture and Consumer Services Co-Author: Ikkei Shikano – University of Hawaii Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:42 AM – 10:54 AM MST Do foliar insecticides applied for stink bug adults impact stink bug egg eclosion and nymphal survival?   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Anjana Duwal (she/her/hers) – Louisiana State University Co-Author: Jeffrey Davis – Louisiana State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:54 AM – 11:06 AM MST Effect of no-risk insecticides on the green lacewing, <i>Chrysopa oculata</i> (Neuroptera: Chrysopidae)   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Binita Sigdel – Tennessee State University Co-Author: Kaushalya G. Amarasekare (she/her/hers) – Tennessee State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:06 AM – 11:18 AM MST Exploring genetic mechanisms of resistance by western corn rootworm to corn producing Gpp34/Tpp35Ab1   Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Elliott M. Smith – Iowa State University Co-Author: Aaron J. Gassmann – Iowa State University Co-Author: Brad S. Coates – USDA-ARS Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:18 AM – 11:30 AM MST	

Movement and survival of larval western corn rootworm and European corn borer within blended refuges of short-stature corn



Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Devin L. Radosevich – Iowa State University

Co-Author: Graham P. Head – Bayer Crop Science

Co-Author: Matthew W. Carroll – Bayer Crop Science

Co-Author: Aaron J. Gassmann – Iowa State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:30 AM – 11:42 AM MST

Optimizing integrated pest management (IPM) for plum curculio in Illinois peaches



Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Karuna Kafle (she/her/hers) – University of Illinois

Co-Author: Kacie Jo Athey – University of Illinois

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:42 AM – 11:54 AM MST

Performance of selected insecticides against chilli thrips in Southern highbush blueberries and their effect on natural enemies



Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Kendi Muthomi – University of Florida

Co-Author: Oscar E. Liburd – University of Florida

Co-Author: Dakshina R. Seal – University of Florida

Co-Author: Sriyanka Lahiri (she/her/hers) – University of Florida

Co-Author: Geoffrey Meru – University of Florida

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:54 AM – 12:06 PM MST

Rice stink bug sampling efficiency



Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Mary Jane Lytle – Mississippi State University

Co-Author: Donald Cook – Mississippi State University

Co-Author: Whitney Crow – Mississippi State University

Co-Author: Jason Bond – Mississippi State University

Co-Author: Jeffrey Gore – Mississippi State University

Co-Author: Angus Catchot – Mississippi State University

Co-Author: Tyler B. Towles – Mississippi State University

Co-Author: Hunter Lipsey – Mississippi State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

12:06 PM – 12:18 PM MST

Status of Bt resistance in European corn borer (Lepidoptera: Crambidae) populations within Minnesota and Wisconsin



Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Tatum Dwyer (they/them/theirs) – University of Minnesota

Co-Author: Wilfrid Calvin – University of Arizona

Co-Author: Fei Yang – University of Minnesota

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: P-IE, IPM - Field Crops 2

Moderator: Rayda K. Krell, Ph.D. – Corteva Agriscience

Moderator: Tiziana Oppedisano (she/her/hers) – Montana State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition



10:30 AM – 10:42 AM MST

Application of hyperspectral imaging to detect temporal infestations of two wheat pests



Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Kaelin Smith (she/her/hers) – Montana State University

Co-Author: Wyatt Medina – Montana State University

Co-Author: Jessica Kansman (she/her/hers) – Montana State University

Co-Author: Jason Cook – Montana State University

Co-Author: David K. Weaver (he/him/his) – Montana State University

Co-Author: Justin Vetch – Montana State University

Co-Author: Tiziana Oppedisano (she/her/hers) – Montana State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:42 AM – 10:54 AM MST

Improving management and resilience to thrips in lettuce in Florida



Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Tennyson Bilinkhinyu Nkhoma – University of Florida

Co-Author: Yavonne Williams – University of Florida

Co-Author: De-fen Mou (she/her/hers) – University of Florida

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:54 AM – 11:06 AM MST

Influence of agronomic practices on tarnished plant bug management in ThryvOn cotton



Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Hunter Lipsey – Mississippi State University

Co-Author: Tyler B. Towles – Mississippi State University

Co-Author: Whitney Crow – Mississippi State University

Co-Author: Donald Cook – Mississippi State University

Co-Author: Mary Jane Lytle – Mississippi State University

Co-Author: Fred R. Musser (he/him/his) – Mississippi State University

Co-Author: Brian Pieralisi – Mississippi State University

Co-Author: Corey Bryant – Mississippi State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:06 AM – 11:18 AM MST

Management strategies for tarnished plant bugs, *Lygus lineolaris*, in cotton



Location: Phoenix Convention Center, 131 B

Presenting Author: Alejandra Velez – Mississippi State University

Co-Author: Whitney Crow – Mississippi State University

Co-Author: Tyler B. Towles – Mississippi State University

Co-Author: Donald Cook – Mississippi State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:18 AM – 11:30 AM MST

Optimizing predator-prey dynamics in Southeastern CBD hemp ecosystems via conservation biological control



Location: Phoenix Convention Center, 131 B

Presenting Author: Ivy Nicola Thweatt – Alabama State University

Co-Author: Olufemi Seyi Ajayi (he/him/his) – Alabama State University

Co-Author: Muhammad Saleem – Alabama State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:30 AM – 11:42 AM MST

Plinazolin technology fit in Mississippi Thryvon and non- Thryvon cotton systems



Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Caleb Robert Rice – Mississippi State University

Co-Author: Whitney Crow – Mississippi State University

Co-Author: Tyler B. Towles – Mississippi State University

Co-Author: Fred R. Musser (he/him/his) – Mississippi State University

Co-Author: Donald Cook – Mississippi State University

Co-Author: Brian Pieralisi – Mississippi State University

Co-Author: Ryan Jackson – Syngenta

Co-Author: Brett Brett Farmer – Mississippi State University

Co-Author: Reece Butler – Mississippi State University

Co-Author: Hunter Lipsey – Mississippi State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:42 AM – 11:54 AM MST

Relationship between semi-arid landscapes and environmental factors on predator and pest composition within alfalfa systems



Location: Phoenix Convention Center, 131 B, PCC

Presenting Author: Evangelina M. Carabotta (she/her/hers) – New Mexico State University

Co-Author: Ricardo A. Ramirez – New Mexico State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:54 AM – 12:06 PM MST

Tarnished plant bug management in ThryvOn cotton



Location: Phoenix Convention Center, 131 B

Presenting Author: Brett Brett Farmer – Mississippi State University

Co-Author: Whitney Crow – Mississippi State University Co-Author: Tyler B. Towles – Mississippi State University Co-Author: Donald Cook – Mississippi State University Co-Author: Brian Pieralisi – Mississippi State University Co-Author: Brian Mills – Mississippi State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
12:06 PM – 12:18 PM MST			
The influence of seed treatments on Mississippi soybean management			
Location: Phoenix Convention Center, 131 B			
Presenting Author: Evan Watts – Mississippi State University Co-Author: Whitney Crow – Mississippi State University Co-Author: Donald Cook – Mississippi State University Co-Author: Tyler B. Towles – Mississippi State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, IPM - General			
Moderator: Travis Prochaska – University of Nebraska Moderator: Anitha Chitturi (she/her/hers) – Lincoln University of Missouri		^	
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 10:42 AM MST			
Aboveground thrips infestation influences root growth in ThryvOn and non-ThryvOn cotton			
Location: Phoenix Convention Center, 131 A, PCC			
Presenting Author: Laissa Cavallini (she/her/hers) – North Carolina State University Co-Author: Dominic Reisig – North Carolina State University Co-Author: Renee Ackerman – North Carolina State University Co-Author: Abigail Waters – North Carolina State University Co-Author: Anders Huseeth – North Carolina State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition

10:42 AM – 10:54 AM MST Click Bait? Efficacy of Group 30 insecticide cover crop treatments on Virginia wireworm species			
			
Location: Phoenix Convention Center, 131 A, PCC			
Presenting Author: Hannah V. Swarm (she/her/hers) – Virginia Tech Co-Author: Thomas P. Kuhar – Virginia Tech			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:54 AM – 11:06 AM MST Compatibility of <i>Cryptolaemus montrouzieri</i> and insecticides for management of <i>Planococcus citri</i>			
			
Location: Phoenix Convention Center, 131 A, PCC			
Presenting Author: Zachary Everson – North Carolina State University Co-Author: Steven Frank – North Carolina State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:06 AM – 11:18 AM MST			
Enhancing insect pest management in soybean and cotton using sprayer drones			
Location: Phoenix Convention Center, 131 A, PCC			
Presenting Author: Saurav Ranabhat (he/him/his) – Louisiana State University Co-Author: James Villegas – Louisiana State University Co-Author: Randy Price – Louisiana State University Co-Author: Jayvee Santiago Bruno (he/him/his) – Louisiana State University Co-Author: O'Neal Edward – Louisiana State University Co-Author: Leroy R. Lopez – Louisiana State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:18 AM – 11:30 AM MST			
Evaluating a vibrational trap for the brown marmorated stink bug, <i>Halyomorpha halys</i>			
Location: Phoenix Convention Center, 131 A			
Presenting Author: Edwin T. Harris – Oregon State University Co-Author: Vaughn Walton – Oregon State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:30 AM – 11:42 AM MST Feeding damage and ovipositional preference of stink bug pests in cotton expressing Mpp51Aa2			
			
Location: Phoenix Convention Center, 131 A, PCC			

Presenting Author: Nathan Curtis Arey – University of Tennessee Co-Author: Sebe Brown – University of Tennessee	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:42 AM – 11:54 AM MST Fitness costs of Vip3Aa resistant <i>Helicoverpa zea</i> strains on non-Bt meridic diet   Location: Phoenix Convention Center, 131 A Presenting Author: Morgan Tate – Texas A&M University Co-Author: David L. Kerns – Texas A&M University Co-Author: Fei Yang – University of Minnesota	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:54 AM – 12:06 PM MST Taking flight: Deploying unmanned aerial systems for insect sampling in soybeans   Location: Phoenix Convention Center, 131 A, PCC Presenting Author: William Covington Lockhart, Sr. – Mississippi State University Co-Author: Fred R. Musser (he/him/his) – Mississippi State University Co-Author: Tyler B. Towles – Mississippi State University Co-Author: Joseph Whittenton – Mississippi State University Co-Author: Marvin Merkl – Mississippi State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, IPM - Horticulture Moderator: David G. Olson – The Davey Tree Expert Company Moderator: Sally Nelson (she/her/hers) – University of Minnesota Extension	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:30 AM – 10:42 AM MST Alternative reduced risk insecticides for the management of the stone fruit borer complex in tart cherry production   Location: Phoenix Convention Center, 131 C Presenting Author: Ignatius Putra Andika – Michigan State University Co-Author: Keith Koonter – Michigan State University Co-Author: David Mota-Sanchez, Ph.D. – Michigan State University Co-Author: John C. Wise – Michigan State University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:42 AM – 10:54 AM MST	

Evaluation of a push-pull system using collards and tomatoes for management of diamondback moth (Lepidoptera: Plutellidae) on cabbage   Location: Phoenix Convention Center, 131 C Presenting Author: Maussi Imelda Arrunategui (she/her/hers) – University of Connecticut	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
10:54 AM – 11:06 AM MST Finding balance: squash bug thresholds, pesticide frequency, and toxicity to beneficial insects in cucurbit cropping systems   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Breh Ruger (she/her/hers) – The Ohio State University Co-Author: Ashley B. Leach – The Ohio State University Co-Author: Ian Kaplan – Purdue University	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:06 AM – 11:18 AM MST Gut reactions: Bees and their love-hate relationship with cucurbit pollen   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Courtney May Walls (she/her/hers) – Virginia Tech Co-Author: T'ai Roulston (he/him/his) – University of Virginia Co-Author: Margaret J. Couvillon – Virginia Tech Co-Author: Thomas P. Kuhar – Virginia Tech Co-Author: James Wilson – Virginia Tech Co-Author: Chin-Cheng Scotty Yang – Virginia Tech	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:18 AM – 11:30 AM MST Overwintering of flower thrips in blueberry crops   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Rosan Adhikari – University of Georgia Co-Author: Ashfaq Sial – University of Georgia	
Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
11:30 AM – 11:42 AM MST Plants attacked above-ground by leaf-mining flies change below-ground microbiota to enhance plant defense   Location: Phoenix Convention Center, 131 C Presenting Author: Yang Gao – Zhejiang University	

Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:42 AM – 11:54 AM MST Quantifying the distribution of oak lecanium scale, <i>Parthenolecanium corni</i> Bouché and <i>P. quercifex</i> Fitch, infestations on landscape willow oak (<i>Quercus phellos</i> L.) trees and resultant consequences for tree condition   Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Benjamin Knowlton (he/him/his) – University of Kentucky Co-Author: Caleb J. Wilson – University of Kentucky			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:54 AM – 12:06 PM MST Reevaluating filbertworm, <i>Cydia latiferreana</i> Walsingham (Lepidoptera: Tortricidae), phenology for improved degree day modeling   Location: Phoenix Convention Center, 131 C Presenting Author: Natalie Renee Lareau – Oregon State University Co-Author: Abigail Dhone – Oregon State University Co-Author: Nik Wiman – Oregon State University Co-Author: Erica Rudolph – FMC Corporation			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
12:06 PM – 12:18 PM MST Selecting insectary plants for improving beneficial insects and pest management in southern vegetable production   Location: Phoenix Convention Center, 131 C Presenting Author: Pragma Kiju – Clemson University Co-Author: Tom Bilbo – Clemson University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: P-IE, Pollinators and Pollination - Honey Bees and Native Pollinators 2 Moderator: Rae Olsson, Ph.D. (they/them/theirs) – Washington State University Moderator: Quinn McFrederick – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:30 AM – 10:42 AM MST Are honey bees more productive when given access to prairie strips?   Location: Phoenix Convention Center, 129 A, PCC Presenting Author: Jarod Perez – Iowa State University			

Co-Author: John Tyndall – Iowa State University Co-Author: Amy Toth – Iowa State University Co-Author: Randall Paul Cass (he/him/his) – Iowa State University Co-Author: Matthew E. O'Neal – Iowa State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:42 AM – 10:54 AM MST Host and biogeographic patterns of native bee microbiomes   Location: Phoenix Convention Center, 129 A Presenting Author: Jen Nisha Schlauch (she/her/hers) – University of California Co-Author: Tobin Hammer – University of California			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
10:54 AM – 11:06 AM MST Incentivized Farm Bill plantings benefit the native bumble bee community   Location: Phoenix Convention Center, 129 A Presenting Author: Jared Michael Brabant – University of Missouri Co-Author: Elizabeth Webb – University of Missouri Co-Author: Deborah Finke – University of Missouri			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:06 AM – 11:18 AM MST Insect pollinators associated with huckleberry, <i>Vaccinium</i> spp., in the Pacific Northwest   Location: Phoenix Convention Center, 129 A Presenting Author: Andrew Nash Muckey – University of Idaho Co-Author: Stephen P. Cook – University of Idaho			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition
11:18 AM – 11:30 AM MST Plant-pollinator network response to high-severity fire along a gradient of time-since-disturbance   Location: Phoenix Convention Center, 129 A Presenting Author: Ryleigh Gelles – Colorado State University Co-Author: Seth Seth Davis – Colorado State University Co-Author: John Mola – Colorado State University Co-Author: Ruth Hufbauer – Colorado State University Co-Author: Camille Stevens-Rumann – Colorado State University			
Student 10-Minute Presentation	Plant-Insect Ecosystems	Student	Student Competition

11:30 AM – 11:42 AM MST

Resource blindness in plant-pollinator networks: Case study from a Bornean rainforest canopy



Location: Phoenix Convention Center, 129 A, PCC

Presenting Author: Andrew H. Aldercotte, MSc – Rutgers University

Co-Author: Retno Widowati, Ph.D. – Universitas Nasional

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:42 AM – 11:54 AM MST

The impact of impervious surface and neighborhood wealth on arthropod biodiversity and ecosystem services in community gardens



Location: Phoenix Convention Center, 129 A

Presenting Author: Asia A. Kaiser (she/her/hers) – University of Colorado

Co-Author: Julian Resasco – University of Colorado

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:54 AM – 12:06 PM MST

The impact of Quebec cranberry agricultural practices on pollinator diversity



Location: Phoenix Convention Center, 129 A

Presenting Author: Samantha Dizon – McGill University

Co-Author: Jessica Paula Gillung (she/her/hers) – McGill University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

12:06 PM – 12:18 PM MST

The landscape mediates the effects of plant volatile on pollinators and pollination



Location: Phoenix Convention Center, 129 A

Presenting Author: Yahel Ben-Zvi – Rutgers University

Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

12:18 PM – 12:30 PM MST

Using floral strips to enhance beneficial insect populations on Manitoba rotational farm land



Location: Phoenix Convention Center, 129 A

Presenting Author: Michael Killewald – University of Manitoba

Co-Author: Alejandro Costamagna – University of Manitoba

Co-Author: Yvonne Lawley – University of Manitoba

Co-Author: Rob Gulden – University of Manitoba

Co-Author: Jason Gibbs – University of Manitoba

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: P-IE, Social Insects

Moderator: Wizzie Brown, BCE – Texas A&M University

Moderator: Michelle Smith, BCE-Emeritus – Corteva Agriscience

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 10:42 AM MST

A multidisciplinary approach to campus conservation: UW-Madison's bee campus initiative



Location: Phoenix Convention Center, 132 A

Presenting Author: Victoria Salerno – University of Wisconsin

Co-Author: James D. Crall – University of Wisconsin

Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:42 AM – 10:54 AM MST

Evaluating the effect of population size and clustering behavior on winter survival in honey bee colonies

(*Apis mellifera* L.)



Location: Phoenix Convention Center, 132 A

Presenting Author: Shelby Ann Kittle – University of Nebraska

Co-Author: Autumn Smart – University of Nebraska

Co-Author: Judy Wu-Smart – University of Nebraska

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:54 AM – 11:06 AM MST

Evaluating wild bumble bee colony performance across urban and rural landscapes



Location: Phoenix Convention Center, 132 A

Presenting Author: Laura Lukens – Colorado State University

Co-Author: John Mola – Colorado State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:06 AM – 11:18 AM MST

Examining host plant use and ant mutualists of the treehopper *Entylia carinata*



Location: Phoenix Convention Center, 132 A

Presenting Author: Rebecca Carranza – University of Illinois

Co-Author: Andrew Suarez – University of Illinois

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:18 AM – 11:30 AM MST

How can green infrastructure affect bumble bee colony health and success?



Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Dante J. Centuori (he/him/his) – The Ohio State University

Co-Author: Michelle Pham – The Ohio State University

Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University

Co-Author: James P. Strange (he/him/his) – The Ohio State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:30 AM – 11:42 AM MST

Invasive arboreal ants and beleaguered butterflies: Assessing predator-prey interactions using a new ex situ methodology



Location: Phoenix Convention Center, 132 A

Presenting Author: Miles Maxcer – University of Florida

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:42 AM – 11:54 AM MST

Social information use by bumble bees across trophic guilds



Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Marie Muniz – The Pennsylvania State University

Co-Author: Elinor M. Lichtenberg – University of North Texas

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:54 AM – 12:06 PM MST

Understanding the role social wasps play in facilitating cluster rot infections in vineyards



Location: Phoenix Convention Center, 132 A

Presenting Author: Fatma Ezzahra Besbes – University of Wisconsin

Co-Author: Christelle Guedot – University of Wisconsin

Co-Author: Leslie Holland – USDA-ARS

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: P-IE, Vectors of Plant Disease 2

Moderator: Dylan J. Beal – UC ANR

Moderator: Jinlong Han – Colorado State University



Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 10:42 AM MST

Bottom-up effects of nutrient availability and disease infection on above- and belowground herbivores



Location: Phoenix Convention Center, 128 AB

Presenting Author: Haotian Liu – Rutgers University

Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:42 AM – 10:54 AM MST

Developing a new molecular assay for detection and differentiation of palm lethal decline phytoplasmas in Africa



Location: Phoenix Convention Center, 128 AB, PCC

Presenting Author: Melody Bloch (she/her/hers) – University of Florida

Co-Author: Ericka Helmick – University of Florida

Co-Author: Fabian Pilet – CIRAD

Co-Author: Brian W. Bahder – University of Florida

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:54 AM – 11:06 AM MST

Evaluating effects of virus infection on alfalfa yield by comparing yield, quality, and virus prevalence (SRAV, AMV, and BLRV) in insecticide-treated versus check plots



Location: Phoenix Convention Center, 128 AB, PCC

Presenting Author: Apekshya Senchuri (she/her/hers) – University of Idaho

Co-Author: Christopher W. Rogers – USDA-ARS

Co-Author: Alexander Karasev – University of Idaho

Co-Author: Erik J. Wenninger (he/him/his) – University of Idaho

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

11:06 AM – 11:18 AM MST

Evaluating snap bean germplasm lines for resistance to sweet potato whitefly and associated viruses in Georgia



Location: Phoenix Convention Center, 128 AB

Presenting Author: Gurjit Singh – University of Georgia

Co-Author: Bhabesh Dutta – University of Georgia Co-Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:18 AM – 11:30 AM MST Impact of natural vegetation on barley yellow dwarf virus (BYDV) epidemiology   Location: Phoenix Convention Center, 128 AB Presenting Author: Shirin Parizad – Virginia Tech Co-Author: Arash Rashed – Virginia Tech	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:30 AM – 11:42 AM MST Investigating the effects of invasive grasses on <i>Aedes aegypti</i> behavior: Laboratory and field study findings   Location: Phoenix Convention Center, 128 AB Presenting Author: Emily Medelez – University of Texas Co-Author: Pushpa Soti – University of Texas Co-Author: Christopher J. Vitek – University of Texas	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:42 AM – 11:54 AM MST Reducing sweetpotato reinfection through vector management   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Rachel E. Morrison (she/her/hers) – Mississippi State University Co-Author: Lorin Harvey – Mississippi State University Co-Author: Natraj Krishnan – Mississippi State University Co-Author: Sead Sabanadzovic – Mississippi State University Co-Author: Fred R. Musser (he/him/his) – Mississippi State University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:54 AM – 12:06 PM MST Understanding the range and etiology of wilting sassafras in the central hardwood forest region   Location: Phoenix Convention Center, 128 AB Presenting Author: Olivia Bigham – Purdue University Co-Author: Tyler Dreaden – University of Kentucky Co-Author: James Jacobs – USDA-Forest Service Co-Author: Matthew Ginzel – Purdue University Co-Author: Anna Conrad – Purdue University	

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition	
12:06 PM – 12:18 PM MST Utilizing high throughput sequencing to understand the movement of pollen-borne viruses at the agroecological interface   Location: Phoenix Convention Center, 128 AB, PCC Presenting Author: Mandeep Tayal – Clemson University Co-Author: Elise Schnabel – Clemson University Co-Author: Christopher Wilson – University of Arkansas Co-Author: Elizabeth J. Cieniewicz (she/her/hers) – Clemson University	Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: PBT, Behavior Moderator: Catherine Schretter – Howard Hughes Medical Institute Inc Moderator: Jaya Sravanthi Mokkalapati – The Pennsylvania State University	Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition
10:30 AM – 10:42 AM MST Automated pose estimation and machine learning for classifying insecticide modes of action   Location: Phoenix Convention Center, 126 A Presenting Author: Junho Yoon – Seoul National University Co-Author: Jun-Hyung Tak – Seoul National University	Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition
10:42 AM – 10:54 AM MST Spatial arrangement of Böhm's bristles and resolution of joint position in cricket antennae (<i>Acheta domesticus</i> L.) (Orthoptera: Gryllidae)   Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Marlo Gunnar McCarter (they/them/theirs) – Purdue Co-Author: Catherine Loudon – University of California	Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Student Competition
10:54 AM – 11:06 AM MST	

Dynamic uneven allocation of foraging exploration task among Eastern subterranean termite worker caste,

Reticulitermes flavipes Kollar  

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Anugerah Fajar (he/him/his) – University of Illinois

Co-Author: Xuguo Zhou – University of Kentucky

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:06 AM – 11:18 AM MST

Effects of pesticides at field-detected concentrations on nursing behavior of honey bee, *Apis mellifera*

 
Location: Phoenix Convention Center, 126 A

Presenting Author: Euijin You – Kyungpook National University

Co-Author: YeongHo Kim, Ph.D. – Kyungpook National University

Co-Author: Young Ho Kim – Kyungpook National University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:18 AM – 11:30 AM MST

Evaluation of fatty acids for spatial repellency against the two-spotted spider mite, *Tetranychus urticae*:

Laboratory and greenhouse bioassays  

Location: Phoenix Convention Center, 126 A

Presenting Author: Ji Hye Oh – Gyeongsang National University

Co-Author: Ryeon Eun Kim – Gyeongsang National University

Co-Author: Dong Hee Kim – Gyeongsang National University

Co-Author: Eun Su Jang – Gyeongsang National University

Co-Author: Hyeon Gu Kim – Gyeongsang National University

Co-Author: Seo Yeon Park – Gyeongsang National University

Co-Author: Da Hyeon Yu – Gyeongsang National University

Co-Author: Sang-Bin Lee – University of California

Co-Author: Gwang hyun Roh – Gyeongsang National University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:30 AM – 11:42 AM MST

Exploring mosquito behaviors to improve attractive toxic sugar bait (ATSB) efficacy  

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Xixian Ng – University of Nebraska

Co-Author: Ellis Johnson – Eurofins Agrosience Services

Co-Author: Leslie Rault – University of Nebraska

Co-Author: Troy Anderson – University of Nebraska

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:42 AM – 11:54 AM MST

Investigating the role of *S. piceifrons piceifrons* gut bacteria in behavioral manifestations of locust phase shift  

Location: Phoenix Convention Center, 126 A

Presenting Author: Joseph Antwi – Southern Illinois University

Co-Author: Brittany Peterson (she/her/hers) – Southern Illinois University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:54 AM – 12:06 PM MST

Moving and mating: Discerning the phenotype of a dopamine and ecdysone receptor in *An. gambiae*

 
Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Elizabeth Freeman – University College London

Co-Author: Marta Andres – London's Global University

Co-Author: Judit Bagi – London's Global University

Co-Author: David Ellis – London's Global University

Co-Author: Marcos Georgiades – London's Global University

Co-Author: Joerg Albert – London's Global University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

12:06 PM – 12:18 PM MST

Response of house flies, *Musca domestica* (Diptera: Muscidae), to denatonium benzoate  

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: R M Panchalie Bhagya Gunathunga (she/her/hers) – Northern Illinois University

Co-Author: Bethia H. King – Northern Illinois University

Co-Author: Chris J. Geden – USDA-ARS

Co-Author: Edwin R. Burgess, IV – University of Florida

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: SysEB, Behavior 2

Moderator: Gary Brewer – University of Nebraska

Moderator: Anna Wallingford – USDA-ARS



Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

10:30 AM – 10:42 AM MST

Acorn ants self-medicate using bacteria  

Location: Phoenix Convention Center, 222 B

Presenting Author: Mathew Pekora – Rowan University

Co-Author: Svetlana Kruse – Rowan University

Co-Author: Jason Melendez – Rowan University

Co-Author: Priscila Rosario Abreu – Rowan University

Co-Author: Jack Cummings – Rowan University

Co-Author: Daniel Wheeler – Rowan University

Co-Author: Wendy Perez – Rowan University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

10:42 AM – 10:54 AM MST

Collective nest-site selection, excavation and emigration of a neotropical ant, *Ectatomma ruidum*



Location: Phoenix Convention Center, 222 B

Presenting Author: Purbayan Ghosh – Arizona State University

Co-Author: Tyler C. Murdock (he/him/his) – Arizona State University

Co-Author: Stephen Pratt – Arizona State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

10:54 AM – 11:06 AM MST

Elite and non-elite individuals in honeybees differ in how behavioral and life-history traits covary



Location: Phoenix Convention Center, 222 B, PCC

Presenting Author: Kord Dicke – Colorado State University

Co-Author: Dhruva Naug – Colorado State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

11:06 AM – 11:18 AM MST

Evolution of increased variability in turning bias and correlated changes in *Drosophila melanogaster*



Location: Phoenix Convention Center, 222 B

Presenting Author: Shraddha Lall – Harvard University

Co-Author: Noah Rodman – Harvard University

Co-Author: Benjamin de Bivort – Harvard University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

11:18 AM – 11:30 AM MST

Exploring reproductive strategies and social dynamics: A comprehensive study of *Bombus impatiens* nests in early colony development  

Location: Phoenix Convention Center, 222 B

Presenting Author: Blanca R. Peto (she/her/hers) – University of California

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

11:30 AM – 11:42 AM MST

Late ain't great: Consequences to delayed symbiont acquisition in a leaf-footed bug  

Location: Phoenix Convention Center, 222 B, PCC

Presenting Author: Liam T. Sullivan – Entomology & Insect Science GIDP

Co-Author: Molly S. Hunter (she/her/hers) – University of Arizona

Co-Author: Suzanne E. Kelly (she/her/hers) – University of Arizona

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

11:42 AM – 11:54 AM MST

Temperature and social experience impact collective thermoregulatory behavior in the honeybee



Location: Phoenix Convention Center, 222 B, PCC

Presenting Author: Rachael Halby (she/her/hers) – Marquette University

Co-Author: Chelsea N. Cook – Marquette University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student

Student Competition

11:54 AM – 12:06 PM MST

Social information supersedes sensory information to drive collective thermoregulatory behavior   Location: Phoenix Convention Center, 222 B Presenting Author: Kerrigan B. Tobin – Marquette University Co-Author: Elsa Hahn – Marquette University Co-Author: Zachary Nelson – Marquette University Co-Author: Chelsea N. Cook – Marquette University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
12:06 PM – 12:18 PM MST Sting theory: Utilizing the principles of particle physics to model honeybee fanning   Location: Phoenix Convention Center, 222 B Presenting Author: Casey E. Lambert – Marquette University Co-Author: Zachary Nelson – Marquette University Co-Author: Kyara Vazquez – Marquette University Co-Author: Chelsea N. Cook – Marquette University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
12:18 PM – 12:30 PM MST Transcription factor motif evolution with gains and losses of social behavior   Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Savanna Grace Ploessl (she/her/hers) – University of Kentucky Co-Author: Beryl Jones – University of Kentucky Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
10:30 AM – 12:30 PM MST Grad 10-min Competition: SysEB, Biodiversity 2 Moderator: István Mikó – University of New Hampshire Moderator: Adrian J. Pekarcik – USDA-ARS Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
10:30 AM – 10:42 AM MST Effect of population density and locust phase on viruses associated with Central American locusts, <i>Schistocerca piceifrons</i>  		

Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Sydney Millerwise (she/her/hers) – Arizona State University Co-Author: Arvind Varsani – Arizona State University Co-Author: Matthew De Koch – Arizona State University Co-Author: Christopher Brennan – Texas A&M University Co-Author: Audélia M.C Mechti (she/her/hers) – Texas A&M University Co-Author: Vivian A. Peralta Santana (she/her/hers) – Texas A&M University Co-Author: Henry Javier Chan Tun – Yucatan Plant Health Co-Author: Mario Poot Pech – Yucatan Plant Health Co-Author: Jon F. Harrison – Arizona State University Co-Author: Arianne Cease – Arizona State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
10:42 AM – 10:54 AM MST Establishing an assurance population for the critically endangered <i>Poecilotheria tarantula</i>   Location: Phoenix Convention Center, 222 C Presenting Author: Jackie Billotte – Colorado State University Co-Author: Kristen Wade – University of California Co-Author: Ruth Hufbauer – Colorado State University Co-Author: Richard Reading – Butterfly Pavilion Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
10:54 AM – 11:06 AM MST Exotic bees dominate bee hotels in urban forest fragments   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Miriam Edelkind-Vealey – University of Georgia Co-Author: S. Kristine Braman – University of Georgia Co-Author: Michael Ulyshen – USDA-Forest Service Co-Author: Kerry M. Oliver – University of Georgia Co-Author: John Wares – University of Georgia Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition		
11:06 AM – 11:18 AM MST How does symbiont metabolism match B-vitamin dietary needs across the world's insects?   Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Hannah Marie Smith – Drexel University		

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:18 AM – 11:30 AM MST

Local field position within blueberry fields determines the composition of ground-dwelling spiders



Location: Phoenix Convention Center, 222 C

Presenting Author: Sarah Miranda de Rezende – University of Georgia

Co-Author: Zack Williams – University of Georgia

Co-Author: Svoboda Pennisi – University of Georgia

Co-Author: Jason M. Schmidt – University of Georgia

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:30 AM – 11:42 AM MST

New records of ensiferans from Agusan del Sur, Philippines, with the description of three new species

(Orthoptera: Ensifera)

Location: Phoenix Convention Center, 222 C

Presenting Author: Jewel Anne Gatmen Salvador, Ph.D. – Mindanao State University

Co-Author: Ming Kai Tan – National University of Singapore

Co-Author: Olga Nuñez – Mindanao State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:42 AM – 11:54 AM MST

Road salts and dragonflies: How does winter salt pollution impact pond macroinvertebrate communities?



Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: Hannah M. Bodmer (she/her/hers) – University of Toronto

Co-Author: Nihal Ercin – University of Toronto

Co-Author: Rosalind Murray – University of Toronto

Co-Author: Shannon McCauley – University of Toronto

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:54 AM – 12:06 PM MST

The importance of insect biomass and abundance for grouse populations



Location: Phoenix Convention Center, 222 C

Presenting Author: Julianna Rose Yager – Binghamton University

Co-Author: Eliza Grames – Binghamton University

Co-Author: Joseph Elias – Binghamton University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

12:06 PM – 12:18 PM MST

Urban biodiversity: Exploring microhabitat heterogeneity and beetle communities in Central Florida urban parks

Location: Phoenix Convention Center, 222 C

Presenting Author: Alessandra Pandolfi – University of Central Florida

Co-Author: David G. G. Jenkins – University of Central Florida

Co-Author: Patrick J. J. Bohlen – University of Central Florida

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

12:18 PM – 12:30 PM MST

What's abuzz at the base: Bee diversity on Fairchild Air Force Base

Location: Phoenix Convention Center, 222 C, PCC

Presenting Author: Alexis Menth (she/her/hers) – Washington State University

Co-Author: Richard S. Zack, Jr. – Washington State University

Co-Author: Silas Bossert (he/him/his) – Washington State University

Co-Author: Joel Gardner – Washington State University

Co-Author: Elizabeth Murray – Washington State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: SysEB, Biodiversity and Conservation

Moderator: Geoffrey E. Morse – University of San Diego

Moderator: Isabella Errigo – Cornell University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:30 AM – 10:42 AM MST

Assessing the habitat requirements and body condition of imperiled bumble bee species in the upper

Midwest

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Erika J. Ibarra-Garibay – Iowa State University

Co-Author: Kelsey Shepherd – Iowa State University
Co-Author: Stephanie Paris – Iowa State University
Co-Author: Anna Tucker – U.S. Geological Survey/Iowa State University
Co-Author: Amy Toth – Iowa State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:42 AM – 10:54 AM MST

Creating conservation genomics resources for an imperiled butterfly  

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Taylor Pierson (she/her/hers) – University of Florida
Co-Author: Ivone de Bem Oliveira, Ph.D. (she/her/hers) – University of Florida
Co-Author: Leonardo C. J Corvalan, MSc – University of Florida
Co-Author: Jaret C. Daniels, Ph.D. – University of Florida

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:54 AM – 11:06 AM MST

Exploring adaptive radiation through a phylogenetic revision of Hawaii’s remarkable endemic *Trupanea* (Diptera: Tephritidae)  

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Spencer Len Pote (he/him/his) – University of Hawaii
Co-Author: Daniel Rubinoff – University of Hawaii

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:06 AM – 11:18 AM MST

Exploring specificity in palm flower weevils (Curculionidae) using species delimitation methods



Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Abigail E. Magland – University of Chicago
Co-Author: Diego Souza – Field Museum
Co-Author: Brian Farrell – Harvard University
Co-Author: Roberta Valente – Federal University of Paraná
Co-Author: Luis Alberto Nuñez-Avellaneda – Universidad De Los Llanos
Co-Author: Bruno A S de Medeiros, Ph.D. – Field Museum

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:18 AM – 11:30 AM MST

Investigating leafhopper abundance and diversity in Eastern Canada: Impact of climate and landscape composition  

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Jordanne Jacques (she/her/hers) – Université Laval
Co-Author: Anne-Sophie Brochu – Université Laval
Co-Author: Frédéric McCune – Université Laval
Co-Author: Valérie Fournier – Université Laval
Co-Author: Edel Perez-Lopez – Université Laval

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:30 AM – 11:42 AM MST

New high-quality genome assembly and annotation for the imperiled Loammi skipper butterfly (*Atrytonopsis loammi*)  

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Rachel L. Walsh, MSc (she/her/hers) – Florida Museum of Natural History
Co-Author: Rebekah Keating Godfrey, Ph.D. – Florida International University
Co-Author: Yi-Ming Weng, Ph.D. – Okinawa Institute of Science and Technology
Co-Author: Jaret C. Daniels, Ph.D. – University of Florida
Co-Author: Akito Y. Kawahara, Ph.D. – Florida Museum of Natural History

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:42 AM – 11:54 AM MST

Revealing the diversity of eukaryotic termite symbionts  

Location: Phoenix Convention Center, 225 A, PCC

Presenting Author: Kali Layne Swichtenberg (she/her/hers) – Arizona State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:30 AM – 12:30 PM MST

Grad 10-min Competition: SysEB, Ecology

Moderator: Melissa Reed – Oklahoma State University
Moderator: Karly Regan – Certis Biologicals

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition



10:30 AM – 10:42 AM MST Evaluation of the role of dung beetles and adaptive multi-paddock grazing in reducing horn fly populations in Oklahoma   Location: Phoenix Convention Center, 226 A Presenting Author: Rodrigo Martins Soares – Oklahoma State University Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University Co-Author: Justin Talley – Oklahoma State University Co-Author: Michael Cavallaro – City of Bullhead Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:42 AM – 10:54 AM MST Factors related to bumblebee parasitism in urban and wild Wyoming   Location: Phoenix Convention Center, 226 A Presenting Author: Amy Storey – University of Wyoming Co-Author: Lusha M. Tronstad, Ph.D. – University of Wyoming Co-Author: Linda van Diepen – University of Wyoming Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:54 AM – 11:06 AM MST Habitat specificity reduces the host range a biological control agent of the avian vampire fly   Location: Phoenix Convention Center, 226 A Presenting Author: Alyssa T. Gooding – University of Minnesota Co-Author: Maria Perez – Charles Darwin Foundation Co-Author: Paolo Piedrahita – Escuela Superior Politecnica del Litoral Co-Author: Charlotte Causton – Charles Darwin Foundation Co-Author: George E. Heimpel – University of Minnesota Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
11:06 AM – 11:18 AM MST Resource use of cavity-nesting bees in Colombia’s tropical savannas   Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Dario Guevara Plata (he/him/his) – Universidad Militar Nueva Granada Co-Author: Lucía Lucia Aguilar Benavides – Universidad Militar Nueva Granada Co-Author: Víctor Hugo González (he/him/his) – University of Kansas

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
11:18 AM – 11:30 AM MST Surveillance and detection of <i>Haemaphysalis longicornis</i> (Acari: Ixodidae) in protected areas from Georgia, USA   Location: Phoenix Convention Center, 226 A Presenting Author: Eleanor M. Fausett – University of California Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
11:30 AM – 11:42 AM MST Using radio telemetry to study bumble bee (<i>Bombus</i> spp.) nesting habitat   Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Sophia M. Gultzo (she/her/hers) – Colorado State University Co-Author: John Mola – Colorado State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
11:42 AM – 11:54 AM MST Vegetation structure and time since fire predict the presence of the regal fritillary butterfly (<i>Speyeria idalia</i>) in Missouri   Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Tiffany Perron (she/her/hers) – University of Central Missouri Co-Author: Daniel Marschalek – University of Central Missouri Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: SysEB, Evolution and Ecology Moderator: Joshua Benoit – University of Cincinnati Moderator: Evan Preisser (he/him/his) – University of Rhode Island Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:30 AM – 10:42 AM MST

Adapting to deserts: Searching for genes contributing to desiccation resistance in the cactophilic

Drosophila mojavensis  

Location: Phoenix Convention Center, 225 B

Presenting Author: Liam Roberts – University of Arizona

Co-Author: Carson W. Allan – University of Arizona

Co-Author: Luciano M. Matzkin (he/him/his) – University of Arizona

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:42 AM – 10:54 AM MST

Current understanding of the ecology and evolution of Grylloblattidae and future research directions



Location: Phoenix Convention Center, 225 B, PCC

Presenting Author: Ellie Gamett (she/her/hers) – Columbia University

Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:54 AM – 11:06 AM MST

Exploring the genetic basis of silk production: Comparative genomics of non-model arthropod silk genes



Location: Phoenix Convention Center, 225 B, PCC

Presenting Author: Amanda Markee (she/her/hers) – American Museum of Natural History

Co-Author: Richard Baker – American Museum of Natural History

Co-Author: Paul Bryan Frandsen – Brigham Young University

Co-Author: Janice Edgerly-Rooks (she/her/hers) – Santa Clara University

Co-Author: Cheryl Hayashi – American Museum of Natural History

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:06 AM – 11:18 AM MST

Gene networks reveal alternate routes to mimetic coloration in North American bumble bees



Location: Phoenix Convention Center, 225 B

Presenting Author: Tunc Dabak – The Pennsylvania State University

Co-Author: Heather M. Hines – The Pennsylvania State University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:18 AM – 11:30 AM MST

Investigating sperm competition in two geographically isolated populations of *Drosophila mojavensis*



Location: Phoenix Convention Center, 225 B

Presenting Author: Xingsen Chen – University of Arizona

Co-Author: Carson W. Allan – University of Arizona

Co-Author: Luciano M. Matzkin (he/him/his) – University of Arizona

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:30 AM – 11:42 AM MST

Leveraging structural prediction to understand the genomic repertoire of olfactory genes in beetles



Location: Phoenix Convention Center, 225 B, PCC

Presenting Author: Mataya Duncan – University of Arkansas

Co-Author: Emilee Walden – University of Arkansas

Co-Author: Emma Turner – University of Arkansas

Co-Author: Sohan Prabhudesai – University of Arkansas

Co-Author: Terrence P. Sylvester – University of Memphis

Co-Author: Mathew A. Price – University of Hawaii

Co-Author: Robert F. Mitchell (he/him/his) – The Pennsylvania State University

Co-Author: Duane D. McKenna – University of Memphis

Co-Author: Rich H. Adams – University of Arkansas

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:42 AM – 11:54 AM MST

The facultative intracellular symbiont *Lariskella* is neutral for lifetime fitness and spreads through cytoplasmic incompatibility in the leaf-footed bug, *Leptoglossus zonatus* (Hemiptera:Coreidae)



Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Edwin F. Umanzor – University of Arizona Co-Author: Suzanne E. Kelly (she/her/hers) – University of Arizona Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas Co-Author: Yu Matsuura – University of the Ryukyus Co-Author: Molly S. Hunter (she/her/hers) – University of Arizona	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
11:54 AM – 12:06 PM MST Turning up the heat: Symbiont-dependent insects and rising global temperatures   Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Abigail Williams (she/her/hers) – Drexel University	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
10:30 AM – 12:30 PM MST Grad 10-min Competition: SysEB, Genetics and Genomics Moderator: Hojun Song – Texas A&M University Moderator: Stephaniea Sandoval Arango (she/her/hers) – The Pennsylvania State University	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
10:30 AM – 10:42 AM MST <i>Wolbachia</i> and Strepsiptera: Multitrophic associations in parasitic systems   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Rebecca Jean Arizapa Millena – American Museum of Natural History	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
10:42 AM – 10:54 AM MST A genomic looking glass: Developing genomic tools to study <i>Nipaecoccus viridis</i> Newstead (Hemiptera: Pseudococcidae), an invasive mealybug pest in Florida citrus   Location: Phoenix Convention Center, 224 B Presenting Author: Tracy Liesenfelt – University of Florida Co-Author: Erin Powell – Florida State Collection of Arthropods Co-Author: Andrew J. Mongue – University of Florida	

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
10:54 AM – 11:06 AM MST Behind the genes of an ultraconserved element (UCE) bait set and the impacts of function on phylogenomic reconstruction   Location: Phoenix Convention Center, 224 B Presenting Author: Hannah L. Cook (she/her/hers) – Washington State University Co-Author: Silas Bossert (he/him/his) – Washington State University Co-Author: Elizabeth Murray – Washington State University	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
11:06 AM – 11:18 AM MST Metagenomic analysis reveals <i>Ca. Phytoplasma</i> spp. in <i>Empoasca fabae</i> indicating ability to vector multiple species   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Joshua Molligan – Université Laval Co-Author: Edel Perez-Lopez – Université Laval	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
11:18 AM – 11:30 AM MST Mother knows best: Unraveling the transcriptome of female desert locust accessory gland after mating   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Vivian A. Peralta Santana (she/her/hers) – Texas A&M University Co-Author: Maeva Angelique Techer, Ph.D. (she/her/hers) – Texas A&M University Co-Author: Hojun Song – Texas A&M University	Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition
11:30 AM – 11:42 AM MST Tailored to kill: A customized UCE probe set for robber flies (Diptera: Asilidae)   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Teagan Marie Mulford – Northern Arizona University Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University	

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
11:42 AM – 11:54 AM MST Temperature influences the outcomes of an environmentally-acquired symbiosis   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Patrick Thomas Stillson (he/him/his) – Emory University Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
11:54 AM – 12:06 PM MST The changing microbiome of a developing cactus bee, <i>Diadasia opuntiae</i> Cockerell   Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Charles T. Bradley – University of Arizona Co-Author: Wendy Moore (she/her/hers) – University of Arizona Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
12:06 PM – 12:18 PM MST Using phylogenetic methods to track the evolution of sungal symbionts in Ptinid beetles   Location: Phoenix Convention Center, 224 B Presenting Author: Austin Ashley Hendricks (she/her/hers) – University of New Mexico Co-Author: Keith Philips – Western Kentucky University Co-Author: Tobias Engl – Max Planck Institute Co-Author: Vincent Martinson – University of New Mexico Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
10:30 AM – 12:30 PM MST Grad 10-min Competition: SysEB, Phylogenetics and Behavior Moderator: Melissa S. Sisson – Middle Georgia State University Moderator: Andrea Lucky – University of Florida Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	^
10:30 AM – 10:42 AM MST	

A new strepsipteran parasite, <i>Xenos gadagkari</i> sp.nov, in the Indian population of the primitively eusocial wasp, <i>Polistes wattii</i>   Location: Phoenix Convention Center, 224 A Presenting Author: Deepak Nain – Panjab University Co-Author: Anjali Rana – Indian Institute of Science Education and Research Co-Author: Rhitoban Raychoudhury – Indian Institute of Science Education and Research Co-Author: Ruchira Sen – Sri Guru Gobind Singh College Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
10:42 AM – 10:54 AM MST Novel large-scale annotation and comparative genomics of Ichneumonoidea (Hymenoptera) reveals insight into the evolution of these hyperdiverse parasitoids   Location: Phoenix Convention Center, 224 A Presenting Author: Rachel Behm – University of Central Florida Co-Author: barbra J. Sharanowski – University of Central Florida Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	
10:54 AM – 11:06 AM MST Phylogenomics of the quadraceps-complex of lice (Psocodea: Phthiraptera) and its bacterial endosymbiont diversity   Location: Phoenix Convention Center, 224 A Presenting Author: Ember Clodfelter – University of Illinois Co-Author: Jorge Dofia – Universidad de Granada Co-Author: Kim O. Walden – University of Illinois Co-Author: Kevin P. Johnson – Illinois Natural History Survey Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Student Competition	

11:06 AM – 11:18 AM MST

Reduction in interaction efficiency disrupts collective thermoregulatory behavior in honeybees



Location: Phoenix Convention Center, 224 A, PCC

Presenting Author: Justine Bich Lien Nguyen – Marquette University

Co-Author: Chelsea N. Cook – Marquette University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:18 AM – 11:30 AM MST

Social networks and social environment in a facultatively social bee



Location: Phoenix Convention Center, 224 A

Presenting Author: Jesse Leon Huisken – Rehan Lab

Co-Author: Jesse Leon Huisken – Rehan Lab

Co-Author: Sandra Rehan (she/her/hers) – York University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:30 AM – 12:30 PM MST

Undergrad 10-min Competition: PBT, Behavior, Chemical Ecology, and Physiology

Moderator: Jacqueline M. Maille (she/her/hers) – Kansas State University

Moderator: Laura L. Ingwell – Purdue University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:30 AM – 10:42 AM MST

Characterizing the role of a metallothionein gene in the fertility of *Drosophila melanogaster*



Location: Phoenix Convention Center, 226 B, PCC

Presenting Author: Yibo Gu – Michigan State University

Co-Author: Shilpi Mohanty – Michigan State University

Co-Author: Loren Campbell – Michigan State University

Co-Author: Taylor Hori – Michigan State University

Co-Author: Zhuo Chen – Michigan State University

Co-Author: Henry Chung – Michigan State University

Co-Author: Zinan Wang (he/him/his) – University of Kentucky

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:42 AM – 10:54 AM MST

Cockroach jumping: A behavioral description and experimental analysis in *Periplaneta*



Location: Phoenix Convention Center, 226 B

Presenting Author: Nicolás José Galvez – North Carolina State University

Co-Author: Adrian Smith – North Carolina Museum of Natural Sciences

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

10:54 AM – 11:06 AM MST

Influence of methoprene on a nutritionally linked gene in *Bombus impatiens*



Location: Phoenix Convention Center, 226 B, PCC

Presenting Author: Joanna Saxon – Rutgers University

Co-Author: Grayson Tung – Rutgers University

Co-Author: Chloe Hawkins (she/her/hers) – Rutgers University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:06 AM – 11:18 AM MST

Investigating variation of nonflight thermogenesis between castes of bumble bees (*Bombus impatiens*)



Location: Phoenix Convention Center, 226 B, PCC

Presenting Author: Alex Christopher Kurtt – Iowa State University

Co-Author: Erika J. Ibarra-Garibay – Iowa State University

Co-Author: Amy Toth – Iowa State University

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:18 AM – 11:30 AM MST

Spacial dynamics of *Wolbachia* throughout *Drosophila simulans* development



Location: Phoenix Convention Center, 226 B, PCC

Presenting Author: Pablo Stilwell – University of Minnesota

Co-Author: Megan W. Jones – University of Minnesota

Co-Author: Amelia Lindsey – University of Minnesota

Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student
Student Competition

11:30 AM – 11:42 AM MST

Spatial repellency and electrophysiological response of caproic acid against the cotton aphid, <i>Aphis gossypii</i> Glover   Location: Phoenix Convention Center, 226 B Presenting Author: Eun Su Jang – Gyeongsang National University Co-Author: Hyeon Gu Kim – Gyeongsang National University Co-Author: Ji Hye Oh – Gyeongsang National University Co-Author: Seo Yeon Park – Gyeongsang National University Co-Author: Da Hyeon Yu – Gyeongsang National University Co-Author: Sang-Bin Lee – University of California Co-Author: Gwang hyun Roh – Gyeongsang National University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition
11:42 AM – 11:54 AM MST To (<i>Nosema</i>) immunity and bee-yond! Uncovering the molecular secrets of survivor and managed honeybee immunity in response to <i>Nosema ceranae</i>   Location: Phoenix Convention Center, 226 B Presenting Author: Emilia L. M. Burnham (she/her/hers) – University of California Co-Author: Boris Baer – University of California Co-Author: Kerry Elizabeth Mauck – University of California Co-Author: Naoki Yamanaka – University of California Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition
11:54 AM – 12:06 PM MST Transcriptomic analysis of <i>Apis mellifera</i> hypopharyngeal glands in varied temperatures   Location: Phoenix Convention Center, 226 B Presenting Author: Emily Jane Sullivan – Rutgers University Co-Author: Grayson Tung – Rutgers University Co-Author: Chloe Hawkings (she/her/hers) – Rutgers University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition
12:06 PM – 12:18 PM MST Warmer temperature and aging interact to shape the nitric oxide synthase humoral immune response in mosquitoes   Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Norbu Shastri – Vanderbilt University Co-Author: Lindsay E. Martin (she/her/hers) – Vanderbilt University

Co-Author: Julian F. Hillyer – Vanderbilt University Student 10-Minute Presentation Physiology, Biochemistry, and Toxicology Student Competition
10:30 AM – 12:30 PM MST Undergrad 10-min Competition: SysEB, General 3 Moderator: Yelena Pacheco (she/her/hers) – USDA-ARS Moderator: Heath Ogden – Utah Valley University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:30 AM – 10:42 AM MST A phylogenetic analysis of genome size evolution and social structure in Hymenoptera   Location: Phoenix Convention Center, 223, PCC Presenting Author: Olivia Frary – Utah Valley University Co-Author: Carl Hjelman (he/him/his) – Utah Valley University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:42 AM – 10:54 AM MST Coevolution between Parabasalia protist endosymbionts and Neoisoptera hosts   Location: Phoenix Convention Center, 223 Presenting Author: Serena Gloria Aguilar – Arizona State University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
10:54 AM – 11:06 AM MST Counting chromosomes: Exploring evolutionary insights from <i>Drosophila</i> karyotypes   Location: Phoenix Convention Center, 223, PCC Presenting Author: Audrey Elizabeth French (she/her/hers) – Utah Valley University Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student Competition
11:06 AM – 11:18 AM MST Investigating correlation between beetle diversity and recurring patterns of genome repeat architecture   Location: Phoenix Convention Center, 223

Presenting Author: Patrick Steven Wynn – Brigham Young University
Co-Author: Gage Boman – Brigham Young University
Co-Author: John Sproul (he/him/his) – Brigham Young University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:18 AM – 11:30 AM MST
Investigating mechanisms of rDNA-driven rapid genome evolution using long-read assemblies



Location: Phoenix Convention Center, 223

Presenting Author: Rachel Seamons – Brigham Young University
Co-Author: John Sproul (he/him/his) – Brigham Young University
Co-Author: Paul Bryan Frandsen – Brigham Young University
Co-Author: Madeline Tanner – Brigham Young University

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:30 AM – 11:42 AM MST
Microarachnids enlightening macro-patterns: New advances on the evolution and biogeography of New

World schizomids

Location: Phoenix Convention Center, 223

Presenting Author: Grant Wass – Palomar College
Co-Author: Rodrigo Monjaraz-Ruedas – San Diego State University Biodiversity Museum
Co-Author: Marshal Hedin – San Diego State University Biodiversity Museum

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:42 AM – 11:54 AM MST
Missing pieces of the puzzle: Using iNaturalist and PBI reveals diversity knowledge gaps in California

Orthotylinæ (Hemiptera: Heteroptera: Miridae)

Location: Phoenix Convention Center, 223, PCC

Presenting Author: Caitlyn Nicole Castillo Campbell (she/her/hers) – University of California
Co-Author: Christiane Weirauch – University of California

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

11:54 AM – 12:06 PM MST

Turning over a new leaf: A survey of neotropical parasitoid Hymenoptera in leaf litter

Location: Phoenix Convention Center, 223

Presenting Author: Robin P. Marquez (he/him/his) – University of Central Florida
Co-Author: Diler Haji – University of Connecticut
Co-Author: Elijah Talamas – Florida State Collection of Arthropods
Co-Author: Michael W. Gates (he/him/his) – USDA-ARS
Co-Author: Robert Kula – USDA-ARS
Co-Author: Ted R. Schultz – Smithsonian Institution
Co-Author: Matthew Buffington – USDA-ARS
Co-Author: Jeffrey Sosa-Calvo – Smithsonian Institution
Co-Author: Robert L. Kresslein – USDA-ARS

Student 10-Minute Presentation Systematics, Evolution, and Biodiversity Student
Student Competition

10:30 AM – 12:45 PM MST
Undergrad 10-min Competition: P-IE, Behavior, Biodiversity, Climate Change, and Conservation

Moderator: Jerome F. Grant (he/him/his) – University of Tennessee
Moderator: Kumar Shrestha – University of Nebraska



Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:30 AM – 10:42 AM MST
An environmental DNA (eDNA) study of pollinator biodiversity along an urban-to-rural gradient



Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Olivia Konsdorf (she/her/hers) – Saginaw Valley State University
Co-Author: Jorge Paredes – Saginaw Valley State University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:42 AM – 10:54 AM MST
An exploratory analysis of gene expression stressors in the behavioral & physiological mechanisms of

Apis mellifera foragers

Location: Phoenix Convention Center, 226 C

Presenting Author: Isabella Cano – Rutgers University
Co-Author: Grayson Tung – Rutgers University
Co-Author: Chloe Hawkins (she/her/hers) – Rutgers University

Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition

10:54 AM – 11:06 AM MST
Bees and thieves: Determining the network structure of a parasitoid-host system for cavity-nesting bees in

Minnesota

Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Jenalyn Ann Ostendorf – University of Minnesota Co-Author: Matthew Petersen – University of Minnesota Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:06 AM – 11:18 AM MST Does host-plant resistance inadvertently increase secondary pest populations by reducing biocontrol?   Location: Phoenix Convention Center, 226 C Presenting Author: Yasmine Helbling – University of Maryland Co-Author: Bill O. Lamp – University of Maryland Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:18 AM – 11:30 AM MST Estimated moth host capacity in urban conservation habitats   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Addison Ashe Copen – The Ohio State University Co-Author: Lucy Guarnieri – The Ohio State University Co-Author: Michelle Pham – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:30 AM – 11:42 AM MST Examining the validity of plant stress hypothesis in tomato plants recovering from flooding   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Michael Anthony Somerville, Jr. (he/him/his) – University of Illinois Co-Author: Esther N. Ngumbi – University of Illinois Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:42 AM – 11:54 AM MST Opposites attract...or do they? Examining the influence of <i>Acalymma vittatum</i> in the host-plant finding decisions of <i>Anasa tristis</i>   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Natalie Brennan (she/her/hers) – Montana State University Co-Author: Matthew Barrett (he/him/his) – Cornell University Co-Author: Jennifer Thaler – Cornell University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:54 AM – 12:06 PM MST

Plant domestication and geographic origin affect resistance to insect herbivory   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Jeremy Garces – Texas A&M University Co-Author: Morgan Thompson (she/her/hers) – Texas A&M University Co-Author: Skai Peterson – Texas A&M University Co-Author: Anjel Helms – Texas A&M University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
12:06 PM – 12:18 PM MST Pollen identification database in the Southeast region for pollinator research   Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Emma Blake U'Ren – Mississippi State University Co-Author: Claire Green – Mississippi State University Co-Author: Pierre Lau (he/him/his) – USDA-ARS Co-Author: Priyadarshini Chakrabarti Basu – Mississippi State University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
12:18 PM – 12:30 PM MST Wild bee species abundance and floral preference on the University of Nebraska-Lincoln campus   Location: Phoenix Convention Center, 226 C Presenting Author: Paige Myers – University of Nebraska Co-Author: Autumn Smart – University of Nebraska Co-Author: Judy Wu-Smart – University of Nebraska Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
12:30 PM – 12:42 PM MST Within-colony foraging specialization among bumble bees and consequences for disease transmission   Location: Phoenix Convention Center, 226 C Presenting Author: Tallisker L.H. Weiss – Cornell University Co-Author: Wee Hao Ng – Cornell University Co-Author: Nils Napp – Cornell University Co-Author: Scott McArt – Cornell University Student 10-Minute Presentation Plant-Insect Ecosystems Student Student Competition
11:30 AM – 2:30 PM MST Tour: Biocollections at Arizona State University 

Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings	Panelist: Jacqueline Serrano (she/her/hers) – USDA-ARS Mini Workshop Early Career
12:00 PM – 1:00 PM MST Insect Photo Salon Location: Phoenix Convention Center, 126 C Organizer: Thomas V. Myers, BCE – All-Rite Pest Control Functions/Events/Meetings	1:00 PM – 2:00 PM MST Developing Multi-dimensional Fluency in Science Communication to Build Trust When You Feel Like an Outsider Location: Phoenix Convention Center, 128 AB Organizer: Melanie Margarita Kirby, MSc – Institute of American Indian Arts Organizer: Jennifer Mariko Tsuruda – University of Tennessee Organizer: Ana Heck (she/her/hers) – Michigan State University Mini Workshop Diversity, Equity, and Inclusion
1:00 PM – 1:30 PM MST Exhibitor Demonstration: Expedition Entomology & The Global Entomology Coalition Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall) Presenting Author: Jace Porter – Global Entomology Coalition Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage	1:00 PM – 2:00 PM MST Q&A with Poster Presenters Location: Phoenix Convention Center, Exhibit Hall 6 Functions/Events/Meetings Exhibit Hall
1:00 PM – 2:00 PM MST USDA - Agricultural Research Service All Hands Location: Phoenix Convention Center, 121 C Organizer: Alvin M. Simmons – USDA-ARS Organizer: Kevin Hackett – USDA-ARS Organizer: Joseph E. Munyaneza – USDA-ARS Organizer: Robert Miller – USDA Organizer: Steve Young – USDA Organizer: Brad S. Coates – USDA-ARS Functions/Events/Meetings	1:00 PM – 2:30 PM MST Branch Leaders Meeting Location: Sheraton Phoenix Downtown, North Mountain Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America Functions/Events/Meetings Committee Meeting
1:00 PM – 2:00 PM MST Empowering Early Career Professionals with Knowledge and Skills for Success Location: Phoenix Convention Center, 125 AB, PCC Organizer: Beth E. Ferguson (she/her/hers) – Rutgers University Organizer: Hannah K. Levenson (she/her/hers) – North Carolina State University Organizer: Deena Wael Husein, Ph.D. – USDA-ARS Panelist: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Panelist: Hollis Woodard – University of California Panelist: Elizabeth H. Beers – Washington State University Panelist: Melody A. Keena (she/her/hers) – USDA-Forest Service Panelist: Erica Jean Kistner-Thomas – USDA-NIFA Panelist: Hannah Joy Burrack – Michigan State University Panelist: Paul F. Rugman-Jones – University of California Panelist: Therese M. Poland (she/her/hers) – USDA-Forest Service Panelist: Hannah K. Levenson (she/her/hers) – North Carolina State University Panelist: Deena Wael Husein, Ph.D. – USDA-ARS	1:00 PM – 2:30 PM MST Academic Entomology in Decline: Can We Reverse the Trends and Protect the Future of Entomology? Location: Phoenix Convention Center, 129 A, PCC Organizer: David W. Onstad – Entomological Society of America Functions/Events/Meetings
	1:00 PM – 5:00 PM MST Tour: Disc Golf at Buffalo Ridge Park  Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings
	1:30 PM – 2:30 PM MST Conversation Starter: Photography Location: Phoenix Convention Center, The Hive (in the Exhibit Hall) Moderator: Ian M. Wright (he/him/his) – Museum of Riverside Functions/Events/Meetings Conversation Starter

2:00 PM – 2:30 PM MST Exhibitor Demonstration: Conviron Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall) Presenting Author: Laura Frederick – Conviron Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage
2:00 PM – 3:00 PM MST Common Names of Insects Committee Meeting Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton Organizer: Joe Rominiecki, CAE (he/him/his) – Entomological Society of America Functions/Events/MeetingsCommittee Meeting
2:00 PM – 4:30 PM MST Certification Board Meeting Location: Sheraton Phoenix Downtown, Paradise Valley, Sheraton Organizer: Willet Hossfeld, ICE-CCP (he/him/his) – Entomological Society of America Functions/Events/MeetingsCommittee MeetingCertification
2:30 PM – 4:30 PM MST FIT Business Meeting with Accomplishments of the Formal and Informal Teaching Pilot Section Organizer: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University Organizer: David Serrano (he/him/his) – Broward College Organizer: Carly M. Tribull – Farmingdale State College Organizer: Doug Golick (he/him/his) – University of Nebraska Organizer: Molly Keck, BCE – Texas A&M University Organized MeetingFormal and Informal Teaching
2:30 PM – 3:00 PM MST Reception Location: Phoenix Convention Center, 127
3:00 PM – 3:05 PM MST Introductory remarks Location: Phoenix Convention Center, 127 Presenting Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University
3:05 PM – 3:25 PM MST FIT Pilot Section updates Location: Phoenix Convention Center, 127 Presenting Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University
3:25 PM – 3:35 PM MST

New member recruitment updates Location: Phoenix Convention Center, 127 Presenting Author: Carly M. Tribull – Farmingdale State College
3:35 PM – 3:45 PM MST Standard Operating Procedures (SOP) manual updates Location: Phoenix Convention Center, 127 Presenting Author: Doug Golick (he/him/his) – University of Nebraska
3:45 PM – 3:50 PM MST ESA President remarks and updates Location: Phoenix Convention Center, 127 Presenting Author: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District
3:50 PM – 4:20 PM MST Committee break-outs and opportunities Location: Phoenix Convention Center, 127
4:20 PM – 4:30 PM MST Closing remarks and meeting wrap-up Location: Phoenix Convention Center, 127 Presenting Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University
2:30 PM – 5:00 PM MST Plant-Insect Ecosystems Section Networking Session and Awards Celebration (Open to All Attendees) Organizer: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Organizer: Anjel Helms – Texas A&M University Organized MeetingPlant-Insect Ecosystems
2:30 PM – 2:50 PM MST Welcome remarks Location: Phoenix Convention Center, 124 AB Presenting Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University
2:50 PM – 3:05 PM MST P-IE business updates Location: Phoenix Convention Center, 124 AB
3:05 PM – 3:40 PM MST Awards presentation Location: Phoenix Convention Center, 124 AB
3:40 PM – 4:00 PM MST Camp Sketchapod highlights Location: Phoenix Convention Center, 124 AB, PCC

Presenting Author: Erin W. Hodgson (she/her/hers) – Iowa State University	
4:00 PM – 5:00 PM MST Entomolympics and refreshments Location: Phoenix Convention Center, 124 AB	
2:30 PM – 5:30 PM MST SysEB Business Meeting Organizer: Andrea Lucky – University of Florida Organizer: Marek L. Borowiec (he/him/his) – Colorado State University Organized Meeting Systematics, Evolution, and Biodiversity	^
2:30 PM – 3:15 PM MST Opening reception Location: Phoenix Convention Center, 224	
3:15 PM – 3:20 PM MST Introductory remarks  Location: Phoenix Convention Center, 224 Presenting Author: Andrea Lucky – University of Florida Organized Meeting Systematics, Evolution, and Biodiversity	
3:20 PM – 3:25 PM MST Student welcome Location: Phoenix Convention Center, 224, PCC Presenting Author: Judicael Fomekong-Lontchi – Brigham Young University	
3:25 PM – 3:35 PM MST Announcing 2024 travel awardees Location: Phoenix Convention Center, 224 Presenting Author: Katja Seltmann – University of California	
3:35 PM – 3:40 PM MST SysEB Patch Memorial Research Award winner presentation  Location: Phoenix Convention Center, 224, PCC Presenting Author: Tatiana Nicole Bush – Washington State University Organized Meeting Systematics, Evolution, and Biodiversity	
3:40 PM – 3:45 PM MST SysEB Snodgrass Memorial Research Award winner presentation  Location: Phoenix Convention Center, 224, PCC	

Presenting Author: Jessica Awad (she/her/hers) – Florida Museum of Natural History Organized Meeting Systematics, Evolution, and Biodiversity	
3:45 PM – 4:05 PM MST Updates from NSF Location: Phoenix Convention Center, 224, PCC Presenting Author: Patrick Abbot, Ph.D. – National Science Foundation	
4:05 PM – 4:15 PM MST Section updates Location: Phoenix Convention Center, 224 Presenting Author: Andrea Lucky – University of Florida	
4:15 PM – 4:45 PM MST Committee updates Location: Phoenix Convention Center, 224 Presenting Author: Emily L. Sandall – Yale University Presenting Author: Dominic Anthony Evangelista (he/him/his) – University of Illinois Presenting Author: Amelia Smith – Purdue University Presenting Author: Phillip Barden (he/him/his) – New Jersey Institute of Technology Presenting Author: Stephen Cameron – Purdue University Presenting Author: Anahi Espindola – University of Maryland	
4:45 PM – 4:50 PM MST Treasurer's report Location: Phoenix Convention Center, 224 Presenting Author: Will Kuhn – Discover Life in America	
4:50 PM – 4:55 PM MST Governing Board report Location: Phoenix Convention Center, 224 Presenting Author: Andrew E. Short – University of Florida	
4:55 PM – 5:10 PM MST ESA President remarks and updates Location: Phoenix Convention Center, 224 Presenting Author: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District	
5:10 PM – 5:15 PM MST FIT Pilot Section update Location: Phoenix Convention Center, 224 Presenting Author: Carly M. Tribull – Farmingdale State College	
5:15 PM – 5:20 PM MST	

ECN update Location: Phoenix Convention Center, 224 Presenting Author: Ainsley Seago (she/her/hers) – Carnegie Museum of Natural History
5:20 PM – 5:30 PM MST Closing remarks and business meeting wrap-up  Location: Phoenix Convention Center, 224 Presenting Author: Marek L. Borowiec (he/him/his) – Colorado State University Organized Meeting Systematics, Evolution, and Biodiversity
2:30 PM – 5:30 PM MST Tour: Biocollections at Arizona State University  Location: Phoenix Convention Center, North Ballroom Foyer Functions/Events/Meetings
2:30 PM – 6:30 PM MST MUVE Business Meeting with Highlights of Medical, Urban, and Veterinary Entomology Organizer: Kyle K. Jordan, BCE – BASF Organized Meeting Medical, Urban, and Veterinary Entomology
2:30 PM – 2:35 PM MST Introductory remarks Location: Phoenix Convention Center, 221, PCC Presenting Author: Kyle K. Jordan, BCE – BASF
2:35 PM – 3:00 PM MST Highlights of medical entomology  Location: Phoenix Convention Center, 221, PCC Presenting Author: Jerome Goddard (he/him/his) – Mississippi State University Organized Meeting Medical, Urban, and Veterinary Entomology
3:00 PM – 3:25 PM MST Highlights of urban entomology  Location: Phoenix Convention Center, 221 Presenting Author: Faith M. Oi – University of Florida Organized Meeting Medical, Urban, and Veterinary Entomology
3:25 PM – 3:50 PM MST

Highlights of veterinary entomology  Location: Phoenix Convention Center, 221 Presenting Author: Sonja L. Swiger – Texas A&M University Organized Meeting Medical, Urban, and Veterinary Entomology
3:50 PM – 4:05 PM MST Award winner recognition Location: Phoenix Convention Center, 221
4:05 PM – 4:50 PM MST Business meeting Location: Phoenix Convention Center, 221
4:50 PM – 6:30 PM MST Reception/social Location: Phoenix Convention Center, 221
2:30 PM – 6:30 PM MST Physiology, Biochemistry, and Toxicology (PBT) Section Networking-Brainstorming Session Organizer: Adekunle Adesanya (he/him/his) – Corteva Agriscience Organizer: Edmund Norris – USDA-ARS Organizer: Kristopher Silver (he/him/his) – Kansas State University Organizer: Ana M. Velez (she/her/hers) – University of Nebraska Organized Meeting Physiology, Biochemistry, and Toxicology
2:30 PM – 3:30 PM MST Networking session Location: Phoenix Convention Center, 122
3:30 PM – 3:40 PM MST Opening remarks  Location: Phoenix Convention Center, 122, PCC Presenting Author: Adekunle Adesanya (he/him/his) – Corteva Agriscience Organized Meeting Physiology, Biochemistry, and Toxicology
3:40 PM – 3:45 PM MST Governing Board Report  Location: Phoenix Convention Center, 122 Presenting Author: Richard Mankin – USDA-ARS Organized Meeting Physiology, Biochemistry, and Toxicology

3:45 PM – 3:50 PM MST Treasurer report and sponsorship update  Location: Phoenix Convention Center, 122 Presenting Author: Kristopher Silver (he/him/his) – Kansas State University Organized Meeting Physiology, Biochemistry, and Toxicology
3:50 PM – 4:00 PM MST Recognition of PBT award winners  Location: Phoenix Convention Center, 122, PCC Presenting Author: Leslie Rault – University of Nebraska Organized Meeting Physiology, Biochemistry, and Toxicology
4:00 PM – 4:15 PM MST PBT Recognition Award in Insect Physiology, Biochemistry and Toxicology winner presentation Location: Phoenix Convention Center, 122 Presenting Author: Dorith Rotenberg – North Carolina State University Organized Meeting Physiology, Biochemistry, and Toxicology
4:15 PM – 4:30 PM MST Lillian and Alex Feir Graduate Student Travel Award in Insect Physiology, Biochemistry, or Molecular Biology award winner presentation Location: Phoenix Convention Center, 122, PCC Presenting Author: Gagandeep Brar – Bayer Crop Science Organized Meeting Physiology, Biochemistry, and Toxicology
4:30 PM – 4:35 PM MST Break Location: Phoenix Convention Center, 122
4:35 PM – 4:55 PM MST Listening session 1: Artificial intelligence and machine learning Location: Phoenix Convention Center, 122
4:55 PM – 5:15 PM MST Listening session 2: Reproducibility and replicability in science Location: Phoenix Convention Center, 122
5:15 PM – 5:20 PM MST Break Location: Phoenix Convention Center, 122
5:20 PM – 5:35 PM MST

PBT committee reports Location: Phoenix Convention Center, 122
5:35 PM – 5:55 PM MST PBT wildly important goals and future symposia and workshop topics  Location: Phoenix Convention Center, 122 Presenting Author: Edmund Norris – USDA-ARS
5:55 PM – 6:05 PM MST Closing remarks Location: Phoenix Convention Center, 122, PCC Presenting Author: Adekunle Adesanya (he/him/his) – Corteva Agriscience
6:05 PM – 6:30 PM MST PBT social Location: Phoenix Convention Center, 122
2:30 PM – 7:30 PM MST Tour: Hot Air Ballooning  Location: Sheraton Phoenix Downtown, Porte Cochere/Driveway, Sheraton Functions/Events/Meetings
5:00 PM – 6:30 PM MST International Union for the Study of Social Insects (IUSSI), North American Section Business Meeting Location: Phoenix Convention Center, 121 C Organizer: Michael Simone-Finstrom – USDA-ARS Functions/Events/Meetings
6:00 PM – 7:30 PM MST Illinois Mixer Location: Sheraton Phoenix Downtown, Ahwatukee Organizer: Kimberly Leigh – University of Illinois Organizer: May R. Berenbaum, Ph.D. (she/her/hers) – University of Illinois Functions/Events/Meetings
6:00 PM – 8:00 PM MST Wisconsin / Minnesota Mixer Location: Sheraton Phoenix Downtown, Encanto A Organizer: Russell L. Groves, Ph.D. – University of Wisconsin Organizer: Sujaya Rao – University of Minnesota Functions/Events/Meetings

6:00 PM – 8:00 PM MST Auburn, Arkansas, Clemson, Kentucky, and Tennessee Mixer Location: Sheraton Phoenix Downtown, Phoenix Ballroom A Organizer: David Held – Auburn University Functions/Events/Meetings
6:00 PM – 9:00 PM MST University of California Mixer Location: Sheraton Phoenix Downtown, Valley Overlook Organizer: Richard A. Redak – University of California Functions/Events/Meetings
6:30 PM – 7:30 PM MST International Association of Black Entomologists (IABE) Annual Meeting Location: Phoenix Convention Center, 126 C Organizer: Barbara A. Amoah (she/her/hers) – Eva Garland Consulting Organizer: Joseph Disi – Bayer Crop Science Organizer: Tara-Kay L. Jones (she/her/hers) – Corteva Agriscience Organizer: Josephine B. Antwi – Oregon State University Functions/Events/Meetings
6:30 PM – 8:00 PM MST Pacific Northwest Mixer: Oregon State University, University of Idaho, Montana State University, and Washington State University Location: Sheraton Phoenix Downtown, Phoenix Ballroom B Organizer: Bob K.D. Peterson – Montana State University Functions/Events/Meetings
6:30 PM – 8:00 PM MST Forensic Entomology: Joint ABFE and NAFEA Mixer Location: Sheraton Phoenix Downtown, Camelback, Sheraton Organizer: Michelle R. Sanford, Ph.D., D-ABFE, FAAFS (she/her/hers) – Harris County Institute of Forensic Sciences Organizer: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Functions/Events/Meetings

6:30 PM – 8:30 PM MST Cornell University Mixer Location: Sheraton Phoenix Downtown, Laveen Organizer: Lisa Westcott – Cornell University Organizer: Patrick O'Grady – Cornell University Functions/Events/Meetings
7:00 PM – 9:00 PM MST Mid-Atlantic Mixer: University of Maryland, University of Delaware, Rutgers University, and Virginia Tech Location: Sheraton Phoenix Downtown, Phoenix Ballroom D Organizer: Amy Yaich – University of Maryland Organizer: Paula Shrewsbury – University of Maryland Functions/Events/Meetings
7:00 PM – 9:00 PM MST Penn State Mixer Location: Sheraton Phoenix Downtown, Encanto B Organizer: Susan W. Bass (he/him/his) – The Pennsylvania State University Functions/Events/Meetings
7:00 PM – 9:00 PM MST Universities of Florida (UF), Georgia (UGA), and North Carolina (NC) Mixer Location: Sheraton Phoenix Downtown, Phoenix Ballroom C Organizer: Andrew E. Short – University of Florida Functions/Events/Meetings
7:00 PM – 9:00 PM MST Purdue Entomology Mixer Location: Sheraton Phoenix Downtown, South Mountain Organizer: Mardelle N. Lorton – Purdue University Functions/Events/Meetings
7:00 PM – 9:00 PM MST Texas A&M University, Oklahoma State University, Society of Southwestern Entomologists, Southwestern Branch, and New Mexico State University Mixer Location: Sheraton Phoenix Downtown, Phoenix Ballroom E Organizer: Teresa Gold – Texas A&M University Functions/Events/Meetings
7:30 PM – 9:00 PM MST The Ohio State University Mixer

Location: Sheraton Phoenix Downtown, Maryvale Organizer: Sarah DeVilbiss – The Ohio State University Organizer: James P. Strange (he/him/his) – The Ohio State University Functions/Events/Meetings
7:30 PM – 9:00 PM MST Prairie States Mixer Location: Sheraton Phoenix Downtown, Estrella Organizer: Steven Harris – Iowa State University Functions/Events/Meetings
8:00 PM – 11:00 PM MST LGBTQIA+ Mixer and Drag Show Location: Stand Up Live, Stand Up Live Organizer: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Organizer: Lauren Esposito – CAS Organizer: Kyle K. Jordan, BCE – BASF Organizer: Thomas N. Sheehan (he/him/his) – University of Georgia Organizer: Lewis Bartlett (they/them/theirs) – University of Georgia Functions/Events/Meetings
Tuesday, November 12, 2024
7:00 AM – 7:30 AM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America General Moderator Training
7:00 AM – 8:00 AM MST Michigan State University Alumni and Friends Breakfast Location: Phoenix Convention Center, 125 AB Organizer: Heather Lenartson-Kluge – Michigan State University Organizer: Hannah Joy Burrack – Michigan State University Functions/Events/Meetings
7:00 AM – 5:00 PM MST Registration and Information Center Location: Phoenix Convention Center, North Ballroom Foyer General Registration and Information Center
7:00 AM – 5:00 PM MST

Presentation Preview Room (PPR) Location: Phoenix Convention Center, 121 A General Presentation Preview Room (PPR)
7:00 AM – 8:00 PM MST Coat and Bag Check Location: Phoenix Convention Center, Exhibit Hall Foyer General
7:00 AM – 9:00 PM MST Lactation Room Location: Phoenix Convention Center, Green Room General
7:00 AM – 9:00 PM MST Relaxation Retreat Location: Phoenix Convention Center, Patio 3 General Relaxation Retreat
8:00 AM – 9:00 AM MST Pathways to Publication: An Editor-Led Writing Workshop for Students Location: Phoenix Convention Center, 128 AB, PCC Organizer: William Jacob Pitt – Washington State University Organizer: David Taylor – University of Nebraska Organizer: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS Mini Workshop Student Publications

8:00 AM – 10:00 AM MST

Tips for Writing a Compelling Award Nomination hosted by the Awards and Honors and Diversity, Equity, and Inclusion Committees

Location: Phoenix Convention Center, 129 A, PCC

Organizer: Patricia Prade (she/her/hers) – The Pennsylvania State University

Organizer: Mustapha Debboun, BCE – Baylor College of Medicine

Organizer: Mark Wrig – University of Hawaii

Organizer: Sarah Elzay, Ph.D. (she/her/hers) – Fort Hays State University

Panelist: Laura Lavine – Washington State University

Panelist: Dalton Ludwick (he/him/his) – USDA-ARS

Panelist: Abigail Hayes – University of Connecticut

Panelist: Lorena Lopez (she/her/hers) – North Carolina State University

Panelist: Lina Bernaola – Texas A&M University

Panelist: Alvin M. Simmons – USDA-ARS

Workshop Diversity, Equity, and Inclusion

8:00 AM – 10:00 AM MST

Improving Communication Between Researchers and Stakeholders to Reduce Threats to Pollinators

Organizer: Brandon Patrick Shannon – The Ohio State University

Organizer: Andony Melathopoulos – Oregon State University



Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

8:00 AM – 8:03 AM MST

Introductory remarks

Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Brandon Patrick Shannon – The Ohio State University

8:03 AM – 8:23 AM MST

From science to policy: Realizations of effective science messaging and advocacy



Location: Phoenix Convention Center, 226 C

Presenting Author: Judy Wu-Smart – University of Nebraska

Co-Author: Elizabeth Van Wormer – University of Nebraska

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

8:23 AM – 8:43 AM MST

Strategies for effective environmental communication to encourage actions that improve pollinator health



Location: Phoenix Convention Center, 226 C

Presenting Author: Dara Wald – Texas A&M University

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

8:43 AM – 8:58 AM MST

Insect pollinators and pesticide product stewardship: Practices & collaborations among stakeholders



Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Caydee E. Savinelli (she/her/hers) – Syngenta

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

8:58 AM – 9:13 AM MST

Public science communication: Sowing success at the grassroots



Location: Phoenix Convention Center, 226 C

Presenting Author: Lora Morandin – Pollinator Partnership

Co-Author: Kelly Bills – Pollinator Partnership

Co-Author: Andy Grinstead – Pollinator Partnership

Co-Author: Anthony Colangelo – Pollinator partnership

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

9:13 AM – 9:28 AM MST

Collaborative research and engagement with farmers interested in pollinator-friendly farming



Location: Phoenix Convention Center, 226 C, PCC

Presenting Author: Briann Dorin (she/her/hers) – York University

Co-Author: Sheila Colla, PhD, Biology; BSc Honours, Zoology (she/her/hers) – York University

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

9:28 AM – 9:43 AM MST

Presenting pollinator and pesticide research to scientists, regulators, and whoever else wants to hear about it



Location: Phoenix Convention Center, 226 C

Presenting Author: Christian Krupke – Purdue University

Section Symposium Physiology, Biochemistry, and Toxicology Plant-Insect Ecosystems

9:43 AM – 9:57 AM MST Panel discussion Location: Phoenix Convention Center, 226 C	
9:57 AM – 10:00 AM MST Closing remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Brandon Patrick Shannon – The Ohio State University	
8:00 AM – 10:00 AM MST Innovating Vector Control: Techniques and Strategies for Disease Prevention Organizer: Sarah Gunter (she/her/hers) – Baylor College of Medicine Organizer: Kyndall Dye-Braumuller, BCE – University of South Carolina Organizer: Max Vigilant – Harris County Mosquito and Vector Control Section Symposium Medical, Urban, and Veterinary Entomology	
8:00 AM – 8:20 AM MST Dengue in Miami-Dade County Location: Phoenix Convention Center, 221 B Presenting Author: John-Paul Mutebi – Miami-Dad Vector Control Section Symposium Medical, Urban, and Veterinary Entomology	
8:20 AM – 8:40 AM MST Is Miami the epicenter for developing AI technology-driven mosquito surveillance methods? Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Andre Costa-da-Silva (he/him/his) – Florida International University Section Symposium Medical, Urban, and Veterinary Entomology	
8:40 AM – 9:00 AM MST Integrating innovative technology to enhance vector-borne disease surveillance in Harris County, Texas Location: Phoenix Convention Center, 221 B Presenting Author: Max Vigilant – Harris County Mosquito and Vector Control Section Symposium Medical, Urban, and Veterinary Entomology	
9:00 AM – 9:20 AM MST New vector control tools in use to suppress the current dengue epidemic in Puerto Rico Location: Phoenix Convention Center, 221 B Presenting Author: Grayson Brown – Puerto Rico Science, Technology, Research Trust	

Section Symposium

Medical, Urban, and Veterinary Entomology

9:20 AM – 9:40 AM MST

Seeing is believing: Mosquito education with Maricopa County’s outreach program

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Conni Griffith (she/her/hers) – Maricopa County

Section Symposium

Medical, Urban, and Veterinary Entomology

9:40 AM – 10:00 AM MST

From air to ground control: The revolution of mosquito abatement by unmanned aerial systems

Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: John S. Savage – Orange County Mosquito and Vector Control District

Section Symposium

Medical, Urban, and Veterinary Entomology

8:00 AM – 10:00 AM MST

Down a Long and Winding Road: Tackling Insect Research Using Long Reads

Organizer: Yelena Pacheco (she/her/hers) – USDA-ARS

Member Symposium

Systematics, Evolution, and Biodiversity

Plant-Insect Ecosystems

8:00 AM – 8:05 AM MST

Introductory remarks

Location: Phoenix Convention Center, 226 A

Presenting Author: Yelena Pacheco (she/her/hers) – USDA-ARS

8:05 AM – 8:23 AM MST

Direct sequencing of insect symbionts via nanopore adaptive sampling



Location: Phoenix Convention Center, 226 A

Presenting Author: Sara Goodwin – Cold Springs Harbor Laboratory

Co-Author: Jonathan H. Badger – National Cancer Institute

Co-Author: Rosanna Giordano – Florida International University

Co-Author: Aleksey Zimin – Johns Hopkins University

Co-Author: Robert Wappel – Cold Springs Harbor Laboratory

Co-Author: Senem M. Eskipehlivan – Cold Springs Harbor Laboratory

Co-Author: Stephanie Muller – Cold Springs Harbor Laboratory

Co-Author: Ravikiran Donthu – Mahindra University

Co-Author: Felipe Soto-Adames – Florida Department of Agriculture and Consumer Services

Co-Author: Paulo Vieira – USDA-ARS

Co-Author: Inga Zasada – USDA-ARS

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:23 AM – 8:41 AM MST

Characterization of silk gland expression across two caddisfly species using long-read sequencing technology



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Gabriela Jijon (she/her/hers) – Brigham Young University

Co-Author: Danyon Gedris – Brigham Young University

Co-Author: Riley C. Nelson – Brigham Young University

Co-Author: Paul Bryan Frandsen – Brigham Young University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:41 AM – 8:59 AM MST

Lessons from a long-read assembly of a North American aphid



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Yelena Pacheco (she/her/hers) – USDA-ARS

Co-Author: Rebecca A. Clement (she/her/hers) – USDA-APHIS

Co-Author: Christopher Owen (he/him/his) – USDA-ARS

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:59 AM – 9:17 AM MST

Insights from long-read sequencing: Phylogenomics, genome structure, and functional genomics of

Odonata



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Ethan R. Tolman – Virginia Tech

Co-Author: Manpreet Kohli – City University of New York

Co-Author: Paul Bryan Frandsen – Brigham Young University

Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History

Co-Author: Anton Suvorov – Virginia Tech

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

9:17 AM – 9:35 AM MST

Using HiFi sequencing to recover allelic diversity of silk proteins across Lepidoptera



Location: Phoenix Convention Center, 226 A, PCC

Presenting Author: Samantha Standring (she/her/hers) – Brigham Young University

Co-author: Ashlyn Powell – Brigham Young University

Co-author: Danyon Gedris – Brigham Young University

Co-author: Charlotte Wright – Sanger Institute

Co-author: Natalie Nyborg – Brigham Young University

Co-author: Jacqueline Heckenhauer – LOEWE Centre for Translational Biodiversity Genomics

Co-author: Akito Y. Kawahara, Ph.D. – Florida Museum of Natural History

Co-author: Bert Foquet – University of Florida

Co-author: Gabriela Jijon (she/her/hers) – Brigham Young University

Co-author: Rachit Singh – Florida Museum of Natural History

Co-author: Paul Bryan Frandsen – Brigham Young University

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:00 AM – 10:00 AM MST

10-min: MUVE, Urban Entomology and Pest Control 1

Moderator: Mark Janowiecki, BCE – City of New Orleans Mosquito, Termite, and Rodent Control Board

Moderator: Alexander Ko, Ph.D. – Envu



10-Minute Presentation Medical, Urban, and Veterinary Entomology

8:00 AM – 8:12 AM MST

Casting termite tunnels to understand how termites approach and establish foraging in resources



Location: Phoenix Convention Center, 225 B, PCC

Presenting Author: Mark Janowiecki, BCE – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Carrie Cottone – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Paul Bardunias – University of Florida

Co-Author: Eric Guidry – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Shaun Broadley – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Francesco Scattorin – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Glen Higgins – City of New Orleans Mosquito, Termite, and Rodent Control Board

Co-Author: Claudia Riegel – City of New Orleans Mosquito, Termite, and Rodent Control Board

10-Minute Presentation Medical, Urban, and Veterinary Entomology

8:12 AM – 8:24 AM MST Formulation technology to improve the weather resistance of residual insecticides  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Jamora Hamilton-Brown, Ph.D. (she/her/hers) – Envu Co-Author: Byron Reid – Environmental Science U.S. Inc. Co-Author: Deborah Koufas – Envu 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:24 AM – 8:36 AM MST Isocycloseram: Novel model of action & broad spectrum of activity against urban pests and public health disease vectors  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Raj K. Saran – Syngenta Co-Author: Brigitte Slaats – Syngenta Co-Author: Brittny Blakely – Syngenta Co-Author: Mark Hoppe – Syngenta Co-Author: Laura Vavassori – Syngenta 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:36 AM – 8:48 AM MST A new insecticidal dust for pest management in 2024, Temprid dust  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Alexander Ko, Ph.D. – Envu 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:48 AM – 9:00 AM MST RESCUE!® FlyPad: An insect sticky trap with corrugated surface  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Qing-He Zhang – Sterling International, Inc. 10-Minute Presentation Medical, Urban, and Veterinary Entomology
9:00 AM – 9:12 AM MST Mapping antennal sensilla to dissect overwintering behaviors of boxelder bugs (<i>Boisea trivittata</i>)  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Anika Sharma – University of Entomology 10-Minute Presentation Medical, Urban, and Veterinary Entomology

9:12 AM – 9:24 AM MST Impacts of wastewater effluent on bees' microbial communities in soil vs wood cavity nesting  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Lyna Ngor (she/her/hers) – University of California Co-Author: Quinn McFrederick – University of California 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:00 AM – 11:00 AM MST Successful Partnerships Between Academia, the Research Community, and the Urban Pest Industry Organizer: Anna I. Berry, BCE (she/her/hers) – Pelsis Organizer: Patricia Hottel, BCE – Rentokil-Terminix Section Symposium Medical, Urban, and Veterinary Entomology
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Anna I. Berry, BCE (she/her/hers) – Pelsis
8:05 AM – 8:20 AM MST The University of Kentucky Technical Directors' Retreat: Aligning academic priorities with stakeholder needs  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Zachary DeVries – University of Kentucky Section Symposium Medical, Urban, and Veterinary Entomology
8:20 AM – 8:35 AM MST Decades of a successful industry/academia partnership at UF/IFAS FLREC  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Johnalyn Gordon (she/her/hers) – University of Florida Co-Author: Thomas Chouvinc – University of Florida Co-Author: Nan-Yao Su – University of Florida Co-Author: Rudolf Scheffrahn – University of Florida Section Symposium Medical, Urban, and Veterinary Entomology
8:35 AM – 8:50 AM MST The Center for Urban and Industrial Pest Management: Public-private sector collaborations  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Barry Pittendrigh – Purdue University

Co-Author: Gary Bennett – Purdue University Section Symposium Medical, Urban, and Veterinary Entomology
8:50 AM – 9:05 AM MST Research, funding, and career opportunities through the National Pest Management Association  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Michael Bentley, BCE – National Pest Management Association Section Symposium Medical, Urban, and Veterinary Entomology
9:05 AM – 9:15 AM MST Break Location: Phoenix Convention Center, 222 B, PCC
9:15 AM – 9:30 AM MST The power of partnership: Collaborative advances in entomology  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Ashley Roden, BCE (she/her/hers) – Sprague Pest Solutions Section Symposium Medical, Urban, and Veterinary Entomology
9:30 AM – 9:45 AM MST Pest management on exhibit: The key to working successfully with museums  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Patrick J. Kelley, BCE (he/him/his) – Insects Limited, Inc. Section Symposium Medical, Urban, and Veterinary Entomology
9:45 AM – 10:00 AM MST Opportunities in warehousing IPM  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Alexandria Hammel, BCE – Nestle Purina Petcare Section Symposium Medical, Urban, and Veterinary Entomology
10:00 AM – 10:30 AM MST Discussion Location: Phoenix Convention Center, 222 B, PCC
8:00 AM – 11:00 AM MST Metamorphosis: From John Henry Comstock Award Winners to Future Leaders in Entomology Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Organizer: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa

Organizer: Alexis Alsdorf – North Carolina State University Organizer: Flinn Martin O'Hara – University of Florida Organizer: Sabita Ranabhat (she/her/hers) – Kansas State University Member Symposium Student
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University
8:05 AM – 8:30 AM MST Bee bold: Achieve goals through leadership, involvement, and daring to try new things  Location: Phoenix Convention Center, 126 B Presenting Author: Hailey N. Shanovich – United States Geological Survey Member Symposium Student
8:30 AM – 8:55 AM MST Improving onion thrips management: Developing machine learning-enhanced, spatially optimized sequential sampling plan  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Lidia Komondy – Cornell University Co-Author: Brian Nault – Cornell University Member Symposium Student
8:55 AM – 9:05 AM MST Break Location: Phoenix Convention Center, 126 B
9:05 AM – 9:30 AM MST Aiming for versatility through research: The benefits of being pretty good at many things  Location: Phoenix Convention Center, 126 B Presenting Author: James Hepler – USDA-ARS Member Symposium Student

9:30 AM – 9:55 AM MST Evolving journey: Tracing the evolution of freshwater insects and shaping my path in entomology  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Alice C. Assmar (she/her/hers) – McGill University Member Symposium Student
9:55 AM – 10:05 AM MST Break Location: Phoenix Convention Center, 126 B
10:05 AM – 10:30 AM MST Transcriptomic analysis of honey bee (<i>Apis mellifera</i>) premature hive exiting behavior  Location: Phoenix Convention Center, 126 B Presenting Author: Jordan Twombly-Ellis – Texas A&M University Co-author: Juliana Rangel – Texas A&M University Member Symposium Student
10:30 AM – 10:55 AM MST Diversity of experience: How I won the John Henry Comstock Award  Location: Phoenix Convention Center, 126 B Presenting Author: Ethan Doherty – Clemson University Member Symposium Student
10:55 AM – 11:00 AM MST Closing remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University
8:00 AM – 11:00 AM MST Team Building for Tomorrow: Empowering Extension Through Modern Collaborations Organizer: Isaac L. Esquivel – North Florida Research and Education Center Organizer: Ashleigh M. Faris – Oklahoma State University Member Symposium Plant-Insect Ecosystems ^
8:00 AM – 8:15 AM MST Feet first: How cooperator relationships have cultivated a junior faculty's first year  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Ashleigh M. Faris – Oklahoma State University

Member Symposium Plant-Insect Ecosystems
8:15 AM – 8:30 AM MST The value of extension in 2024  Location: Phoenix Convention Center, 122 C Presenting Author: Whitney Crow – Mississippi State University Member Symposium Plant-Insect Ecosystems
8:30 AM – 8:45 AM MST Sorghum aphid management: A Louisiana Extension success story  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Sebe Brown – University of Tennessee Member Symposium Plant-Insect Ecosystems
8:45 AM – 9:00 AM MST Empowering research dissemination: A collaborative approach  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Carey Minteer – University of Florida Co-Author: Kenneth Thomas Gioeli, M.Ag. (he/him/his) – University of Florida Member Symposium Plant-Insect Ecosystems
9:00 AM – 9:10 AM MST Break Location: Phoenix Convention Center, 122 C
9:10 AM – 9:25 AM MST Mid-South Entomology Working Group: Extension and research working together  Location: Phoenix Convention Center, 122 C Presenting Author: Donald Cook – Mississippi State University Member Symposium Plant-Insect Ecosystems

9:25 AM – 9:40 AM MST

An industry perspective of on-farm research, the importance of these cooperators, and how to foster these relationships 

Location: Phoenix Convention Center, 122 C, PCC

Presenting Author: Jesse M. Richardson – Corteva Agriscience

Co-Author: Patti Prasifka (she/her/hers) – Corteva Agriscience

Member Symposium Plant-Insect Ecosystems

9:40 AM – 9:55 AM MST

Strengthening connections for on-farm research: Case studies on emerging pests 

Location: Phoenix Convention Center, 122 C

Presenting Author: Anthony J. McMechan – University of Nebraska

Co-Author: Thales Rodrigues da Silva – University of Nebraska

Co-Author: Dylan Mangel – University of Nebraska

Co-Author: Gabriela Carmona – Corteva Agriscience

Member Symposium Plant-Insect Ecosystems

9:55 AM – 10:10 AM MST

Safety third: Maintaining stakeholder attention 

Location: Phoenix Convention Center, 122 C

Presenting Author: Emily Kraus – University of Florida

Member Symposium Plant-Insect Ecosystems

10:10 AM – 10:15 AM MST

Break

Location: Phoenix Convention Center, 122 C

10:15 AM – 10:30 AM MST

Extension cotton entomology: Week to week and field to field 

Location: Phoenix Convention Center, 122 C

Presenting Author: Scott H. Graham – Auburn University

Member Symposium Plant-Insect Ecosystems

10:30 AM – 10:45 AM MST

Don't forget about county agents: Building extension programming through on farm research 

Location: Phoenix Convention Center, 122 C

Presenting Author: Isaac L. Esquivel – North Florida Research and Education Center

Co-Author: Kieth Wynn – University of Florida

Co-Author: Jennifer Bearden – University of Florida

Co-Author: Daniel Leonard – University of Florida

Co-Author: Mark Mauldin – University of Florida

Co-Author: Ethan Carter – University of Florida

Member Symposium Plant-Insect Ecosystems

10:45 AM – 11:00 AM MST

Moving extension to new platforms: How Crop Protection Network uses podcast to reach new audiences



Location: Phoenix Convention Center, 122 C, PCC

Presenting Author: Ed Zaworski – Iowa State University

Co-Author: Daren Mueller – Iowa State University

Member Symposium Plant-Insect Ecosystems

8:00 AM – 11:00 AM MST

At the Nexus of Ticks and Tick-Borne Illness Mitigation: Novel Perspectives for Tick Disease Control

Organizer: Kathleen Walker – University of Arizona

Organizer: Paulina Maldonado – University of Arizona



Section Symposium Medical, Urban, and Veterinary Entomology

Physiology, Biochemistry, and Toxicology

8:00 AM – 8:05 AM MST

Introductory remarks

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Paulina Maldonado – University of Arizona

8:05 AM – 8:20 AM MST

Current and future options for control of the brown dog tick, *Rhipicephalus sanguineous* s.l. 

Location: Phoenix Convention Center, 221 C

Presenting Author: Kathleen Walker – University of Arizona

Section Symposium Medical, Urban, and Veterinary Entomology

Physiology, Biochemistry, and Toxicology

8:20 AM – 8:35 AM MST

Spilling the guts: Tick midgut microbiome and its implications for an alternative tick management strategy



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Paulina Maldonado – University of Arizona

Co-Author: Yoonseong Park – Kansas State University

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

8:35 AM – 8:50 AM MST

For whom the tick "Toll"s 

Location: Phoenix Convention Center, 221 C

Presenting Author: Sukanya Narasimhan – Yale University

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

8:50 AM – 9:05 AM MST

Evaluation of reservoir-targeted interventions to reduce the risk of tick-borne disease in the western United States 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Andrea Swei, Ph.D. (she/her/hers) – San Francisco State University

Co-Author: Maxwell Newton – San Francisco State University

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

9:05 AM – 9:20 AM MST

Sugars in tick saliva are not sweet in red meat allergy 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Yoonseong Park – Kansas State University

Co-Author: Paulina Maldonado – University of Arizona

Co-Author: Andres Felipe Holguin Rocha – Kansas State University

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

9:20 AM – 9:35 AM MST

Break

Location: Phoenix Convention Center, 221 C

9:35 AM – 9:50 AM MST

Using a murine model of Alpha-gal syndrome to study tick bite-induced immune responses 

Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Shahid Karim – University of Southern Mississippi

Co-Author: Suredra Sharma – University of Southern Mississippi

Co-Author: Shailesh Choudhary – University of North Carolina

Co-Author: Julia Vorobiov – University of North Carolina

Co-Author: Scott Commins – University of North Carolina

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

9:50 AM – 10:05 AM MST

Understanding the significance of cuticular chitin remodeling in ticks 

Location: Phoenix Convention Center, 221 C

Presenting Author: Sujata S. Chaudhari – University of Nebraska

Co-author: Savannah Armendariz – University of Nebraska

Co-author: Faith Kizisek – University of Nebraska

Co-author: Vinai Thomas – University of Nebraska

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

10:05 AM – 10:20 AM MST

The physiological events regulated by neuropeptide signaling via GPCR in different phases of tick blood feeding 

Location: Phoenix Convention Center, 221 C

Presenting Author: Donghun Kim – Kyungpook National University

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

10:20 AM – 10:35 AM MST

Two types of axonal muscarinic acetylcholine receptors mediate formation of saliva cocktail in the tick *Ixodes ricinus* 

Location: Phoenix Convention Center, 221 C

Presenting Author: Ladislav Simo – Institut National de la Recherche Agronomique (INRAe)

Co-author: Caina Ning – Institut National de la Recherche Agronomique (INRAe)

Co-author: James Valdes – Czech Academy of Sciences

Co-author: Lourdes Mateos-Hernandez – Institut National de la Recherche Agronomique (INRAe)

Co-author: Sabine Rakotobe – Institut National de la Recherche Agronomique (INRAe)

Co-author: Livia Sofrankova – Institut National de la Recherche Agronomique (INRAe)

Co-author: Helena Frantova – Czech Academy of Sciences

Co-author: Veronika Urbanova – Czech Academy of Sciences

Co-author: Tereza Kozelkova – Czech Academy of Sciences

Co-author: Filip Dycka – Czech Academy of Sciences

Co-author: Petr Kopacek – Czech Academy of Sciences

Co-author: Ondrej Hajdusek – Czech Academy of Sciences

Co-author: Radek Sima – Czech Academy of Sciences

Co-author: Jiri Tyc – Czech Academy of Sciences
Co-author: Tomas Bily – Czech Academy of Sciences
Co-author: Marie Vancova – Czech Academy of Sciences
Co-author: Jan Perner – Czech Academy of Sciences
Co-author: Steeve Thany – Institut National de la Recherche Agronomique (INRAe)

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

10:35 AM – 10:50 AM MST

Editing tick genome: Challenges and opportunities



Location: Phoenix Convention Center, 221 C

Presenting Author: Monika Gulia-Nuss – University of Nevada
Co-Author: Michael Pham – University of Nevada
Co-Author: Jakub Wudarski – University of Nevada
Co-Author: Arvind Sharma – University of Nevada
Co-Author: Andrew Nuss – University of Nevada

Section Symposium Medical, Urban, and Veterinary Entomology
Physiology, Biochemistry, and Toxicology

10:50 AM – 11:00 AM MST

Closing remarks
Location: Phoenix Convention Center, 221 C, PCC
Presenting Author: Paulina Maldonado – University of Arizona

8:00 AM – 11:00 AM MST

Multifunctional Chemicals? Plant Volatiles Influence Herbivores, Pollinators, and Natural Enemies

Organizer: Morgan Thompson (she/her/hers) – Texas A&M University
Organizer: Emily Russavage (she/her/hers) – University of Maryland
Organizer: Olivia Marie Bernauer, Ph.D. (she/her/hers) – University of Wisconsin-Eau Claire

Section Symposium Plant-Insect Ecosystems

8:00 AM – 8:05 AM MST

Introductory remarks
Location: Phoenix Convention Center, 122 A, PCC
Presenting Author: Morgan Thompson (she/her/hers) – Texas A&M University

8:05 AM – 8:20 AM MST

Airborne help: Elucidating the dynamics of volatile emissions in plants exposed to simultaneously occurring biotic and abiotic stressors
Location: Phoenix Convention Center, 122 A, PCC



Presenting Author: Esther N. Ngumbi – University of Illinois

Section Symposium Plant-Insect Ecosystems

8:20 AM – 8:35 AM MST

Identifying plant and fungal volatiles for ambrosia beetle management in highly managed agroecosystems



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Kelsey Tobin – Cornell University
Co-Author: Matthew Ginzel – Purdue University
Co-Author: Christophe Duplais – Cornell University
Co-Author: Monique Rivera – Cornell University

Section Symposium Plant-Insect Ecosystems

8:35 AM – 8:50 AM MST

Big push-little pull: Repellent effects of methyl benzoate drive reduced spotted-wing infestation in blueberries



Location: Phoenix Convention Center, 122 A, PCC

Presenting Author: Beth E. Ferguson (she/her/hers) – Rutgers University
Co-Author: Cody Gale – USDA-ARS
Co-Author: Aijun Zhang – USDA-ARS
Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University

Section Symposium Plant-Insect Ecosystems

8:50 AM – 9:05 AM MST

Methyl salicylate: A ubiquitous volatile signal mediates plant deterrence against herbivory



Location: Phoenix Convention Center, 122 A, PCC
Presenting Author: Ariel M. Sorg (she/her/hers) – USDA-ARS
Co-Author: Jorrel Mendoza – USDA-ARS
Co-Author: Hui Liu – USDA-ARS
Co-Author: Kristin Roy – USDA-ARS
Co-Author: Zachary Gorman – USDA-ARS
Co-Author: Denise Tieman – University of Florida
Co-Author: Cindy McKenzie – USDA-ARS
Co-Author: Gilles Basset – University of Florida
Co-Author: Anna Block – USDA-ARS

Section Symposium Plant-Insect Ecosystems

9:05 AM – 9:20 AM MST

From lab to field: Use of plant volatiles to increase biological control of the noxious air potato vine by <i>Lilioceris cheni</i>  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Xavier Martini – University of Florida Co-Author: Jessica Griesheimer – University of Florida Co-Author: Alexander Gaffke – USDA-ARS Section Symposium Plant-Insect Ecosystems
9:20 AM – 9:30 AM MST Break Location: Phoenix Convention Center, 122 A, PCC
9:30 AM – 9:45 AM MST Combining semiochemicals and agronomic practices for managing <i>Lygus lineolaris</i>: An integrated approach  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Justin George – USDA-ARS Co-Author: Gadi V.P. Reddy – USDA-ARS Co-Author: David Hall – Natural Resources Institute Section Symposium Plant-Insect Ecosystems
9:45 AM – 10:00 AM MST Evaluating pollinator self-medication using intraspecific variation in floral compounds  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Seanne Clemente – University of Massachusetts Co-Author: Nina Theis – Elms College Co-Author: Lynn S. Adler – University of Massachusetts Section Symposium Plant-Insect Ecosystems
10:00 AM – 10:15 AM MST Floral fragrance shapes interactions with both pollinating and predatory moths  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Haley Carter (she/they) – Northwestern University Co-Author: Tania Jogesh – Chicago Botanic Garden Co-Author: Robert Raguso – Cornell University Co-Author: Maria Sol Balbuena – Universidad de Buenos Aires Co-Author: Krissa Skogen – Clemson University Section Symposium Plant-Insect Ecosystems

10:15 AM – 10:30 AM MST Deadly scents: Exposure to plant volatiles increase mortality of entomopathogenic nematodes during infection  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Alexander Gaffke – USDA-ARS Co-Author: David I. Shapiro-Ilan – USDA-ARS Co-Author: Hans T. Alborn – USDA-ARS Section Symposium Plant-Insect Ecosystems
10:30 AM – 11:00 AM MST Panel discussion Location: Phoenix Convention Center, 122 A, PCC
8:00 AM – 11:00 AM MST 10-min: PBT, Life History Traits and Fitness 1 Moderator: Joe Hull – USDA-ARS Moderator: Maureen J. Gorman – Kansas State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:00 AM – 8:12 AM MST Age-resistant worker reproductive potential and effect of helpers on prolonged lifespan in an ant  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Juergen Liebig (he/him/his) – Arizona State University Co-Author: Kevin Haight (he/him/his) – Arizona State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:12 AM – 8:24 AM MST Bioactive peptides inhibit feeding activity in the grey garden slug  Location: Phoenix Convention Center, 224 A Presenting Author: Man-Yeon Choi – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:24 AM – 8:36 AM MST Dietary iron supplementation increases the severity of <i>Enterococcus faecalis</i> infections in <i>Manduca sexta</i> larvae  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Maureen J. Gorman – Kansas State University Co-Author: Marilyn Reese – Kansas State University Co-Author: Michael R. Kanost – Kansas State University

10-Minute Presentation	Physiology, Biochemistry, and Toxicology
8:36 AM – 8:48 AM MST	
Drosophila as a pain model and the possibility of pain in insects	
Location: Phoenix Convention Center, 224 A	
Presenting Author: Bob Fischer (he/him/his) – Texas State University	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
8:48 AM – 9:00 AM MST	
Honey bee workers prefer food treated with deformed wing virus	
Location: Phoenix Convention Center, 224 A	
Presenting Author: Joseph E. McCarthy – USDA-ARS	
Co-Author: Elizabeth M. Walsh (she/her/hers) – USDA-ARS	
Co-Author: Michael Simone-Finstrom – USDA-ARS	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
9:00 AM – 9:12 AM MST	
Investigating the role of female-specific odorant receptors in the detection of host plant odors in <i>Manduca sexta</i>	
Location: Phoenix Convention Center, 224 A, PCC	
Presenting Author: Anandrao A. Patil (he/him/his) – University of Washington	
Co-Author: Melanie Anderson – University of Washington	
Co-Author: Pramod KC – University of Washington	
Co-Author: Jeff Riffell – University of Washington	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
9:12 AM – 9:24 AM MST	
Break	
Location: Phoenix Convention Center, 224 A	
9:24 AM – 9:36 AM MST	
Knockdown of spermatogenesis genes as a potential tool to control <i>Lygus hesperus</i>	
Location: Phoenix Convention Center, 224 A, PCC	
Presenting Author: Inana X. Schutze (she/her/hers) – USDA-ARS	
Co-Author: Roni J. Gross – USDA-ARS	
Co-Author: Yu-Hui Wang – USDA-ARS	
Co-Author: Chan C. Heu – USDA-ARS	
Co-Author: Daniel Langhorst – USDA-ARS	
Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS	
Co-Author: Colin S. Brent (he/him/his) – USDA-ARS	

Co-Author: Joe Hull – USDA-ARS	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
9:36 AM – 9:48 AM MST	
Linking early-life performance and lifespan in the solitary bee, <i>Megachile rotundata</i>	
Location: Phoenix Convention Center, 224 A, PCC	
Presenting Author: Andre Szejner Sigal – North Dakota State University	
Co-Author: Joseph P. Rinehart – USDA-ARS	
Co-Author: Julia Bowsher – North Dakota State University	
Co-Author: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
9:48 AM – 10:00 AM MST	
Mosquito biting activities below human host skin	
Location: Phoenix Convention Center, 224 A	
Presenting Author: Joanna Katarzyna Konopka – Johns Hopkins University	
Co-Author: Danny Poinapen – Western University	
Co-Author: Christopher Potter (he/him/his) – Johns Hopkins University	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:00 AM – 10:12 AM MST	
New insights into predictive biology through stored product insect genomes	
Location: Phoenix Convention Center, 224 A	
Presenting Author: Erin D. Scully – USDA-ARS	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:12 AM – 10:24 AM MST	
Parallel pheromone, metabolite, and lipid analyses reveal patterns associated with early life transitions and ovary activation in honey bee (<i>Apis mellifera</i>) queens	
Location: Phoenix Convention Center, 224 A	
Presenting Author: Alison McAfee – North Carolina State University	
Co-Author: Armando Alcazar Magana – University of British Columbia	
Co-Author: Leonard J. Foster – The University of British Columbia	
Co-Author: Shelley Hoover – University of Lethbridge	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:24 AM – 10:36 AM MST	

Co-Author: Shailendra Singh – FarmSense, Inc. Co-Author: Eamonn Keogh, Ph.D. – University of California Co-Author: Cliff Kitayama, Ph.D. – FarmSense, Inc. Co-Author: Tracy Ellis, Ph.D. – FarmSense, Inc.	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
10:15 AM – 10:35 AM MST Can we use artificial intelligence to identify insects? Opportunities, pitfalls, and hurdles in adoption  Location: Phoenix Convention Center, 124 AB Presenting Author: Marek L. Borowiec (he/him/his) – Colorado State University Co-Author: Alex McKeeken – University of Minnesota	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
10:35 AM – 10:55 AM MST Landscape bee-havior: Using automated monitoring to understand pollinator behavioral dynamics in complex landscapes  Location: Phoenix Convention Center, 124 AB Presenting Author: James D. Crall – University of Wisconsin Co-Author: Matt A. Smith – University of Wisconsin Co-Author: Olivia Marie Bernauer, Ph.D. (she/her/hers) – University of Wisconsin-Eau Claire Co-Author: Brett Graham – Harvard University Co-Author: Rafael Salas – University of Wisconsin Co-Author: Acacia Tang – University of Wisconsin Co-Author: Benjamin de Bivort – Harvard University Co-Author: Claudio Gratton – University of Wisconsin Co-Author: Brian Spiesman – Kansas State University Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
10:55 AM – 11:05 AM MST Break Location: Phoenix Convention Center, 124 AB	
11:05 AM – 11:25 AM MST Towards tracking individual monarch butterfly movements and behaviors in the wild: Advances with mSAIL (milligram-scale small animal integrated logger)  Location: Phoenix Convention Center, 124 AB Presenting Author: Delbert Andre Green – University of Michigan Co-Author: Gordon Carichner – University of Michigan Co-Author: Ehab Hamed – University of Pittsburgh Co-Author: Sara Shoori – University of Michigan	

Co-author: Demba Komma – University of Michigan Co-author: Roger Hsiao – University of California Co-author: Mingyu Yang – University of Michigan Co-author: Inhee Lee – University of Pittsburgh Co-author: Hun-Seok Kim – University of Michigan Co-author: David Blaauw – University of Michigan	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
11:25 AM – 11:45 AM MST Leveraging automated monitoring of solitary bee foraging and nesting behavior to inform population models  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Edward Idun Amoah – The Pennsylvania State University Co-Author: Santosh Sanjel – The Pennsylvania State University Co-Author: Natalie Boyle – The Pennsylvania State University Co-Author: Erica Smithwick – The Pennsylvania State University	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
11:45 AM – 11:55 AM MST INSECT NET: A new graduate training program to increase access and use of automated insect monitoring systems  Location: Phoenix Convention Center, 124 AB Presenting Author: Christina M. Grozinger – The Pennsylvania State University	
Program Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Jaya Sravanthi Mokkaapati – The Pennsylvania State University	
8:00 AM – 12:00 PM MST Empowering Tomorrow’s Food Systems with Controlled Environment Agriculture Organizer: Samantha A. Willden (she/her/hers) – Cornell University Organizer: Mike S. Wolfin (he/him/his) – The Pennsylvania State University	
Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Mike S. Wolfin (he/him/his) – The Pennsylvania State University	

8:05 AM – 8:25 AM MST Addressing food production challenges and resilience through controlled environment horticulture  Location: Phoenix Convention Center, 126 C Presenting Author: Daniel Leskovar – Texas A&M University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:25 AM – 8:45 AM MST De-bugging greenhouse operations  Location: Phoenix Convention Center, 126 C Presenting Author: Gene Giacomelli – University of Arizona Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
8:45 AM – 9:05 AM MST Protected culture as a climate adaptation tool and implications for IPM  Location: Phoenix Convention Center, 126 C Presenting Author: Laura L. Ingwell – Purdue University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:05 AM – 9:25 AM MST Challenges and opportunities for pest management in controlled environment agriculture in the U.S. and its importance for global food systems  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Luis A. Canas – The Ohio State University Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS Co-Author: Grace Sward – Corteva Agriscience Co-Author: Valerie Anderson – The Ohio State University Co-Author: Andy Michel – The Ohio State University Co-Author: Jonathan Lee-Rodriguez – The Ohio State University Co-Author: Larry Phelan – The Ohio State University Co-Author: Nuris Acosta – The Ohio State University Co-Author: Erick Javier Martinez – The Ohio State University Co-Author: Peter M. Piermarini – The Ohio State University Co-Author: Liva L. Rakotondraibe – The Ohio State University Co-Author: Michael E. Reding – USDA-ARS Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching

9:25 AM – 9:35 AM MST Break Location: Phoenix Convention Center, 126 C
9:35 AM – 9:55 AM MST Advancing CEA integrated pest management: A rapidly growing industry  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Erich Schoeller – University of Georgia Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
9:55 AM – 10:10 AM MST Developing sustainable biocontrol based integrated pest control strategies for major CEA pests  Location: Phoenix Convention Center, 126 C Presenting Author: Arash Kheirodin – Texas A&M University Co-Author: Albertha J. Parkins – University of Georgia Co-Author: Jason Schmid – University of Georgia Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:10 AM – 10:25 AM MST Succeeding with biopesticides in controlled environment agriculture  Location: Phoenix Convention Center, 126 C Presenting Author: Karly Regan – Certis Biologicals Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:25 AM – 10:40 AM MST Diversifying high tunnel systems with companion plants and weeds  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Samantha A. Willden (she/her/hers) – Cornell University Co-Author: Laura L. Ingwell – Purdue University Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:40 AM – 10:55 AM MST Syrphid flies (<i>Toxomerus marginatus</i>) for aphid management in high tunnels: A comparative study with lacewings (<i>Chrysoperla carnea</i>)  Location: Phoenix Convention Center, 126 C Presenting Author: Allison Zablah – Purdue University Co-Author: Laura L. Ingwell – Purdue University

Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
10:55 AM – 11:05 AM MST Break Location: Phoenix Convention Center, 126 C
11:05 AM – 11:20 AM MST Biological control of pest arthropods unique to controlled environment agriculture: Exploring the full continuum of technologies  Location: Phoenix Convention Center, 126 C Presenting Author: Anna Wallingford – USDA-ARS Co-Author: Samantha A. Willden (she/her/hers) – Cornell University Co-Author: Becky Sideman – University of New Hampshire Co-Author: Laura L. Ingwell – Purdue University
Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
11:20 AM – 11:35 AM MST Covering our bases: Designing extension opportunities for IPM success  Location: Phoenix Convention Center, 126 C Presenting Author: Ashley B. Leach – The Ohio State University
Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
11:35 AM – 11:50 AM MST Natural enemies bringing us together: How empowering stakeholders led to interesting and impactful research projects  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Mike S. Wolfin (he/him/his) – The Pennsylvania State University Co-Author: Malachi Brought – The Pennsylvania State University Co-Author: Luke Christopher Reynolds (he/him/his) – The Pennsylvania State University Co-Author: Caitlyn Dionysius – The Pennsylvania State University Co-Author: Justin Riedhammer – The Pennsylvania State University
Section Symposium Plant-Insect Ecosystems Formal and Informal Teaching
11:50 AM – 12:00 PM MST Discussion Location: Phoenix Convention Center, 126 C
8:00 AM – 12:00 PM MST Old Pest, New Problem: Bt Resistance in European Corn Borer in North America Organizer: Jocelyn L. Smith – University of Guelph Organizer: Matthew W. Carroll – Bayer Crop Science



Organizer: Kelsey E. Fisher – Connecticut Agricultural Experiment Station
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:05 AM – 8:25 AM MST Old pest, new problem: Bt resistance in European corn borer in North America  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jocelyn L. Smith – University of Guelph
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jocelyn L. Smith – University of Guelph
8:25 AM – 8:40 AM MST 25 years of monitoring European corn borer <i>Ostrinia nubilalis</i> (Lepidoptera: Crambidae) susceptibility to <i>Bacillus thuringiensis</i> proteins  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Ana M. Velez (she/her/hers) – University of Nebraska Co-Author: Jocelyn L. Smith – University of Guelph
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:40 AM – 8:55 AM MST Sentinel monitoring for resistance to Bt toxins in European corn borer <i>Ostrinia nubilalis</i> Hübner (Lepidoptera: Crambidae) in eastern North America  Location: Phoenix Convention Center, 131 B Presenting Author: Galen Dively – University of Maryland Co-Author: Kelsey E. Fisher – Connecticut Agricultural Experiment Station
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
8:55 AM – 9:10 AM MST Adult European corn borer movement ecology: Overhaul of old assumptions compelled by 25-years of new evidence  Location: Phoenix Convention Center, 131 B Presenting Author: Thomas Sappington – USDA-ARS
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:10 AM – 9:25 AM MST

Survey and assessment of Cry1F resistance alleles in US European corn borer populations  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Yamikani Ngona – The Ohio State University Co-Author: Yasmine Farhan – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Co-Author: Juan Luis Jurat-Fuentes (he/him/his) – University of Tennessee Co-Author: Kurt Lamour – University of Tennessee Co-Author: Andy Michel – The Ohio State University Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:25 AM – 9:40 AM MST New tools for an old pest: HiPlex targeted sequencing for Bt resistance screening in European corn borer (<i>Ostrinia nubilalis</i>)  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Juan Luis Jurat-Fuentes (he/him/his) – University of Tennessee Co-Author: Yasmine Farhan – University of Guelph Co-Author: Peter Noah Tandy – University of Tennessee Co-Author: Tom Ruttink – Research Institute for Agriculture, Fisheries and Food Co-Author: Kurt Lamour – University of Tennessee Co-Author: Jocelyn L. Smith – University of Guelph Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:40 AM – 9:55 AM MST The fitness of <i>Ostrinia nubilalis</i> Hübner (Lepidoptera: Crambidae) in Canada with multiple Bt resistance  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Josee Kelly (she/her/hers) – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Co-Author: Yasmine Farhan – University of Guelph Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
9:55 AM – 10:10 AM MST Poster session and break Location: Phoenix Convention Center, 131 B
9:55 AM – 10:10 AM MST SD47: European corn borer phenology in Connecticut  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Dominic Rowland (He/They) – Connecticut Agricultural Experiment Station Co-Author: Kelsey E. Fisher – Connecticut Agricultural Experiment Station

Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
9:55 AM – 10:10 AM MST SD48: Identifying European corn borer (<i>Ostrinia nubilalis</i> Hübner) host plant utilization using stable isotope analysis  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jocelyn L. Smith – University of Guelph Co-Author: Jenna Straughan – University of Guelph Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Poster Display
10:10 AM – 10:25 AM MST Minor region, major impact: The producer experience and extension for Bt-resistant ECB in the Maritime provinces  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Caitlin Congdon (she/her/hers) – Perennia Food and Agriculture Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:25 AM – 10:40 AM MST Canada-wide ECB resistance monitoring using third party contractors  Location: Phoenix Convention Center, 131 B Presenting Author: Adam Pfeffer – Bayer Crop Science Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:40 AM – 10:55 AM MST Delving into the enigma of Bt resistance in European corn borer: Uncovering mysteries and implications for Bt corn cultivation  Location: Phoenix Convention Center, 131 B Presenting Author: Amit Sethi – Corteva Agriscience Co-Author: Sandra Lass – Corteva Agriscience Co-Author: Benchie Ortegon – Corteva Agriscience Co-Author: Sefriyani Johan – Corteva Agriscience Co-Author: Matt Wihlm – Corteva Agriscience Co-Author: Kelly Jordan – Corteva Agriscience Co-Author: Casey Oster – Corteva Agriscience Co-Author: Chad Benson – Corteva Agriscience Co-Author: Taylor Klunker – Corteva Agriscience Co-Author: Zach Ballou – Corteva Agriscience

Co-Author: Leigh Christensen – Corteva Agriscience Co-Author: Relanie Humpal – Corteva Agriscience Co-Author: Alec Leners – Corteva Agriscience Co-Author: Mary Santos – Corteva Agriscience Co-Author: Roberto Estrada – Corteva Agriscience Co-Author: Renata Pereira – Corteva Agriscience Co-Author: Andre LB Crespo, Ph.D. – Corteva Agriscience
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
10:55 AM – 11:10 AM MST Industry perspective on ECB resistance to insect control traits in Bt corn  Location: Phoenix Convention Center, 131 B Presenting Author: Matthew W. Carroll – Bayer Crop Science
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:10 AM – 11:25 AM MST Canadian regulatory considerations: Managing and mitigating pest resistance to novel insecticidal traits  Location: Phoenix Convention Center, 131 B Presenting Author: Yasmine Farhan – University of Guelph Co-Author: Andrea Hitchon – Canadian Food Inspection Agency Co-Author: Cecile Girard – Canadian Food Inspection Agency
Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology
11:25 AM – 11:55 AM MST Panel discussion Location: Phoenix Convention Center, 131 B
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jocelyn L. Smith – University of Guelph
8:00 AM – 12:00 PM MST Insect Decline RCN Symposium and Workshop Organizer: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Organizer: David Wagner – University of Connecticut Organizer: Eliza Grames – Binghamton University Organizer: Christie Bahlai – Kent State University Organizer: Chris Halsch – State University of New York Organizer: Chris Elphick – University of Connecticut



Workshop Member Symposium
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 221 A Presenting Author: Eliza Grames – Binghamton University
8:05 AM – 8:30 AM MST UK insect declines: Trends, drivers, and implications Location: Phoenix Convention Center, 221 A Presenting Author: Richard Fox – Butterfly Conservation
Workshop Member Symposium
8:30 AM – 8:45 AM MST Insect biodiversity research in Guyana: Past, present, and future Location: Phoenix Convention Center, 221 A Presenting Author: Gyanpriya Maharaj – University of Guyana Co-Author: Eric Stoll – University of Guyana
Workshop Member Symposium
8:45 AM – 9:00 AM MST Growing invertebrate conservation in Australia Location: Phoenix Convention Center, 221 A Presenting Author: Kate Umbers – Invertebrates Australia
Workshop Member Symposium
9:00 AM – 9:15 AM MST Current trends in grassland grasshopper communities Location: Phoenix Convention Center, 221 A Presenting Author: Calla Sopko – Smithsonian Institution Co-Author: Nicole Davidson – USDA-ARS Co-Author: Ellen A. R. Welti – Smithsonian Institution Co-Author: Dave H. Branson – USDA-ARS Co-Author: Laura Burkle – Montana State University
Workshop Member Symposium
9:15 AM – 9:30 AM MST Bridging the gap: Enhancing insect monitoring in the neotropics through collaboration Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Melissa Sanchez Herrera – Universidad del Rosario
Workshop Member Symposium

9:30 AM – 9:45 AM MST A strategic vision for insect conservation Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Scott Black (he/him/his) – Xerces Society for Invertebrate Conservation Workshop Member Symposium	
9:45 AM – 9:55 AM MST Break Location: Phoenix Convention Center, 221 A	
9:55 AM – 10:00 AM MST Introduction to panel Location: Phoenix Convention Center, 221 A	
10:00 AM – 10:10 AM MST Causes of insect decline Location: Phoenix Convention Center, 221 A Presenting Author: Chris Halsch – State University of New York Workshop Member Symposium	
10:10 AM – 10:40 AM MST How to do a systematic review and meta-analysis Location: Phoenix Convention Center, 221 A Presenting Author: Eliza Grames – Binghamton University Workshop Member Symposium	
10:40 AM – 11:35 AM MST Group work Location: Phoenix Convention Center, 221 A	
11:35 AM – 11:50 AM MST Wrap-up and next steps Location: Phoenix Convention Center, 221 A	
8:00 AM – 12:00 PM MST Empowering Tomorrow: Indigenous Scientists and Insect Science Organizer: Willow Lovecky – University of Virginia Organizer: Sky Wildcat – AISES - Advancing Indigenous People In STEM Organizer: Melissa Reed – Oklahoma State University Organizer: Daniel Marshall – Washington State University Member Symposium Diversity, Equity, and Inclusion	
8:00 AM – 8:05 AM MST	

Introductory remarks Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Daniel Marshall – Washington State University	
8:05 AM – 8:20 AM MST AISES-Advancing Indigenous People in STEM: Supporting Indigenous voices in biological societies  Location: Phoenix Convention Center, 225 A Presenting Author: Sky Wildcat – AISES - Advancing Indigenous People In STEM Member Symposium Diversity, Equity, and Inclusion	
8:20 AM – 8:35 AM MST Rooted defenders: The role of entomopathogenic nematodes in enhancing systemic cucumber plant resistance to adult striped cucumber beetles  Location: Phoenix Convention Center, 225 A Presenting Author: Adriane Fifield (she/her/hers) – Texas A&M University Co-Author: Anjel Helms – Texas A&M University Member Symposium Diversity, Equity, and Inclusion	
8:35 AM – 8:50 AM MST Investigating the effects of trap nest density on rates of parasitism  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Willow Lovecky – University of Virginia Co-Author: T'ai Roulston (he/him/his) – University of Virginia Member Symposium Diversity, Equity, and Inclusion	
8:50 AM – 9:05 AM MST Movement capabilities of <i>Amblyomma americanum</i> in laboratory and field conditions  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Daniel Marshall – Washington State University Co-Author: Karen C. Poh (she/her/hers) – USDA-ARS Co-Author: Mason Reichard – Oklahoma State University Co-Author: Jeb P. Owen – Washington State University Member Symposium Diversity, Equity, and Inclusion	
9:05 AM – 9:15 AM MST Break Location: Phoenix Convention Center, 225 A	

9:15 AM – 9:30 AM MST Using Hualapai language and insect science to engage youth in STEM learning  Location: Phoenix Convention Center, 225 A Presenting Author: Elisabeth Alden – University of Arizona Member Symposium Diversity, Equity, and Inclusion
9:30 AM – 9:45 AM MST Insect science the Auntie way: Applying Indigenous perspectives and upholding sovereignty  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Cheyenne Reuben-Thomas (she/they) – Cornell University Member Symposium Diversity, Equity, and Inclusion
9:45 AM – 10:00 AM MST Socioecological impacts on population structure in a host-dependent urban pest, the common bed bug (<i>Cimex lectularius</i>)  Location: Phoenix Convention Center, 225 A Presenting Author: Cari Lewis – University of Tulsa Co-Author: Warren Booth – Virginia Tech Member Symposium Diversity, Equity, and Inclusion
10:00 AM – 10:15 AM MST Tick abundance and diversity in 'hot spots' in the Choctaw Nation of Oklahoma  Location: Phoenix Convention Center, 225 A Presenting Author: Jamie Eastep – Oklahoma State University Co-Author: Bruce H. Noden – Oklahoma State University Member Symposium Diversity, Equity, and Inclusion
10:15 AM – 10:25 AM MST Break Location: Phoenix Convention Center, 225 A
10:25 AM – 11:05 AM MST Panel discussion Location: Phoenix Convention Center, 225 A
11:05 AM – 11:15 AM MST Break Location: Phoenix Convention Center, 225 A
11:15 AM – 11:55 AM MST

Panel discussion Location: Phoenix Convention Center, 225 A
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Daniel Marshall – Washington State University
8:00 AM – 12:00 PM MST The Sterile Insect Technique: Innovations, Challenges, and Future Directions Organizer: Marion Le Gall (she/her/hers) – M3 Agriculture Technologies  Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Marion Le Gall (she/her/hers) – M3 Agriculture Technologies
8:05 AM – 8:23 AM MST A history of SIT: From Knippling to CRISPR  Location: Phoenix Convention Center, 131 A Presenting Author: Lisa G. Neven (she/her/hers) – USDA-ARS Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
8:23 AM – 8:41 AM MST Measuring success: Assessing the influence of mass-rearing quality parameters on screwworm mating performance  Location: Phoenix Convention Center, 131 A Presenting Author: Alex Arp – USDA-ARS Co-Author: Paul Vincent Hickner – USDA-ARS Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
8:41 AM – 8:59 AM MST How to integrate nutritional geometry principles to optimize insect diets: A new framework for insect rearing using the intake target concept  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Marion Le Gall (she/her/hers) – M3 Agriculture Technologies Co-Author: Carolyn Huynh (she/her/hers) – M3 Agriculture Technologies Co-Author: Allen Cohen – North Carolina State University Co-Author: Nathan Moses-Gonzales – M3 Agriculture Technologies

Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
8:59 AM – 9:17 AM MST Resilience and recovery of gut microbiomes in mass reared fruit flies  Location: Phoenix Convention Center, 131 A Presenting Author: Charles Mason – USDA-ARS		
Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
9:17 AM – 9:28 AM MST Break Location: Phoenix Convention Center, 131 A		
9:28 AM – 9:46 AM MST Reducing the risk of high activity radioactive sources in sterile insect technique: An argument for using X-ray and other alternative technologies  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Jodi Lieberman (she/her/hers) – Sandia National Laboratories		
Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
9:46 AM – 10:04 AM MST Soft X-ray irradiation for sterile insect technique  Location: Phoenix Convention Center, 131 A Presenting Author: Ron Haff – USDA-ARS Co-Author: Peishih Liang (she/her/hers) – USDA-ARS		
Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
10:04 AM – 10:22 AM MST New, highly reliable X-ray systems with temperature control for adult insect X-ray SIT  Location: Phoenix Convention Center, 131 A Presenting Author: William McLaughlin – Precision X-Ray Inc. Co-Author: Jiaqi Lyu – Precision X-Ray Inc. Co-Author: Andrew Parker – International Atomic Energy Agency Co-Author: Hanano Yamada – International Atomic Energy Agency		
Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
10:22 AM – 10:40 AM MST X-ray can be an alternative to gamma radiation for the sterile insect technique for sterilization of <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 131 A		

Presenting Author: Chao Chen – University of Florida Co-Author: Daniel Hahn – University of Florida
Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
10:40 AM – 10:51 AM MST Break Location: Phoenix Convention Center, 131 A
10:51 AM – 11:09 AM MST Lab-reared <i>Aedes aegypti</i> adults can quickly achieve similar cold hardiness to wild populations with 3 days of outdoor acclimation: Implications for mosquito release programs  Location: Phoenix Convention Center, 131 A Presenting Author: Daniel Hahn – University of Florida Co-Author: Dylan Alexander Tussey (he/him/his) – USDA-APHIS Co-Author: Chao Chen – University of Florida Co-Author: Hunter Martin – University of Florida Co-Author: Estelle Martin (she/her/hers) – University of Florida Co-Author: Rudy Xue – Anastasia Mosquito Control District of St. Johns County
Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
11:09 AM – 11:27 AM MST Advances and challenges in the sterile insect technique: From insect sperm to prototypes  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Diana Pérez-Staples (she/her/hers) – Universidad Veracruzana Co-Author: Yeudiel Gomez-Simuta – SAGARPA-SENASICA Co-Author: José Meza – SAGARPA-SENASICA Co-Author: Jorge Toledo – El Colegio de la Frontera Sur
Member Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology
11:27 AM – 11:45 AM MST Progress in developing genetic SIT for management of the cotton pest <i>Lygus hesperus</i> (Knight)  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Chan C. Heu – USDA-ARS Co-Author: Roni J. Gross – USDA-ARS Co-Author: Dannialle M. LeRoy – USDA-ARS Co-Author: Inana X. Schutze (she/her/hers) – USDA-ARS Co-Author: Daniel Langhorst – USDA-ARS Co-Author: Colin S. Brent (he/him/his) – USDA-ARS Co-Author: Joe Hull – USDA-ARS Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS

Member Symposium	Plant-Insect Ecosystems	Medical, Urban, and Veterinary Entomology
11:45 AM – 11:55 AM MST Closing remarks Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Marion Le Gall (she/her/hers) – M3 Agriculture Technologies		
8:00 AM – 12:00 PM MST How to Be a Vector for Entomophilia: Infecting the Future Organizer: David Serrano (he/him/his) – Broward College Organizer: Carl Hjelman (he/him/his) – Utah Valley University Program Symposium Formal and Informal Teaching		
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 121 C Presenting Author: David Serrano (he/him/his) – Broward College		
8:05 AM – 8:25 AM MST Bugs in the system: A computational biologist's first semester teaching entomology Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Carl Hjelman (he/him/his) – Utah Valley University Program Symposium Formal and Informal Teaching		
8:25 AM – 8:45 AM MST Bite me if you can: Teaching insects as disease vectors to undergraduate non-majors Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Tolulope Agunbiade (she/her/hers) – Texas A&M University-Kingsville Program Symposium Formal and Informal Teaching		
8:45 AM – 9:05 AM MST Utilizing the global decline of insects to engage nonmajor students and cultivate an understanding of the invaluable roles insects play in human society Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Kristin Dunn – William & Mary Program Symposium Formal and Informal Teaching		
9:05 AM – 9:25 AM MST		

Livestock entomology for undergraduates and producers: Implementing lessons learned from one to help teach the other Location: Phoenix Convention Center, 121 C Presenting Author: Jonathan Cammack – Oklahoma State University Program Symposium Formal and Informal Teaching
9:25 AM – 9:45 AM MST Insects online: The buzz of content creation and our place in it Location: Phoenix Convention Center, 121 C Presenting Author: Bradon Coy – Lil Dudes Insect Academy Program Symposium Formal and Informal Teaching
9:45 AM – 10:00 AM MST Break Location: Phoenix Convention Center, 121 C
10:00 AM – 10:20 AM MST Entomology edutainment: How Extension impacts communities for a sustainable future Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Morgan Pinkerton (she/her/hers) – University of Florida Program Symposium Formal and Informal Teaching
10:20 AM – 10:40 AM MST Creating valuable experiences for the professional and child through summer entomology camps Location: Phoenix Convention Center, 121 C Presenting Author: Molly Keck, BCE – Texas A&M University Program Symposium Formal and Informal Teaching
10:40 AM – 11:00 AM MST Buzzing with potential: The educational power of community engagement and undergraduate research in biology courses Location: Phoenix Convention Center, 121 C Presenting Author: Emmanuel Santa-Martinez – Salt Lake Community College Program Symposium Formal and Informal Teaching
11:00 AM – 11:20 AM MST A successful volunteer program to collect scientifically rigorous data on native bees Location: Phoenix Convention Center, 121 C

Presenting Author: Karen Wright – Washington State Department of Agriculture Program Symposium Formal and Informal Teaching	
11:20 AM – 11:40 AM MST Shining a light on firefly populations in the western U.S.  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Christy Bills – Utah Museum of Natural History Program Symposium Formal and Informal Teaching	
11:40 AM – 11:55 AM MST Panel discussion Location: Phoenix Convention Center, 121 C	
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 121 C Presenting Author: David Serrano (he/him/his) – Broward College	
8:00 AM – 12:00 PM MST APHIS PPQ Insect Rearing and Biocontrol: Celebrating the Careers of Drs. Juli Gould and Hannah Nadel Organizer: Mauri Hickin – USDA-APHIS-PPQ-S&T Organizer: Hannah J. Broadley (she/her/hers) – USDA-APHIS Organizer: Chrissy Dodge (she/her/hers) – USDA-APHIS Organizer: Theresa Booth – USDA-APHIS Section Symposium Plant-Insect Ecosystems	
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Chrissy Dodge (she/her/hers) – USDA-APHIS	
8:05 AM – 8:25 AM MST Overview of PPQs contributions to biological control and rearing of national priority insect pests  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Ronald Weeks – USDA-APHIS Section Symposium Plant-Insect Ecosystems	
8:25 AM – 8:45 AM MST	

Hannah Nadel, a naturalist in the insect containment laboratory, rearing invasive moth pests to support APHIS-PPQ emergency response programs  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Gregory S. Simmons – USDA-APHIS Section Symposium Plant-Insect Ecosystems	
8:45 AM – 9:05 AM MST Combining the power of DNA and morphology to stop biological invasion in wood-packaging material  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Yunke Wu – USDA-APHIS Co-Author: Scott Myers – USDA-APHIS Co-Author: Hannah Nadel – USDA-APHIS Co-Author: Peter Reagel – USDA-APHIS Co-Author: Ann Ray – Xavier University Section Symposium Plant-Insect Ecosystems	
9:05 AM – 9:20 AM MST Break Location: Phoenix Convention Center, 126 A, PCC	
9:20 AM – 9:40 AM MST Accomplishments and function of the USDA APHIS emerald ash borer biocontrol rearing facility  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Nicole Sawallich – USDA-APHIS Section Symposium Plant-Insect Ecosystems	
9:40 AM – 10:00 AM MST Advancements in emerald ash borer larval diet development  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Kristine Grayson – University of Richmond Co-Author: Mauri Hickin – USDA-APHIS-PPQ-S&T Co-Author: Hannah Nadel – USDA-APHIS Co-Author: Cori Carson – University of Richmond Co-Author: Megan Doner – USDA-APHIS Co-Author: Sue Lane – USDA-APHIS Co-Author: Erica Martin – University of Richmond Co-Author: Mary Watson – USDA-APHIS Section Symposium Plant-Insect Ecosystems	

10:00 AM – 10:15 AM MST Break Location: Phoenix Convention Center, 126 A, PCC
10:15 AM – 10:35 AM MST Progress and development of classical biocontrol for shot hole borers (<i>Euwallacea</i> spp.) and box tree moth (<i>Cydalima perspectalis</i>)  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Chrissy Dodge (she/her/hers) – USDA-APHIS Co-Author: Maddie Ryan – University of Massachusetts Co-Author: Angela Hoover – USDA-APHIS Co-Author: Gregory S. Simmons – USDA-APHIS Co-Author: Paul F. Rugman-Jones – University of California Co-Author: Hannah J. Broadley (she/her/hers) – USDA-APHIS Co-Author: Juli Gould – USDA-APHIS Section Symposium Plant-Insect Ecosystems
10:35 AM – 10:55 AM MST Developing biological control methods for the spotted lanternfly  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Kim Alan Hoelmer (he/him/his) – USDA-ARS Co-Author: Hannah J. Broadley (she/her/hers) – USDA-APHIS Co-Author: Xingeng Wang – USDA-ARS Co-Author: Juli Gould – USDA-APHIS Section Symposium Plant-Insect Ecosystems
10:55 AM – 11:15 AM MST Research updates on biological control of emerald ash borer  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Theresa Booth – USDA-APHIS Co-Author: Tim Morris – State University of New York Co-Author: Melissa K. Fierke – State University of New York Co-Author: Elizabeth Marie Clifton, Ph.D. (she/her/hers) – University of New Hampshire Co-Author: Chrissy Dodge (she/her/hers) – USDA-APHIS Co-Author: Juli Gould – USDA-APHIS Section Symposium Plant-Insect Ecosystems
11:15 AM – 11:30 AM MST Discussion Location: Phoenix Convention Center, 126 A, PCC

11:30 AM – 11:40 AM MST Closing remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Chrissy Dodge (she/her/hers) – USDA-APHIS
8:00 AM – 12:00 PM MST Cross-disciplinary Innovations in EPG Science to Address Current and Emerging Issues Organizer: Anastasia M. Cooper (she/her/hers) – Auburn University Organizer: Berenice Romero (she/her/hers) – Louisiana State University Section Symposium Physiology, Biochemistry, and Toxicology
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Anastasia M. Cooper (she/her/hers) – Auburn University
8:05 AM – 8:25 AM MST Innovations in EPG technology accelerate its application to new and emerging issues in agriculture  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Elaine A. Backus (she/her/hers) – USDA-ARS Co-Author: William Patterson – Interdisciplinary Consulting Corp Co-Author: Timothy Ebert – University of Florida Section Symposium Physiology, Biochemistry, and Toxicology
8:25 AM – 8:45 AM MST The probing behavior and vector potential of <i>Melanaphis sacchari</i> in transmitting sorghum mosaic virus  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Jeffrey Davis – Louisiana State University Section Symposium Physiology, Biochemistry, and Toxicology
8:45 AM – 9:05 AM MST Using electrical penetration graph data to reveal the effects of a bacterial plant pathogen and symbiont on psyllid phenotypic plasticity  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Kerry Elizabeth Mauck – University of California Co-author: Marco Gebiola – University of Naples Federico II Section Symposium Physiology, Biochemistry, and Toxicology

9:05 AM – 9:25 AM MST Connecting gut contents to insect feeding/probing behavior and implications for data interpretation  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Gina M. Angelella – USDA-ARS Co-Author: Rodney Cooper – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology
9:25 AM – 9:35 AM MST Break Location: Phoenix Convention Center, 122 B, PCC
9:35 AM – 9:55 AM MST Blood-feeding arthropods: Thoughts and considerations when setting up your EPG study  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Anastasia M. Cooper (she/her/hers) – Auburn University Co-Author: Kathryn Reif – Auburn University Co-Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Dana Mitzel – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology
9:55 AM – 10:15 AM MST Use of electropenetrography (EPG) and histology to understand the feeding behaviors and biomechanics of <i>Varroa destructor</i> mites on honey bee pupae  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Andrew Y. Li – USDA-ARS Co-author: Steven Cook – USDA-ARS Co-author: Daniel E. Sonenshine (he/him/his) – National Institute of Health Co-Author: Francisco Posada-Florez – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology
10:15 AM – 10:35 AM MST Characterization of the probing behaviors of the hibiscus mealybug, <i>Nipaecoccus viridis</i> trialing different tethering materials and AC-DC EPG setting  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Emilie Pauline Demard (she/her/hers) – University of Florida Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida Co-Author: Elaine A. Backus (she/her/hers) – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology

10:35 AM – 10:45 AM MST Break Location: Phoenix Convention Center, 122 B, PCC
10:45 AM – 11:35 AM MST Discussion Location: Phoenix Convention Center, 122 B, PCC
11:35 AM – 11:40 AM MST Closing remarks Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Anastasia M. Cooper (she/her/hers) – Auburn University
8:00 AM – 12:00 PM MST Arthropod Metabarcoding: A Powerful Tool for Inventorying, Monitoring, and Regenerating Biodiversity Organizer: Isaac Overcast (he/him/his) – California Academy of Sciences Organizer: Lauren Esposito – CAS Organizer: Natalie Graham – University of Hawaii Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
8:00 AM – 8:04 AM MST Introductory remarks Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Isaac Overcast (he/him/his) – California Academy of Sciences
8:04 AM – 8:19 AM MST DNA metabarcoding of Hawaiian Arthropoda across temporal scales: Understanding how past disturbances shape present-day ecosystems  Location: Phoenix Convention Center, 224 B Presenting Author: Natalie Graham – University of Hawaii Co-Author: Walter Russell III – Army Natural Resources Program Co-Author: Paul Krushelnysky – University of Hawaii Co-Author: Jerilyn Calaor – Virginia Tech Co-Author: Haldre Rogers – Virginia Tech Co-Author: Samantha Al-Bayer – Colorado State University Co-Author: Ken Pulliafco – Colorado State University Co-Author: Jeremy Catalin Andersen – University of Massachusetts Co-Author: Pritam Banerjee – University of California Co-Author: Sven Weber – University of California Co-Author: Henrik Krehenwinkel – Trier University Co-Author: Susan Kennedy – Trier University Co-Author: Rosemary Gillespie – University of California Co-Author: George Roderick – University of California

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:19 AM – 8:34 AM MST

Making metabarcoding more meaningful: Leveraging natural history collections to develop DNA reference libraries 

Location: Phoenix Convention Center, 224 B

Presenting Author: Anna Holmquist (she/her/hers) – California Academy of Sciences

Co-Author: Athena Lam – California Academy of Sciences

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:34 AM – 8:49 AM MST

Arthropods are kin: Operationalizing a data sovereignty framework in DNA metabarcoding 

Location: Phoenix Convention Center, 224 B

Presenting Author: Leke Hutchins – University of California

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

8:49 AM – 9:04 AM MST

Metabarcoding analysis of arthropod diversity in the rainforest of Mexico 

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Eugenia Zarza (she/her/hers) – El Colegio de la Frontera Sur

Co-Author: Edyciel Jordan Alvarado-Robledo – El Colegio de la Frontera Sur

Co-Author: David Martínez-Cano – El Colegio de la Frontera Sur

Co-Author: Alejandro Zamora – Instituto de Ecología A.C.

Co-Author: Victor Reynoso – Universidad Nacional Autónoma de México

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

9:04 AM – 9:19 AM MST

A predictive model of arthropod biodiversity resilience to inform conservation strategy 

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Isaac Overcast (he/him/his) – California Academy of Sciences

Co-Author: Lauren Esposito – CAS

Co-Author: Rayna C. Bell – California Academy of Sciences

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

9:19 AM – 9:32 AM MST

Break

Location: Phoenix Convention Center, 224 B

9:32 AM – 9:47 AM MST

Unlocking pest detection and monitoring in greenhouse tomato agriculture: Harnessing eDNA technology 

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Jonathan Lee-Rodriguez – The Ohio State University

Co-author: Christopher M. Ranger (he/him/his) – USDA-ARS

Co-author: Ashley B. Leach – The Ohio State University

Co-author: Andy Michel – The Ohio State University

Co-author: Michael E. Reding – USDA-ARS

Co-author: Luis A. Canas – The Ohio State University

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

9:47 AM – 10:02 AM MST

Flowing from the ashes: Environmental DNA reveals community recovery of aquatic ecosystems after a megafire event 

Location: Phoenix Convention Center, 224 B

Presenting Author: Isabella Errigo – Cornell University

Co-Author: Paul Bryan Frandsen – Brigham Young University

Co-Author: John M. Chaston – Brigham Young University

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

10:02 AM – 10:17 AM MST

Tropical eDNA sampling and its challenges 

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Rhema Uche-Dike (he/him/his) – American Museum of Natural History

Co-author: Ethan R. Tolman – Virginia Tech

Co-author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

10:17 AM – 10:32 AM MST

Using environmental DNA for rapid and cost-efficient arthropod biodiversity assessments 

Location: Phoenix Convention Center, 224 B

Presenting Author: Julie Lockwood (she/her/hers) – Rutgers University

Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems

10:32 AM – 10:47 AM MST

Using eDNA metabarcoding to complement traditional aquatic invertebrate biodiversity surveys in the Sierra Nevada of California 

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Ajith E. Seresinghe (he/him/his) – University of California Co-author: Rachel Meyer – University of California Co-author: David Herbst – Sierra Streams Institute	
Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
10:47 AM – 11:00 AM MST Break Location: Phoenix Convention Center, 224 B	
11:00 AM – 11:15 AM MST Assessing the role of vertebrate insectivores in shaping arthropod communities and their interactions in the Marianas  Location: Phoenix Convention Center, 224 B Presenting Author: Jerilyn Calaor – Virginia Tech Co-Author: Susan Kennedy – Trier University Co-Author: Natalie Graham – University of Hawaii Co-Author: Haldre Rogers – Virginia Tech	
Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
11:15 AM – 11:30 AM MST Unveiling prey choice in scorpions with metabarcoding of regurgitant  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Eric O. Stiner – California Academy of Sciences Co-author: David Hassan Canseco Vielma – University of California Co-author: Lauren Esposito – CAS	
Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
11:30 AM – 11:45 AM MST Peck, poop, and PCR: Unveiling entomological and applied insights of pastured poultry systems via DNA metabarcoding  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Kantima Thongjueud – University of Kentucky	
Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	

11:45 AM – 12:00 PM MST Environmental DNA for characterizing pollinator biodiversity of vulnerable plant communities  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Aron Katz – Engineer Research and Development Center	
Section Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems	
8:00 AM – 12:00 PM MST Enigmatic Bridge of Exo-Endo: Extracellular Vesicles in Arthropod Physiology and Control Organizer: Kristopher Silver (he/him/his) – Kansas State University Organizer: Xiufeng Zhang (he/him/his) – Kansas State University Organizer: Dana Mitzel – USDA-ARS Organizer: Ana M. Velez (she/her/hers) – University of Nebraska Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
8:00 AM – 8:05 AM MST Introductory remarks Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Xiufeng Zhang (he/him/his) – Kansas State University	
8:05 AM – 8:25 AM MST A comparative analysis of unusual extracellular vesicle-like venom secretions from parasitoid wasps of <i>Drosophila</i>  Location: Phoenix Convention Center, 222 C Presenting Author: Shubha Govind – City University of New York Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
8:25 AM – 8:45 AM MST Extracellular vesicles and RNA interference in <i>Diabrotica undecimpunctata</i>  Location: Phoenix Convention Center, 222 C Presenting Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Soheyla Fatehi – Kansas State University Co-Author: Kun Yan Zhu – Kansas State University Co-Author: Berlin Londono – Tulane University Co-Author: Yoonseong Park – Kansas State University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	

8:45 AM – 9:05 AM MST Identifying components of exosome biogenesis pathways in <i>Diabrotica undecimpunctata</i> Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Festus Kehinde Ajibefun – Kansas State University Co-Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska Co-Author: Xiufeng Zhang (he/him/his) – Kansas State University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
9:05 AM – 9:20 AM MST Break Location: Phoenix Convention Center, 222 C	
9:20 AM – 9:40 AM MST Exploring the role of exosomes in systemic spread of RNAi in the western corn rootworm Location: Phoenix Convention Center, 222 C Presenting Author: Marija Milosevic – University of Nebraska Co-Author: Suresh Varsani – University of Nebraska Co-Author: Festus Kehinde Ajibefun – Kansas State University Co-Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
9:40 AM – 10:00 AM MST Exosome as potential dsRNA carrier in RNAi Location: Phoenix Convention Center, 222 C Presenting Author: John Wang – USDA-ARS Co-Author: Janos Zempleni – University of Nebraska Co-Author: Jerry Jerry Zhu – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:00 AM – 10:20 AM MST Characterization of exosome cargoes of <i>Culex tarsalis</i> cells with West Nile virus Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Xiufeng Zhang (he/him/his) – Kansas State University Co-Author: Dana Mitzel – USDA-ARS	

Co-Author: Kristopher Silver (he/him/his) – Kansas State University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:20 AM – 10:35 AM MST Break Location: Phoenix Convention Center, 222 C	
10:35 AM – 10:55 AM MST Identification of tick antigens after vaccination with tick extracellular vesicles in white-tailed deer Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Adela Oliva Chavez (she/her/hers) – University of Wisconsin Co-Author: Julia Gonzalez – Rutgers University Co-Author: Cristina Harvey – Texas A&M University Co-Author: Cárita de Souza Ribeiro-Silva – Universidade Federal de Goiás Co-Author: Brenda Leal-Galvan – Texas A&M University Co-Author: Kelly Persinger – Texas A&M University Co-Author: Tammi Johnson – Texas A&M University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:55 AM – 11:15 AM MST Targeting arthropod exosomes to combat vector-borne viral diseases Location: Phoenix Convention Center, 222 C Presenting Author: Hameeda Sultana – University of Tennessee Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
11:15 AM – 11:55 AM MST Panel discussion Location: Phoenix Convention Center, 222 C	
11:55 AM – 12:00 PM MST Closing remarks Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Xiufeng Zhang (he/him/his) – Kansas State University	
8:00 AM – 12:00 PM MST Increasing Societal Impacts of Forensic Entomology: Standardizing Practices and Novel Applications Organizer: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Organizer: Krystal Hans (she/her/hers) – Purdue University	

Organizer: Denise Gemmellaro (she/her/hers) – Kean University

Section Symposium Medical, Urban, and Veterinary Entomology

8:00 AM – 8:05 AM MST

Introductory remarks

Location: Phoenix Convention Center, 130, PCC

Presenting Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University

8:05 AM – 8:25 AM MST

Identifying myiasis in death investigations



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Michelle R. Sanford, Ph.D., D-ABFE, FAAFS (she/her/hers) – Harris County Institute of Forensic Sciences

Section Symposium Medical, Urban, and Veterinary Entomology

8:25 AM – 8:45 AM MST

Steps towards a simplified pictorial key to third instar blow fly larvae (Diptera: Calliphoridae)



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Andrew Wesley Meeds – Arizona State University

Co-Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University

Section Symposium Medical, Urban, and Veterinary Entomology

8:45 AM – 9:05 AM MST

Environmental forensic entomology: The fourth subdiscipline



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Charity Owings – University of Tennessee

Section Symposium Medical, Urban, and Veterinary Entomology

9:05 AM – 9:25 AM MST

Carrion fly (Order: Diptera) production-to-whole-carcass biomass ratio: Implications for agricultural forensics and epidemiology?



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Sienna McPeck – Texas A&M University

Co-Author: Jeffery Tomberlin – Texas A&M University

Section Symposium Medical, Urban, and Veterinary Entomology

9:25 AM – 9:40 AM MST

Break

Location: Phoenix Convention Center, 130, PCC

9:40 AM – 10:20 AM MST

Poster session

Location: Phoenix Convention Center, 130, PCC

9:40 AM – 10:20 AM MST

SD40: Blow fly oviposition behavior on aged substrates



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Vanessa Cooper – Purdue University

Co-Author: Krystal Hans (she/her/hers) – Purdue University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST

SD41: Changes in bacterial composition during the process of decomposition



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Denise Gemmellaro (she/her/hers) – Kean University

Co-Author: Andrea Oncoy – Kean University

Co-Author: Luis Scala – Kean University

Co-Author: Ava La Lande – Kean University

Co-Author: Stephanie Urias – Kean University

Co-Author: Sarah Knapik – Kean University

Co-Author: Gloria Raise (she/her/hers) – OPS Diagnostics

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST

SD42: Effect of preservation, time and temperature on DNA recovery, quantification, and amplification on blow fly specimens (Diptera: Calliphoridae)



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Kathryn Melancon (she/her/hers) – Arizona State University

Co-Author: Sydnee Wedel (she/her/hers) – Arizona State University

Co-Author: Jonathan Parrott (he/him/his) – Arizona State University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST

SD43: Forensically relevant insect diversity associated with human remains in the midwestern US



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Krystal Hans (she/her/hers) – Purdue University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST
SD44: CANCELLED: Maximizing evidence recovery from aquatic environments: Procedural standards



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Gloria Raise (she/her/hers) – OPS Diagnostics

Co-Author: Andrea Zaferes – TEAMLGS

Co-Author: Denise Gemmellaro (she/her/hers) – Kean University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST
SD45: The succession of invertebrate communities involved in swine decomposition in freshwater environments in Italy



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Andrea Benassi – Universita' degli Studi di Modena e Reggio Emilia

Co-Author: Gloria Raise (she/her/hers) – OPS Diagnostics

Co-Author: Nicholas Lorusso – University of Texas

Co-Author: Denise Gemmellaro (she/her/hers) – Kean University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

9:40 AM – 10:20 AM MST
SD46: We don't know what we don't know: A look at the gaps in forensic entomology casework



Location: Phoenix Convention Center, 130, PCC

Presenting Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University

Section Symposium Medical, Urban, and Veterinary Entomology Poster Display

10:20 AM – 11:00 AM MST
Discussion
Location: Phoenix Convention Center, 130, PCC

11:00 AM – 11:05 AM MST
Closing remarks
Location: Phoenix Convention Center, 130, PCC

Presenting Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University

8:00 AM – 12:00 PM MST
10-min: P-IE, IPM - Horticulture 2

Moderator: Brett R. Blaauw – University of Georgia
Moderator: Todd E. Shelly (he/him/his) – USDA-APHIS



10-Minute Presentation Plant-Insect Ecosystems

8:00 AM – 8:12 AM MST
Impact of size on mating preference of navel orangeworm (Lepidoptera: Pyralidae) and implications for sterile insect technique



Location: Phoenix Convention Center, 127 C

Presenting Author: Kristina Baker – USDA-ARS

Co-Author: Nathalie J. Baena Bejarano, Ph.D. – University of California

Co-Author: Kristina Baker – USDA-ARS

Co-Author: Charles S. Burks – USDA-ARS

Co-Author: Michelle Yang – USDA-ARS

Co-Author: Houston Wilson (he/him/his) – University of California

10-Minute Presentation Plant-Insect Ecosystems

8:12 AM – 8:24 AM MST
Management of insecticide-resistant western flower thrips in North Carolina fruiting vegetable systems



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Scott T. Lee – North Carolina State University

Co-Author: George Kennedy – North Carolina State University

Co-Author: James Walgenbach – North Carolina State University

10-Minute Presentation Plant-Insect Ecosystems

8:24 AM – 8:36 AM MST
Navigating the challenges of integrating cover crops into diverse vegetable operations in southern California



Location: Phoenix Convention Center, 127 C

Presenting Author: Jacob Pecenka, Ph.D. – Rodale Institute

Co-Author: Arianna Bozzolo – Rodale Institute

Co-Author: Andrew Smith – Rodale Institute

10-Minute Presentation Plant-Insect Ecosystems

8:36 AM – 8:48 AM MST
Optimizing repellents and attractants as a push-pull strategy for ambrosia beetles in horticultural tree crops



Location: Phoenix Convention Center, 127 C, PCC

Presenting Author: Aaron Yilmaz – USDA-ARS

Co-Author: Shimat Villanasery V. Joseph – University of Georgia

Co-Author: Brett R. Blaauw – University of Georgia

Co-Author: Ted E. Cottrell – USDA-ARS

Co-Author: Alejandro Del-Pozo – Virginia Tech Co-Author: Michael E. Reding – USDA-ARS Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
8:48 AM – 9:00 AM MST Optimizing traps for ambrosia beetle monitoring: Types, colors, and placement heights in the pecan production system  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Rajendra Acharya (he/him/his) – University of Georgia Co-Author: Shivakumar Veerlapati (he/him/his) – University of Georgia Co-Author: Apurba K K. Barman – University of Georgia 10-Minute Presentation Plant-Insect Ecosystems	
9:00 AM – 9:12 AM MST Pesticide use effects on beneficial arthropods in apple orchards  Location: Phoenix Convention Center, 127 C Presenting Author: Diana Obregon – Cornell University Co-Author: Alejandro Calixto – Cornell University 10-Minute Presentation Plant-Insect Ecosystems	
9:12 AM – 9:24 AM MST Break Location: Phoenix Convention Center, 127 C	
9:24 AM – 9:36 AM MST Pheromone plume range and impact on mating disruption of San Jose scale in peach production  Location: Phoenix Convention Center, 127 C Presenting Author: Brett R. Blaauw – University of Georgia 10-Minute Presentation Plant-Insect Ecosystems	
9:36 AM – 9:48 AM MST Population dynamic of the cotton leafhopper <i>Jacobiasca lybica</i> (Hemiptera: Cicadellidae) and its incidence on grapevines and citrus in Morocco  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Khalid Khfif – National Institute for Agricultural Research Co-Author: Kseniia Koledenkova – University of Reims Co-Author: Mohamed Sbaghi – National Institute for Agricultural Research Co-Author: Abdelhamid Zaid – Moulay Ismail University of Meknes	

Co-Author: Yves Brostaux – University of Liege Co-Author: Lhoussaine El Rhaffari – Moulay Ismail University of Meknes 10-Minute Presentation Plant-Insect Ecosystems	
9:48 AM – 10:00 AM MST Seasonal phenology of <i>Carpophilus truncatus</i> (Coleoptera: Nitidulidae) in almond orchards in California  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Mahesh Ghimire – University of California Co-Author: Jhalendra P. Rijal (he/him/his) – University of California Co-Author: Sudan Gyawaly – University of California Co-Author: Houston Wilson (he/him/his) – University of California Co-Author: David R. Haviland – University of California 10-Minute Presentation Plant-Insect Ecosystems	
10:00 AM – 10:12 AM MST Synthetic food baits and the capture of Mediterranean and Oriental fruit flies (Diptera: Tephritidae)  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Todd E. Shelly (he/him/his) – USDA-APHIS Co-Author: Jose A.P. Marcelino – Florida Department of Agriculture and Consumer Services Co-Author: Pedro Rendon – USDA-APHIS Co-Author: Corinna Bazelet – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
10:12 AM – 10:24 AM MST Break Location: Phoenix Convention Center, 127 C	
10:24 AM – 10:36 AM MST The effects of azadirachtin soil drenches on survivorship and development of avocado lace bug  Location: Phoenix Convention Center, 127 C Presenting Author: Michael Bosch – USDA-ARS Co-Author: Angelita L. Acebes-Doria (she/her/hers) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
10:36 AM – 10:48 AM MST Thrips complex in ornamental plants: Their abundance and management  Location: Phoenix Convention Center, 127 C Presenting Author: Rafia Akhtar Khan (she/her/hers) – Texas A&M University	

10-Minute Presentation	Plant-Insect Ecosystems
10:48 AM – 11:00 AM MST What to do about spider mites and western flower thrips in a growing southeastern strawberry industry?  Location: Phoenix Convention Center, 127 C Presenting Author: Tom Bilbo – Clemson University	
10-Minute Presentation	Plant-Insect Ecosystems
11:00 AM – 11:12 AM MST What would spotted lanternfly (<i>Lycorma delicatula</i>) life history look like if it established in Stockton, CA?  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Melody A. Keena (she/her/hers) – USDA-Forest Service	
10-Minute Presentation	Plant-Insect Ecosystems
8:00 AM – 12:00 PM MST 10-min: SysEB, Conservation and Climate Change Moderator: Karen Goodell (she/her/hers) – The Ohio State University Moderator: Kelsey Lyberger – Stanford University ⬆	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:00 AM – 8:12 AM MST Optimizing wild bee surveys for conservation management: A comparison of survey methods  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Karen Goodell (she/her/hers) – The Ohio State University Co-Author: Amber Fredenburg (she/her/hers) – The Ohio State University Co-Author: Matthew Semler – The Ohio State University Co-Author: MaLisa Spring – The Ohio State University	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:12 AM – 8:24 AM MST Bison as bee habitat engineers  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Sarah Red-Laird (she/her/hers) – Bee Regenerative	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:24 AM – 8:36 AM MST	

Diversity and conservation of Mesoamerican bees: Relative effects of three major threats within the potential distribution of bee species  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Oscar Gustavo Martínez-López, Ph.D. (he/him/his) – University of California Riverside Co-Author: Noemi Arnold – El Colegio de la Frontera Sur Co-Author: Philippe Sagot – El Colegio de la Frontera Sur Co-Author: Jorge Mérida-Rivas – El Colegio de la Frontera Sur Co-Author: Elda Miriam Aldasoro-Maya – El Colegio de la Frontera Sur Co-Author: Rémy Vandame – El Colegio de la Frontera Sur	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:36 AM – 8:48 AM MST Challenges of insect conservation in urban landscape  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Piotr Nowicki – Jagiellonian University	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:48 AM – 9:00 AM MST Break Location: Phoenix Convention Center, 127 B, PCC	
9:00 AM – 9:12 AM MST Changing herbivores and changing climate in the Great Plains: Effects on dung beetle communities and ecosystem services  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Mary Liz Liz Jameson – Wichita State University Co-Author: Morgan Triple – Universal Engineering Services Co-Author: Bryanna Woodard – Wichita State University Co-Author: Max Proctor – Wichita State University Co-Author: Ben Joseph Allgire – University of Massachusetts Co-Author: Ellen A. R. Welti – Smithsonian Institution	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
9:12 AM – 9:24 AM MST Expanding the dynamic shift detector algorithm to monitor insect populations through time  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Thomas P. Franzem – Kent State University Co-Author: Mariamar Gutierrez Ramirez – National Park Service Co-Author: Leo Kuck (he/him/his or they/them/theirs) – National Park Service Co-Author: Christie Bahlai – Kent State University	

10-Minute Presentation	Systematics, Evolution, and Biodiversity
9:24 AM – 9:36 AM MST	
Insect interactions with wind turbines: The state of knowledge and future directions	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Michelle Weschler, MSc – University of Wyoming	
Co-Author: Lusha M. Tronstad, Ph.D. – University of Wyoming	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
9:36 AM – 9:48 AM MST	
Leveraging high-throughput genomics to aid imperiled insect conservation	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Ivone de Bem Oliveira, Ph.D. (she/her/hers) – University of Florida	
Co-Author: Taylor Pierson (she/her/hers) – University of Florida	
Co-Author: Leonardo C. J Corvalan, MSc – University of Florida	
Co-Author: Sarah Steele Cabrera – University of Florida	
Co-Author: Geena Hill – University of Florida	
Co-Author: Amanda Markee (she/her/hers) – American Museum of Natural History	
Co-Author: Jaret C. Daniels, Ph.D. – University of Florida	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
9:48 AM – 10:00 AM MST	
Break	
Location: Phoenix Convention Center, 127 B, PCC	
10:00 AM – 10:12 AM MST	
Takeaways from a unique initiative for advancing at-risk butterfly conservation and recovery efforts	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Jaret C. Daniels, Ph.D. – University of Florida	
Co-Author: Kristin Rossetti – Florida Museum of Natural History	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:12 AM – 10:24 AM MST	
Thermal tolerance and size variability in mosquitoes across a climate gradient	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Kelsey Lyberger – Stanford University	
Co-Author: Lisa Couper – University of California	
Co-Author: Johannah Farner – Stanford University	
Co-Author: Erin Mordecai – Stanford University	

10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:24 AM – 10:36 AM MST	
Priority conservation areas for protected saproxylic beetles in Romania under current and future climate scenarios	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Marian D. Mirea – University of Bucharest	
Co-Author: Iulia Miu – University of Bucharest	
Co-Author: Viorel Popescu – Columbia University	
Co-Author: Bekka Brodie – Columbia University	
Co-Author: Silviu Chiriac – Vrancea Environmental Protection Agency	
Co-Author: Laurentiu Rozyłowicz – University of Bucharest	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:36 AM – 10:48 AM MST	
Spatiotemporal trends of two tortricid pests of macadamia in Hawaii unravel the threats of invasive species to native compositions	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Pascal Osabhaahiem Aigbedion-Atalor, Ph.D. – DKI US Pacific Basin Agricultural Research Center	
Co-Author: Nathalie de Rocquigny – University of Hawaii	
Co-Author: Angelita L. Acebes-Doria (she/her/hers) – USDA-ARS	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:48 AM – 11:00 AM MST	
Comparative neuroanatomy of ant mushroom bodies	
Location: Phoenix Convention Center, 127 B, PCC	
Presenting Author: Hlib Burtsev (he/him/his) – Brown University	
Co-Author: Shubham Gautam – Okinawa Institute of Science and Technology	
Co-Author: Evan P. Economo – Okinawa Institute of Science and Technology	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
8:00 AM – 12:00 PM MST	
10-min: PBT, Toxicology	
Moderator: Flinn Martin O'Hara – University of Florida	
Moderator: Xianchun Li, Ph.D. (he/him/his) – University of Arizona	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
8:00 AM – 8:12 AM MST	

Developmental and neurological effects of arsenic on <i>Drosophila melanogaster</i>  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Jawaid Ahsan, Ph.D. (he/him/his) – Central University of South Bihar 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:12 AM – 8:24 AM MST Discovery of natural insecticides against Navel orangeworm  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Mikhail Shilman – USDA-ARS Co-Author: Wai Gee – USDA-ARS Co-Author: Thomas Henderson – USDA-ARS Co-Author: Ronald Haff – USDA-ARS Co-Author: Evelynne Hougardy – USDA-ARS Co-Author: Somanette Rivas – USDA-ARS Co-Author: Brian N. Hogg – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:24 AM – 8:36 AM MST Eco-friendly management of two stored products insect pests by entomopathogenic fungus (<i>Metarhizium anisoplae</i>) under different abiotic conditions  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Awais Ali Chatha, Sr. (he/him/his) – Government College University Faisalabad Co-Author: Muhammad Asrar, Sr. 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:36 AM – 8:48 AM MST Elucidating resistance mechanisms of western corn rootworm to Bt toxins and dsRNAs via metabolomics approaches  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Man P. Huynh (he/him/his) – University of Missouri Co-Author: Bruce E. Hibbard – USDA-ARS Co-Author: Khanh-Van Ho – University of Missouri Co-Author: Kent Shelby – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
8:48 AM – 9:00 AM MST Enhanced apoptosis contributes to the synergistic interaction between Cry1Ac and xanthotoxin  Location: Phoenix Convention Center, 226 B, PCC

Presenting Author: Xianchun Li, Ph.D. (he/him/his) – University of Arizona Co-Author: Yudong Ren – Zhengzhou University Co-Author: Zhongyuan Deng – Zhengzhou University Co-Author: Lixiang Wang – Zhengzhou University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:00 AM – 9:12 AM MST Break Location: Phoenix Convention Center, 226 B, PCC
9:12 AM – 9:24 AM MST Evaluating the toxic effect of CBD on <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Erick Javier Martinez – The Ohio State University Co-Author: Luis A. Canas – The Ohio State University Co-Author: Peter M. Piermarini – The Ohio State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:24 AM – 9:36 AM MST First insights towards RNAi-based management of the pollen beetle <i>Brassicogethes viridescens</i>  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Jonathan Willow – Estonian University of Life Sciences Co-Author: Triin Kallavus – Estonian University of Life Sciences Co-Author: Éricmar Avila dos Santos – Ghent University Co-Author: Clauvis Taning – Ghent University Co-Author: Kristof De Schutter – Ghent University Co-Author: Guy Smaghe – Ghent University Co-Author: Eve Veromann – Estonian University of Life Sciences 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:36 AM – 9:48 AM MST Functional characteristics of sodium channels in <i>Lygus lineolaris</i> and <i>Lygus hesperus</i> from <i>Xenopus</i> Oocytes expression system  Location: Phoenix Convention Center, 226 B, PCC Presenting Author: Yuzhe Du (she/her/hers) – USDA-ARS Co-Author: Yuzhe Du (she/her/hers) – USDA-ARS Co-Author: Shane Scheibener – USDA-ARS Co-Author: Yu-Cheng Zhu (he/him/his) – USDA-ARS Co-Author: Omaththage Perera – USDA-ARS Co-Author: Gadi V.P. Reddy – USDA-ARS

Co-Author: Johnalyn Gordon (she/her/hers) – University of Florida Co-Author: Zachary DeVries – University of Kentucky 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:12 AM – 8:24 AM MST Responses to sublethal insecticide exposure in the German cockroach (Blattodea: Ectobiidae)  Location: Phoenix Convention Center, 223, PCC Presenting Author: Shao-Hung Dennis Lee (he/him/his) – University of California Co-Author: Man Zhao – University of California Co-Author: Chow-Yang Lee, BCE – University of California 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:24 AM – 8:36 AM MST The gut microbiota confers resistance against <i>Salmonella</i> Typhimurium in the German cockroach vector via key indicator species, contributing to variation in infection outcome  Location: Phoenix Convention Center, 223, PCC Presenting Author: Matt Turner – University of South Dakota Co-Author: Landen Van Hulzen – University of South Dakota Co-Author: Kylene Guse – University of South Dakota Co-Author: Jose Pietri (he/him/his) – University of South Dakota 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:36 AM – 8:48 AM MST Effectiveness of colored baits for controlling German cockroaches, <i>Blattella germanica</i> L. (Dictyoptera: Blattellidae)  Location: Phoenix Convention Center, 223, PCC Presenting Author: Anil Chandra Neupane – National Pingtung University of Science and Technology Co-Author: Lekhnath Kafle – National Pingtung University of Science and Technology 10-Minute Presentation Medical, Urban, and Veterinary Entomology
8:48 AM – 9:00 AM MST A new baiting study on the dark rover ant in California  Location: Phoenix Convention Center, 223, PCC Presenting Author: Siavash Taravati – University of California 10-Minute Presentation Medical, Urban, and Veterinary Entomology
9:00 AM – 9:12 AM MST

<i>Piper crassinervium</i> essential oil: Toxicity and repellency against imported fire ants (Formicidae: Hymenoptera)  Location: Phoenix Convention Center, 223, PCC Presenting Author: Farhan Mahmood Shah, Ph.D. – University of Mississippi Co-Author: Mei Wang – University of Mississippi Co-Author: Jianping Zhao – University of Mississippi Co-Author: Joesph Lee – University of Mississippi Co-Author: Ikhlās A. Khan – University of Mississippi Co-Author: Abbas Ali – University of Mississippi 10-Minute Presentation Medical, Urban, and Veterinary Entomology
9:12 AM – 9:24 AM MST Break Location: Phoenix Convention Center, 223, PCC
9:24 AM – 9:36 AM MST An alliance to improve urban pest ant management  Location: Phoenix Convention Center, 223, PCC Presenting Author: Dong-Hwan Choe – University of California Co-Author: Chow-Yang Lee, BCE – University of California Co-Author: Michael K. Rust – University of California Co-Author: Karey Windbiel-Rojas – University of California 10-Minute Presentation Medical, Urban, and Veterinary Entomology
9:36 AM – 9:48 AM MST Are fire ants sensitive to feeding on biogenic amines?  Location: Phoenix Convention Center, 223, PCC Presenting Author: Ashley Marin Morris – USDA-ARS Co-Author: Satya P. Chinta – USDA-ARS Co-Author: Robert Kenneth Vander Meer – USDA-ARS 10-Minute Presentation Medical, Urban, and Veterinary Entomology
9:48 AM – 10:00 AM MST Using a biomimetic material to stop bed bugs (<i>Cimex lectularius</i> L.) in their tracks: Effects of differences in horizontal and vertical locomotion  Location: Phoenix Convention Center, 223, PCC Presenting Author: Patrick Liu – University of California Co-Author: Patrick Liu – University of California Co-Author: Catherine Loudon – University of California Co-Author: Jorge Bustamante, Jr. (he/him/his) – University of California

Co-Author: Dong-Hwan Choe – University of California Co-Author: Kathleen Campbell – University of California Co-Author: Andrew Mason Sutherland, BCE – University of California	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:00 AM – 10:12 AM MST Leaf-derived entrapment material captures more bed bugs than selected commercial monitoring devices in field experiments (Hemiptera: Cimicidae)  Location: Phoenix Convention Center, 223, PCC Presenting Author: Jorge Bustamante, Jr. (he/him/his) – University of California Co-Author: Patrick Liu – University of California Co-Author: Kathleen Campbell – University of California Co-Author: Andrew Mason Sutherland, BCE – University of California Co-Author: Dong-Hwan Choe – University of California Co-Author: Catherine Loudon – University of California	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:12 AM – 10:24 AM MST Evaluation and comparison of whole-home heat systems when utilized for bed bug (<i>Cimex lectularius</i> L.) elimination in low-income housing units  Location: Phoenix Convention Center, 223, PCC Presenting Author: Dini M. Miller, Ph.D. (she/her/hers) – Virginia Tech Co-Author: Dakotah B. Todd – Virginia Tech Co-Author: Morgan Martin Wilson (she/her/hers) – Virginia Tech	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:24 AM – 10:36 AM MST Natural products & the bed bug problem in the changing climate: Lessons to learn  Location: Phoenix Convention Center, 223, PCC Presenting Author: Junaid ur Rehman (he/him/his) – University of Mississippi Co-Author: Amar G. Chittiboyina – University of Mississippi Co-Author: Ikhlas A. Khan – University of Mississippi	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:36 AM – 10:48 AM MST Break Location: Phoenix Convention Center, 223, PCC	
10:48 AM – 11:00 AM MST	

Application of insecticide dusts for the management of Indian meal moth wandering larvae under laboratory conditions  Location: Phoenix Convention Center, 223, PCC Presenting Author: Xiaodan Pan – Rutgers University Co-Author: Changlu Wang – Rutgers University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:00 AM – 11:12 AM MST Hydrogen cyanide as an alternative fumigant for stored product pests in the USA  Location: Phoenix Convention Center, 223, PCC Presenting Author: Thomas W. Phillips, Ph.D. – Kansas State University Co-Author: Jamie Aikins – Kansas State University Co-Author: Md. Mahbub Hasan	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:12 AM – 11:24 AM MST Ozone gas (O3) fumigation as an alternative control of <i>Tribolium castaneum</i> and <i>Cryptolestes ferrugineus</i>  Location: Phoenix Convention Center, 223, PCC Presenting Author: Shahzad Saleem (he/him/his) – COMSATS University Islamabad, Sahiwal Campus Co-Author: Linda Mason, Ph.D. – Purdue University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:24 AM – 11:36 AM MST Are whole building pest inspections better than targeted inspections in affordable housing?  Location: Phoenix Convention Center, 223, PCC Presenting Author: Stephen A. Kells, BCE – University of Minnesota Co-Author: Lan Liu – University of Minnesota	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:36 AM – 11:48 AM MST Resisting resistance: Identifying biochemical biomarkers for pyrethroid resistance in <i>Aedes aegypti</i> mosquitoes  Location: Phoenix Convention Center, 223, PCC Presenting Author: Carla-Cristina Melo Edwards – University of California Co-Author: Geoffrey M. Attardo (he/him/his) – University of California	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	

8:00 AM – 12:15 PM MST 10-min: MUVE, Mosquito Biology and Ecology Moderator: Arpita Dalal (she/her/hers) – University of Nebraska Moderator: Joshua Benoit – University of Cincinnati 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
8:00 AM – 8:12 AM MST Temperature effects on foraging efficiency of range expanding mosquitoes: A functional response study  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Arpita Dalal (she/her/hers) – University of Nebraska Co-Author: Prithish Halder – University of Nebraska Co-Author: Xixian Ng – University of Nebraska Co-Author: Troy Anderson – University of Nebraska Co-Author: John P. DeLong – University of Nebraska 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
8:12 AM – 8:24 AM MST Blood feeding and transfluthrin exposure on <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Robert L. Aldridge (he/him/his) – USDA-ARS Co-Author: Edmund Norris – USDA-ARS Co-Author: Seth Gibson – USDA-ARS Co-Author: Adam Bowman – USDA-ARS Co-Author: Jedidiah Kline – USDA-ARS Co-Author: Daniel L. Kline – USDA-ARS Co-Author: Kenneth J. Linthicum, BCE – USDA-ARS 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
8:24 AM – 8:36 AM MST Correlating electropenetrography waveforms with transcriptomic profiles in <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Miriam Shani Ruhinda (she/her/hers) – Kansas State University Co-Author: Dana Mitzel – USDA-ARS Co-Author: Phillip Shults – USDA-ARS Co-Author: Kristopher Silver (he/him/his) – Kansas State University 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
8:36 AM – 8:48 AM MST	

Effects of an obligate intracellular microsporidian parasite on the microbiota of <i>Aedes aegypti</i>  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Dom Magistrado (she/her/hers) – The Ohio State University Co-Author: Sarah M. Short – The Ohio State University 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
8:48 AM – 9:00 AM MST Molecular mechanisms mediating larval ecology and mosquito host-seeking behavior  Location: Phoenix Convention Center, 222 A Presenting Author: Karthikeyan Chandrasegaran (he/him/his) – University of California Co-Author: Clement Vinauger, Ph.D. – Virginia Tech Co-Author: Adaline Bisese – Virginia Tech 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
9:00 AM – 9:12 AM MST Synchronized rhythms in human body odor and mosquito olfactory behavior  Location: Phoenix Convention Center, 222 A Presenting Author: Clement Vinauger, Ph.D. – Virginia Tech Co-Author: Lan Lou – Virginia Tech Co-Author: Karthikeyan Chandrasegaran (he/him/his) – University of California Co-Author: Emilie Applebach – Virginia Tech Co-Author: Adaline Bisese – Virginia Tech Co-Author: Richard Rust – Virginia Tech Co-Author: Zhijian Tu – Virginia Tech Co-Author: Chloe Lahondere – Virginia Tech 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
9:12 AM – 9:24 AM MST Break Location: Phoenix Convention Center, 222 A	
9:24 AM – 9:36 AM MST Drought increases the prevalence of multiple blood feeding events in mosquitoes  Location: Phoenix Convention Center, 222 A Presenting Author: Joshua Benoit – University of Cincinnati Co-Author: Christopher James Holmes – University of Cincinnati Co-Author: Souvik Chakraborty – University of Cincinnati Co-Author: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati Co-Author: Melissa R. Uhran – University of Cincinnati Co-Author: Ronja Aleksandra Frigard (she/her/hers) – University of Cincinnati	

Co-Author: Shyh-Chi Chen – University of Cincinnati Co-Author: Jason Rasgon – The Pennsylvania State University Co-Author: Matthew DeGennaro – Florida International University Co-Author: Yanyu Xiao – University of Cincinnati	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
9:36 AM – 9:48 AM MST	
Molecular basis of olfactory-driven behaviours of <i>Culicoides imicola</i>	
Location: Phoenix Convention Center, 222 A	
Presenting Author: Adi Behar – Kimron Veterinary institute	
Co-Author: Yechial Shashar – Kimron Veterinary Institute	
Co-Author: Jonathan D. Bohbot – The Hebrew University	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
9:48 AM – 10:00 AM MST	
Biomechanical constraints and trade-offs between sugar and blood feeding in mosquitoes	
Location: Phoenix Convention Center, 222 A	
Presenting Author: Chloe Lahondere – Virginia Tech	
Co-Author: Irving Upshur – Virginia Tech	
Co-Author: Shajaesza Dhakhai Diggs (she/her/hers) – Virginia Tech	
Co-Author: Danielle Tchamba Nijike – Virginia Tech	
Co-Author: Joanna M. Reinhold, Ph.D. (she/her/hers) – Virginia Tech	
Co-Author: Sara Wilmsen – Virginia Tech	
Co-Author: Jake J. Socha – Virginia Tech	
Co-Author: Mark Stremier – Virginia Tech	
Co-Author: Clement Vinauger, Ph.D. – Virginia Tech	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
10:00 AM – 10:12 AM MST	
Leveraging molecular barcoding to identify plant sugar feeding sources in mosquitoes	
Location: Phoenix Convention Center, 222 A	
Presenting Author: Edwin R. Burgess, IV – University of Florida	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
10:12 AM – 10:24 AM MST	
Establishing a male-positive genetic sexing strain in the Asian malaria vector <i>Anopheles stephensi</i>	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Fangying Chen – University of California	

Co-Author: Shih-Che Weng, Ph.D. (he/him/his) – University of California Co-Author: Omar S. Akbari – University of California	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
10:24 AM – 10:36 AM MST	
Mast cell-derived IL-10 regulates malaria parasite transmission to <i>Anopheles stephensi</i> with a female-biased immune response	
Location: Phoenix Convention Center, 222 A	
Presenting Author: Nora Cespedes – University of Idaho	
Co-Author: Erinn L. Donnelly – University of Idaho	
Co-Author: Hannah L. Kaylor – University of Idaho	
Co-Author: Taylor A. Coles – University of Idaho	
Co-Author: Judy Van de Water – University of California	
Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
10:36 AM – 10:48 AM MST	
Break	
Location: Phoenix Convention Center, 222 A	
10:48 AM – 11:00 AM MST	
Histamine and serotonin treatment interact with temperature and infection status of <i>Anopheles stephensi</i> to alter circadian activity and potentiate <i>Plasmodium</i> transmission	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Kevin Omondi Ochwedo, Ph.D. – University of Idaho	
Co-Author: Nora Cespedes – University of Idaho	
Co-Author: Xiaodi Wang – University of Washington	
Co-Author: Ronald Essah Bentil – University of Idaho	
Co-Author: Jyotishka Datta – Virginia Tech	
Co-Author: Michael Robert – Virginia Tech	
Co-Author: Jeff Riffell – University of Washington	
Co-Author: Edwin Lewis – University of Idaho	
Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
11:00 AM – 11:12 AM MST	
Microbial communities in <i>Anopheles</i> breeding habitats in malaria-endemic sites in Ghana	
Location: Phoenix Convention Center, 222 A	
Presenting Author: Akua Obeng Forson – University of Ghana	
Co-Author: Yaw Asare Afrane – University of Ghana	
Co-Author: Isaac Kwame Sraku – University of Ghana	

Co-Author: Ivy Hurwitz – University of New Mexico
Co-Author: Douglas J. Perkins – University of New Mexico

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:12 AM – 11:24 AM MST

Behavioral and transcriptome analyses reveal the impact of sleep deprivation on mosquito biology



Location: Phoenix Convention Center, 222 A

Presenting Author: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati

Co-Author: Lyn Wang – University of Cincinnati

Co-Author: Jasmine Kennedy – University of Cincinnati

Co-Author: Clement Vinauger, Ph.D. – Virginia Tech

Co-Author: Joshua Benoit – University of Cincinnati

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:24 AM – 11:36 AM MST

The CI toxin CinB is packaged into mature spermatids and its antidote accumulates in oocyte cytoplasm



Location: Phoenix Convention Center, 222 A

Presenting Author: Seun Olaitan Oladipupo – Yale University

Co-Author: Mark Hochstrasser – Yale University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:36 AM – 11:48 AM MST

The spectral sensitivity of mosquito photoreceptors can explain behavioral preferences for colored stimuli



Location: Phoenix Convention Center, 222 A

Presenting Author: Adam J. Blake – University of Washington

Co-Author: Gregor Belušič – University of Ljubljana

Co-Author: Jeff Riffell – University of Washington

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:48 AM – 12:00 PM MST

Predictive modeling of mosquito abundance and West Nile virus transmission dynamics: Insights from a decade of surveillance in Arizona



Location: Phoenix Convention Center, 222 A

Presenting Author: Desiree Andersen – University of Arizona

Co-Author: Leigh Combrink – University of Arizona

10-Minute Presentation Medical, Urban, and Veterinary Entomology

12:00 PM – 12:12 PM MST

Anopheles population genetics on Oceanic islands and the release of genetically engineered mosquitoes



Location: Phoenix Convention Center, 222 A

Presenting Author: Melina Campos – University of California

Co-Author: Gregory Lanzaro – University of California

10-Minute Presentation Medical, Urban, and Veterinary Entomology

8:00 AM – 5:00 PM MST

Speaker Practice Room

Location: Phoenix Convention Center, 121 B

General Speaker Practice Room

9:00 AM – 12:00 PM MST

Empowering Your Future in Industry: An Interactive Career Workshop

Location: Phoenix Convention Center, 125 AB, PCC

Organizer: Scott T. O'Neal – Corteva Agriscience

Organizer: Sajjan Grover – Bayer Crop Science

Organizer: Debora Montezano – Corteva Agriscience

Organizer: Gabi Inveninato Carmona – Corteva Agriscience

Workshop Early Career Student

9:00 AM – 12:00 PM MST

Illuminating Forms Most Numerous: Systematics and Diversity of the Tenebrionoidea

Organizer: Charla Renee Replegle (they/them/theirs) – Purdue University

Organizer: Christopher Wirth – Purdue University

Organizer: Olivia Gearer – Purdue University

Member Symposium Systematics, Evolution, and Biodiversity

9:00 AM – 9:05 AM MST

Introductory remarks

Location: Phoenix Convention Center, 127 A

Presenting Author: Charla Renee Replegle (they/them/theirs) – Purdue University

9:05 AM – 9:20 AM MST

Towards stabilizing Nearctic tenebrionoid taxonomy: A journey from the "ids" to the "oids" (Coleoptera:

Scraptiidae, Salpingidae, Melandryidae)



Location: Phoenix Convention Center, 127 A

Presenting Author: M. Andrew Johnston – Purdue University

Member Symposium	Systematics, Evolution, and Biodiversity
9:20 AM – 9:35 AM MST	
Insights into the development and function of tenebrionid defensive glands	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Adam Maxwell Rork – Purdue University	
Co-Author: Aaron D. Smith – Purdue University	
Member Symposium	Systematics, Evolution, and Biodiversity
9:35 AM – 9:50 AM MST	
A (finally) complete phylogeny for the charismatic genus <i>Onymacris</i> using ultraconserved elements	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Iris Quayle – University of California	
Member Symposium	Systematics, Evolution, and Biodiversity
9:50 AM – 9:55 AM MST	
Break	
Location: Phoenix Convention Center, 127 A	
9:55 AM – 10:10 AM MST	
Tenebrionidae and conservation	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Rolf Aalbu – California Academy of Sciences	
Co-Author: Kojun Kanda – USDA-APHIS	
Co-Author: M. Andrew Johnson – Purdue University	
Member Symposium	Systematics, Evolution, and Biodiversity
10:10 AM – 10:25 AM MST	
The Tenebrionoidea or darkling beetles and allies of Indiana	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Christopher Wirth – Purdue University	
Co-Author: M. Andrew Johnston – Purdue University	
Member Symposium	Systematics, Evolution, and Biodiversity
10:25 AM – 10:40 AM MST	
Progress in Sepidiini (Tenebrionidae: Pimeliinae) phylogeny	
Location: Phoenix Convention Center, 127 A, PCC	

Presenting Author: Olivia Gearer – Purdue University	
Co-Author: Aaron D. Smith – Purdue University	
Co-Author: Marcin Jan Kaminski (he/him/his) – Polish Academy of Sciences	
Member Symposium	Systematics, Evolution, and Biodiversity
10:40 AM – 10:55 AM MST	
A new higher taxon of <i>Heteromera</i> from Bolivia	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Michael Ivie – Montana State University	
Co-Author: Dan Young – University of Wisconsin	
Member Symposium	Systematics, Evolution, and Biodiversity
10:55 AM – 11:00 AM MST	
Break	
Location: Phoenix Convention Center, 127 A	
11:00 AM – 11:25 AM MST	
High-throughput DNA sequencing on historical collections of beetles: Phylogenetic studies among Platynotini (Tenebrionidae)	
Location: Phoenix Convention Center, 127 A, PCC	
Presenting Author: Marcin Jan Kaminski (he/him/his) – Polish Academy of Sciences	
Member Symposium	Systematics, Evolution, and Biodiversity
11:25 AM – 11:40 AM MST	
Generic revision of the relictual subtribe Dysantina (Coleoptera: Tenebrionidae: Toxicini)	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Aaron D. Smith – Purdue University	
Member Symposium	Systematics, Evolution, and Biodiversity
11:40 AM – 11:45 AM MST	
Closing remarks	
Location: Phoenix Convention Center, 127 A	
Presenting Author: Charla Renee Replogle (they/them/theirs) – Purdue University	
9:00 AM – 12:00 PM MST	
10-min: P-IE, Host-Plant Resistance	
Moderator: Hillary Fischer – Michigan State University	
Moderator: Honglin Feng – Louisiana State University	
10-Minute Presentation	Plant-Insect Ecosystems

9:00 AM – 9:12 AM MST

Age-dependent and herbivory-induced epicuticular wax in *Sorghum x drummondii* has consequences for herbivore growth and development 

Location: Phoenix Convention Center, 129 B

Presenting Author: Alejandro Rafael Vasquez Marcano – University of Arkansas

Co-Author: Rupesh Kariyat – University of Arkansas

Co-Author: Joe Louis – University of Nebraska

10-Minute Presentation Plant-Insect Ecosystems

9:12 AM – 9:24 AM MST

Aphid salivary metabolites in the plant 

Location: Phoenix Convention Center, 129 B

Presenting Author: Hillary Fischer – Michigan State University

Co-Author: Aleksandra Skirycz – Michigan State University

10-Minute Presentation Plant-Insect Ecosystems

9:24 AM – 9:36 AM MST

The genome sequence of the Chinese praying mantis (*Tenodera sinensis*) reveals the evolution of nociceptive ion channels across Arthropoda 

Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Jay Keche Goldberg – John Innes Centre

Co-Author: Keating Godfrey – University of Florida

Co-Author: Ryan Cook

Co-Author: Meghan Barrett (she/her/hers) – Indiana University Indianapolis

10-Minute Presentation Plant-Insect Ecosystems

9:36 AM – 9:48 AM MST

Cotton resistance against *Bemisia tabaci*: What compounds and regulators have a role to play? 

Location: Phoenix Convention Center, 129 B

Presenting Author: Somaiyeh Ghasemzadeh – University of Vermont

Co-Author: Yongjun Zhang – Chinese Academy of Agricultural Sciences

10-Minute Presentation Plant-Insect Ecosystems

9:48 AM – 10:00 AM MST

Differential responses of wheat cultivars to bird cherry-oat aphid and Russian wheat aphid infestations 

Location: Phoenix Convention Center, 129 B

Presenting Author: Rafael Hayashida – Oklahoma State University

Co-Author: Elizabeth Williams – Oklahoma State University

Co-Author: Lindsey McKay – Oklahoma State University

Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University

10-Minute Presentation Plant-Insect Ecosystems

10:00 AM – 10:12 AM MST

Disruption of the sorghum circadian clock impacts sorghum-sugarcane aphid interaction dynamics and aphid feeding behavior 

Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Kumar Shrestha – University of Nebraska

Co-Author: Prince Zogli – University of Nebraska

Co-Author: Lise Pingault – University of Nebraska

Co-Author: Sajjan Grover – Bayer Crop Science

Co-Author: Joe Louis – University of Nebraska

10-Minute Presentation Plant-Insect Ecosystems

10:12 AM – 10:24 AM MST

Enhancing the role of cultivar resistance in integrated management of sugarcane stem borers. 

Location: Phoenix Convention Center, 129 B

Presenting Author: Blake E. Wilson – Louisiana State University

10-Minute Presentation Plant-Insect Ecosystems

10:24 AM – 10:36 AM MST

Break

Location: Phoenix Convention Center, 129 B

10:36 AM – 10:48 AM MST

Evaluating larval performance of the South American tomato pinworm (*Tuta absoluta*) on wild tomato accessions 

Location: Phoenix Convention Center, 129 B

Presenting Author: Erika M. Bueno (she/her/hers) – University of California

Co-Author: Briley F. Mullin – University of California

Co-Author: Benjamin W. Lee – University of California

Co-Author: Ian Grettenberger – University of California

10-Minute Presentation Plant-Insect Ecosystems

10:48 AM – 11:00 AM MST

The temporal pattern of neighboring plant defense response to herbivore-specific plant volatiles 

Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Minghui Wang – Yunnan University

10-Minute Presentation Plant-Insect Ecosystems	
11:00 AM – 11:12 AM MST Minor cannabinoid major impact: Role of varins in cannabis aphid resistance  Location: Phoenix Convention Center, 129 B Presenting Author: Jacob MacWilliams – Colorado State University Co-Author: Punya Nachappa – Colorado State University 10-Minute Presentation Plant-Insect Ecosystems	
11:12 AM – 11:24 AM MST Resistant tree or resilient ecosystem? Forest insects and pathogens in longleaf pine  Location: Phoenix Convention Center, 129 B Presenting Author: Kier D. Klepzig – The Jones Center Co-Author: Kamal J.K. Gandhi – University of Georgia Co-Author: Caterina Villari – University of Georgia Co-Author: Ben Gochmour – University of Georgia Co-Author: Crystal Bishop – Clemson University 10-Minute Presentation Plant-Insect Ecosystems	
11:24 AM – 11:36 AM MST Serine proteinase inhibitors from <i>Nicotiana benthamiana</i>, a nonpreferred host plant, inhibit the growth of <i>Myzus persicae</i> (green peach aphid)  Location: Phoenix Convention Center, 129 B Presenting Author: Honglin Feng – Louisiana State University 10-Minute Presentation Plant-Insect Ecosystems	
11:36 AM – 11:48 AM MST The role of cucurbitacins on the development of the polyphagous saltmarsh caterpillar (<i>Estigmene acrea</i> Drury) (Lepidoptera: Arctiidae)  Location: Phoenix Convention Center, 129 B Presenting Author: Dimitra -. Papantoniou, Ph.D. – Texas A&M University Co-Author: Anjel Helms – Texas A&M University 10-Minute Presentation Plant-Insect Ecosystems	
11:48 AM – 12:00 PM MST The role of plant hormones in spotted lanternfly-grapevine interactions  Location: Phoenix Convention Center, 129 B Presenting Author: Flor Edith Acevedo – The Pennsylvania State University	

Co-Author: Sukhman Singh – The Pennsylvania State University 10-Minute Presentation Plant-Insect Ecosystems	
9:00 AM – 12:00 PM MST 10-min: SysEB, Systematics, Phylogenetics, and Evolution 1 Moderator: Ida Naughton – University of California Moderator: Robert L. Kresslein – USDA-ARS 10-Minute Presentation Systematics, Evolution, and Biodiversity	⌆
9:00 AM – 9:12 AM MST Endemic ants from the California Channel Islands result from divergent evolutionary processes  Location: Phoenix Convention Center, 132 A Presenting Author: Ida Naughton – University of California Co-Author: Philip Ward – University of California Co-Author: Maria Tonione – University of California Co-Author: Bo Huey Chiang – University of California Co-Author: Neil Tsutsui – University of California Co-Author: David A. Holway – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:12 AM – 9:24 AM MST Wicked ants: A global overview of diversity and evolution of Ponerinae  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: John T. Longino (he/him/his) – University of Utah 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:24 AM – 9:36 AM MST Integrative taxonomic revision and phylogenomics of <i>Nylanderia</i> Emery (Hymenoptera: Formicidae) in the Neotropics  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Jason Lee Williams – University of Florida Co-Author: John S. LaPolla, Ph.D. – Towson University Co-Author: Aswaj Punnath (he/him/his) – University of Florida Co-Author: Andrea Lucky – University of Florida 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:36 AM – 9:48 AM MST	

Carpenter ants and their little helpers: Evolutionary history of Camponotini ants and their endosymbionts



Location: Phoenix Convention Center, 132 A

Presenting Author: Philip Ward – University of California

Co-Author: Brian Lee Fisher (he/him/his) – California Academy of Sciences

Co-Author: Jennifer Wernegreen – Duke University

Co-Author: Bonnie B. Blaimer – Museum für Naturkunde

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:48 AM – 10:00 AM MST

Patterns of genetic differentiation across three levels of intimate trophic relationships reveals cryptic lineages of an inquiline wasp



Location: Phoenix Convention Center, 132 A

Presenting Author: Robinson Sudan – Texas State University

Co-Author: Amanda Driscoe – Texas State University

Co-Author: Scott P. Egan – Rice University

Co-Author: Glen R. Hood – Wayne State University

Co-Author: Andrew A. Forbes – University of Iowa

Co-Author: Jim Ott – Texas State University

10-Minute Presentation Systematics, Evolution, and Biodiversity

10:00 AM – 10:12 AM MST

Break

Location: Phoenix Convention Center, 132 A

10:12 AM – 10:24 AM MST

Mandibular rods: The form and function of a novel synapomorphy for the hymenopteran infraorder Proctotrupomorpha



Location: Phoenix Convention Center, 132 A

Presenting Author: Robert L. Kresslein – USDA-ARS

Co-Author: Brendon Elias Boudinot – Smithsonian Institution

Co-Author: Michael Jansen – USDA-ARS

Co-Author: Jonah M. Ulmer – USDA-ARS

Co-Author: John Heraty – University of California

Co-Author: Michael W. Gates (he/him/his) – USDA-ARS

10-Minute Presentation Systematics, Evolution, and Biodiversity

10:24 AM – 10:36 AM MST

The alkali bee and allies (Halictidae, Nomiinae): Phylogeny, natural history, and biogeography



Location: Phoenix Convention Center, 132 A

Presenting Author: Silas Bossert (he/him/his) – Washington State University

Co-Author: Douglas Walsh – Washington State University

10-Minute Presentation Systematics, Evolution, and Biodiversity

10:36 AM – 10:48 AM MST

Fast, cheap, and minimally destructive: A validated DNA-barcoding protocol for bees using MinION



Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Michael G. Branstetter – USDA-ARS

Co-Author: Colleen Meidt – Utah State University

Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS

Co-Author: Jeremy B. Jensen (he/him/his) – Utah State University

Co-Author: Jenny Gan – USDA-ARS

10-Minute Presentation Systematics, Evolution, and Biodiversity

10:48 AM – 11:00 AM MST

Phylogenomics and historical biogeography of diphaglossine bees (Hymenoptera, Colletidae, Diphaglossinae)



Location: Phoenix Convention Center, 132 A

Presenting Author: Felipe Vieira Freitas – Universidade de São Paulo

Co-Author: Elizabeth Murray – Washington State University

Co-Author: Michael G. Branstetter – USDA-ARS

Co-Author: Gabriel Melo – Federal University of Paraná

Co-Author: Eduardo A. B. Almeida – Universidade de São Paulo

Co-Author: Silas Bossert (he/him/his) – Washington State University

10-Minute Presentation Systematics, Evolution, and Biodiversity

11:00 AM – 11:12 AM MST

Phylogenomics and diversification dynamics of dragonflies and damselflies revealed using extensive taxon sampling and targeted enrichment



Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Lacie Newton (she/they) – American Museum of Natural History

Co-Author: Seth M. Bybee – Brigham Young University

Co-Author: Paul Bryan Frandsen – Brigham Young University

Co-Author: Aaron M. Goodman – American Museum of Natural History

Co-Author: Judicael Fomekong-Lontchi – Brigham Young University

Co-Author: Pungki Lupiyaningdyah – Brigham Young University

Co-Author: Laura Sutherland (she/her/hers) – Brigham Young University

Co-Author: Ethan R. Tolman – Virginia Tech

Co-Author: Rhema Uche-Dike (he/him/his) – American Museum of Natural History

Co-Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History

10-Minute Presentation Systematics, Evolution, and Biodiversity

11:12 AM – 11:24 AM MST

Spine dining: Leg spur morphology patterns provide insight into adult dragonfly foraging behaviors



Location: Phoenix Convention Center, 132 A

Presenting Author: Christofer Brothers – University of California

Co-Author: Stacey Combes – University of California

10-Minute Presentation Systematics, Evolution, and Biodiversity

11:24 AM – 11:36 AM MST

Evolution, phylogenomics, and transcriptomics of mayflies (Ephemeroptera)



Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Heath Ogden – Utah Valley University

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:00 AM – 12:00 PM MST

10-min: SysEB, Honey Bees and Native Pollinators

Moderator: Madeleine Ostwald – University of California

Moderator: Michael C. Orr – Stuttgart Naturkundemuseum

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:00 AM – 9:12 AM MST

Defining a pollination niche and ecological specialization associated with bristly nama in the U.S. Southern

High Plains



Location: Phoenix Convention Center, 131 C

Presenting Author: Scott Longing – Texas Tech University

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:12 AM – 9:24 AM MST

Long-term monitoring of wild bees in the longleaf pine ecosystem



Location: Phoenix Convention Center, 131 C, PCC

Presenting Author: Christine M. Favorito (she/her/hers) – The Jones Center

Co-Author: Thomas N. Sheehan (he/him/his) – University of Georgia

Co-Author: Conor G. Fair (he/him/his) – University of Georgia

Co-Author: Kier D. Klepzig – The Jones Center

Co-Author: Kamal J.K. Gandhi – University of Georgia

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:24 AM – 9:36 AM MST

Resurveying historically sampled sites to understand wild bee population trajectories



Location: Phoenix Convention Center, 131 C

Presenting Author: Kelsey K. Graham – USDA-ARS

Co-Author: Rufus Isaacs – Michigan State University

Co-Author: Paul Glaum – Waterborne Environmental

Co-Author: Terry Griswold – USDA-ARS

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:36 AM – 9:48 AM MST

Where do social bees live?



Location: Phoenix Convention Center, 131 C, PCC

Presenting Author: Michael C. Orr – Stuttgart Naturkundemuseum

Co-Author: John S. Ascher (he/him/his) – National Univerisity of Singapore

Co-Author: Jason Gibbs – University of Manitoba

Co-Author: Michael Mikat – Charles University

Co-Author: Jakub Straka – Univerzita Karlova

Co-Author: Alice C. Hughes – University of Hong Kong

10-Minute Presentation Systematics, Evolution, and Biodiversity

9:48 AM – 10:00 AM MST

Automating bee wing analysis: Computer vision for biodiversity monitoring and evolutionary ecology research



Location: Phoenix Convention Center, 131 C, PCC

Presenting Author: Madeleine Ostwald – University of California

Co-Author: Jorge De La Cruz – University of California

Co-Author: Charles N. Thrift (he/him/his) – University of California

Co-Author: Katja Seltmann – University of California

10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:00 AM – 10:12 AM MST	
Can cavity-nesting bees and wasps be reliably identified from participatory science observations of nest characteristics?	
	
Location: Phoenix Convention Center, 131 C, PCC	
Presenting Author: Garret Jolma, MSc (he/him/his) – Butterfly Pavilion	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:12 AM – 10:24 AM MST	
New insights into the ecology of <i>Osmia calaminthae</i> , an imperiled bee species in Florida	
	
Location: Phoenix Convention Center, 131 C, PCC	
Presenting Author: Chase Billingsley Kimmel, Ph.D. (he/him/his) – University of Florida	
Co-Author: Ivone de Bem Oliveira, Ph.D. (she/her/hers) – University of Florida	
Co-Author: Clint Gibson – University of Florida	
Co-Author: Jonathan Elmquist – University of Florida	
Co-Author: Jaret C. Daniels, Ph.D. – University of Florida	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:24 AM – 10:36 AM MST	
Break	
Location: Phoenix Convention Center, 131 C	
10:36 AM – 10:48 AM MST	
Gut microbiome safeguarding honey bees against fungal pathogens	
	
Location: Phoenix Convention Center, 131 C	
Presenting Author: Svyetlana Kruse – Rowan University	
Co-Author: Mathew Pekora – Rowan University	
Co-Author: Jason Melendez – Rowan University	
Co-Author: Priscila Rosario – Rowan University	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
10:48 AM – 11:00 AM MST	
Overwintering survival: A potential determinant of geographic range limits in <i>Bombus</i>	
	
Location: Phoenix Convention Center, 131 C	
Presenting Author: Brook Milligan – New Mexico State University	
Co-Author: Ashley Therese Rohde – New Mexico State University	
10-Minute Presentation	Systematics, Evolution, and Biodiversity

11:00 AM – 11:12 AM MST	
Probiotics and dietary effects on the microbiota and health of honey bees	
	
Location: Phoenix Convention Center, 131 C	
Presenting Author: Farida Azzouz Olden – Kentucky State University	
Co-Author: Joseph Palmer – Kentucky State University	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
11:12 AM – 11:24 AM MST	
What honeybee queen reproduction tells us about germline progenitor phenotypes	
	
Location: Phoenix Convention Center, 131 C	
Presenting Author: Georgia Cullen – University of Kentucky	
Co-Author: Josh Gilligan – University of Otago	
Co-Author: Joseph Guhlin – University of Otago	
Co-Author: Peter K. Dearden – University of Otago	
10-Minute Presentation	Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST	
D3513: Risk-based commercial citrus survey for HLB/ACP in San Joaquin Valley, California	
	
Location: Phoenix Convention Center, Exhibit Hall 6, PCC	
Presenting Author: Saurabh Gautam – Alliance of Pest Control Districts	
Co-Author: Subhas Hajeri – Alliance of Pest Control Districts	
Co-Author: Dhiraj Gautam – Alliance of Pest Control Districts	
Co-Author: Weiqi Luo – North Carolina State University	
Poster Display	Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST	
D3546: Mechanosensitivity in relation to diet of host <i>Manduca sexta</i>	
	
Location: Phoenix Convention Center, Exhibit Hall 6, PCC	
Presenting Author: Joseph Cosmo Iacovazzi, III (he/him/his) – Keystone College	
Co-Author: Carol Miles – Binghamton University	
Poster Display	Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST	
Juried Art Show	
Location: Phoenix Convention Center, Exhibit Hall 6	
Organizer: Cindy E. Myers – Entomological Society of America	
Functions/Events/Meetings	Exhibit Hall

9:00 AM – 5:00 PM MST Exhibit Hall Location: Phoenix Convention Center, Exhibit Hall 6	
General Exhibit Hall	
9:00 AM – 5:00 PM MST Student Regular Poster: FIT	^
Student Poster Display Formal and Informal Teaching Student	
9:00 AM – 5:00 PM MST D3236: Attractiveness of different bodily fluids to <i>Sarcophaga bullata</i> and the implications in sexual assault cases	
Location: Exhibit Hall 6 Presenting Author: Jillian C. Farrell – Arcadia University	
Student Poster Display Formal and Informal Teaching Student	
9:00 AM – 5:00 PM MST D3237: Buriers of the dead: An active learning exercise about sexton beetles	
Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Amelea Jones (she/her/hers) – Oklahoma State University Co-Author: Wyatt Wyatt Hoback (he/him/his) – Oklahoma State University	
Student Poster Display Formal and Informal Teaching Student	
9:00 AM – 5:00 PM MST D3238: Mosquito community composition in two natural areas of South Texas	
Location: Exhibit Hall 6 Presenting Author: Alexandra Encina – University of Texas Co-Author: Yuexun Tian – Texas A&M University Co-Author: Francisco Ferreira (he/him/his) – Texas A&M University Co-Author: Nadia Fernandez Santos – Texas A&M University Co-Author: Gabriel L. Hamer (he/him/his) – Texas A&M University	
Student Poster Display Formal and Informal Teaching Student	
9:00 AM – 5:00 PM MST Student Regular Poster: MUVE	^
Student Poster Display Medical, Urban, and Veterinary Entomology Student	
9:00 AM – 5:00 PM MST	

D3239: Black soldier fly adults as potential vectors of Methicillin-resistant <i>Staphylococcus aureus</i> and other pathogenic bacteria	
Location: Exhibit Hall 6 Presenting Author: Kalini Jankee – University of Maine Co-Author: Julia Coombs – University of Maine Co-Author: Matthew A. Moyet (he/him/his) – University of Maine Co-Author: Edward Bernard – University of Maine Co-Author: Andrei Alyokhin – University of Maine	
Student Poster Display Medical, Urban, and Veterinary Entomology Student	
9:00 AM – 5:00 PM MST D3240: Capturing mosquitoes with electric fields using insulated conductor wires	
Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Autumn Roberts (she/her/hers) – Arizona State University Co-Author: Michael Erickson – Arizona State University Co-Author: Ndey Jobe – Arizona State University Co-Author: Krijn Paaijmans – Arizona State University	
Student Poster Display Medical, Urban, and Veterinary Entomology Student	
9:00 AM – 5:00 PM MST D3241: Circadian rhythms of <i>Culicoides sonorensis</i> biting midges infected with arboviruses	
Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Brandon Hall – Kansas State University Co-Author: Edward Bird – Kansas State University Co-Author: Barbara S. Drolet (she/her/hers) – USDA-ARS Co-Author: Kristopher Silver (he/him/his) – Kansas State University Co-Author: Dana Nayduch – USDA-ARS	
Student Poster Display Medical, Urban, and Veterinary Entomology Student	

9:00 AM – 5:00 PM MST D3243: Effects of caffeine on sleep and activity in mosquitoes  Location: Exhibit Hall 6 Presenting Author: Lyn Wang – University of Cincinnati Co-Author: Evan S. Smith – University of Cincinnati Co-Author: Arturo Ledezma – University of Cincinnati Co-Author: Pranav Jayakumar – University of Cincinnati Co-Author: Oluwaseun Matthew Ajayi (he/him/his) – University of Cincinnati Co-Author: Joshua Benoit – University of Cincinnati Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3244: Environmental health benefit of SIT release in Fresno County Cal, 2016-2019  Location: Exhibit Hall 6 Presenting Author: Kasem Salim – University of California Co-Author: Andrea L. Joyce, Ph.D. – University of California Co-Author: Jodi Holeman – Consolidated Mosquito Abatement District Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3245: Exploration of wolbachia in mosquitoes (Diptera: Culicidae)  Location: Exhibit Hall 6 Presenting Author: Jovany Barajas – University of California Co-Author: Abril Medina – University of Guadalajara Co-Author: Andrea L. Joyce, Ph.D. – University of California Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3246: Favorable micro-climates to combat water loss in a mosquito living in an otherwise unfavorable environment  Location: Exhibit Hall 6 Presenting Author: Alejandra Cruz Huerta – University of Texas Co-Author: Katherine Young – University of Texas Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3247: From mound to carrion: The influence of distance on feeding behavior in two necrophagous ant species in Southeast Texas 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Krista Rose Schulz (she/her/hers) – Sam Houston State University Co-Author: Sibyl Bucheli – Sam Houston State University Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3248: Investigating the formation of hemocyte extracellular DNA traps in the bed bug, <i>Cimex lectularius</i>  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Christian Joel Guerrero – University of South Dakota Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST D3249: Utilization of the suitability assessment of materials tool in vector-borne disease education in Arizona  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jordan Robinson – University of Arizona Co-Author: Alexandria Renault – University of Arizona Co-Author: Kacey Ernst – University of Arizona Co-Author: Mary Hayden – University of Mississippi Co-Author: Sarah Yeo – University of Arizona Co-Author: Josh Ambrister – University of Arizona Co-Author: Davida Adofoli – University of Arizona Co-Author: Skyler Eve Finucane (she/her/hers) – University of Arizona Student Poster Display Medical, Urban, and Veterinary Entomology Student
9:00 AM – 5:00 PM MST Student Regular Poster: P-IE  Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST D3262: Anthropogenic climate change and it's effects on herbivorous arthropods within the pinyon pine-juniper communities of the Great Basin  Location: Exhibit Hall 6 Presenting Author: Chloe Collier-Allen – University of Nevada Co-Author: Lee Dyer – University of Nevada Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST

D3263: Biodiversity of sweat bees (Hymenoptera: Halictidae) occurring in the Texas high plains 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Shelby Hernandez (she/her/hers) – Texas Tech University

Co-Author: Joshua Winsauer – Texas Tech University

Co-Author: Reannah Hollaway – Texas Tech University

Co-Author: Scott Longing – Texas Tech University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3264: Co-locating pollinator habitat with solar energy infrastructure: A potential win-win in conservation and energy production 

Location: Exhibit Hall 6

Presenting Author: Tristan A. Barley (he/him/his) – University of Illinois

Co-Author: Lily Reynolds – University of Illinois

Co-Author: Elena M. Gratton – The Pennsylvania State University

Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3265: Compositional changes in the Ephemeroptera, Plecoptera, and Trichoptera of an urban river (Mill Creek, OR-WA) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Quinn Erik Miller (he/him/his) – Whitman College

Co-Author: Heidi Dobson – Whitman College

Co-Author: Lucien Rochelois – Whitman College

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3266: *Crithidia bombi* fluorescence loss in the absence of neomycin 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Neida O. Portillo (they/them/theirs) – Umass Amherst

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3267: Crop-associated microbiota differentially regulate corn and cotton resistance to herbivory 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Morgan Thompson (she/her/hers) – Texas A&M University

Co-Author: Jayda Arriaga – Texas A&M University

Co-Author: Lindsey Perkin – USDA-ARS

Co-Author: Anjel Helms – Texas A&M University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3268: CT scanning bees for pollen identity and quantification: A novel approach 

Location: Exhibit Hall 6

Presenting Author: Samantha Pryer – University of Florida

Co-Author: Rachel E. Mallinger – University of Florida

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3269: Effect of decreased snowpack on a rare butterfly's host plant 

Location: Exhibit Hall 6

Presenting Author: Christopher Walsh – Providence College

Co-Author: Rachael E. Bonoan – Providence College

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3270: Enhancement of a pollen substitute to promote honeybee health 

Location: Exhibit Hall 6

Presenting Author: Santosh Ghimire – Kentucky State University

Co-Author: Joseph Palmer – Kentucky State University

Co-Author: Farida Azzouz Olden – Kentucky State University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3271: Exploring the growth dynamics and infectivity of cultured *Crithidia bombi* on host bumblebees *Bombus impatiens* 

Location: Exhibit Hall 6

Presenting Author: Shakira Keyla Affoue Ebian (she/her/hers) – University of Massachusetts

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3272: Heat stress and its influence on a sub-tropical annual crop and its pollinators: Implications for agriculture in an era of climate change 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Blaire M. Kleiman – Florida International University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3273: Hemiptera diversity in almond orchards and association with crop phenology



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Phillip Callahan – University of California

Co-Author: Fabian Gonzalez – University of California

Co-Author: Andrea L. Joyce, Ph.D. – University of California

Co-Author: Jhalendra P. Rijal (he/him/his) – University of California

Co-Author: Sudan Gyawaly – University of California

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3274: How far does a leafhopper move? Measuring the dispersive distance of *Euscelidius variegates* (Hemiptera: Cicadellidae) in Oregon sweet cherry orchards using mark-release-recapture method



Location: Exhibit Hall 6

Presenting Author: Yan Yan – Oregon State University

Co-Author: Anders Wohler – Oregon State University

Co-Author: Maggie Freeman – Oregon State University

Co-Author: Kelsey Galimba – Oregon State University

Co-Author: Ashley Thompson – Oregon State University

Co-Author: Chris Adams – Oregon State University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3275: Impacts of mulch treatments on pest, predator, and pollinator arthropod populations on strawberry crops in Northwest Washington



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Claire Winslow – Washington State University

Co-Author: Julia Gray – Washington State University

Co-Author: Louis Nottingham – Washington State University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3276: Influence of seeding method and time on establishment of native prairie plant communities and associated changes in bee abundance and diversity



Location: Exhibit Hall 6

Presenting Author: Ryan Beard – Purdue University

Co-Author: Douglas Richmond – Purdue University

Co-Author: Aaron Patton – Purdue University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3277: Insect pests of the sweet potatoes and their management in Florida and Brazil



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Maria Jessica dos Santos Cabral – Universidade Federal dos Vales do Jequitinhonha e Mucuri

Co-Author: Muhammad Haseeb – Florida A&M University

Co-Author: Marcus Alvarenga Soares – Universidade Federal dos Vales do Jequitinhonha e Mucuri Diamantina

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3278: Interactive effects of climate and chemical stressors on important pollinators



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Marie Muniz – The Pennsylvania State University

Co-Author: Heather Grab – Cornell University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3279: Investigating one dark taxon, Platygastriidae (Hymenoptera: Platygastroidea) for biocontrol of another: The blueberry gall midge complex (Diptera: Cecidomyiidae)



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Monique Raymond (she/her/hers) – University of New Hampshire

Co-Author: Elijah Talamas – Florida State Collection of Arthropods

Co-Author: M. Bellemore – University of New Hampshire

Co-Author: István Mikó – University of New Hampshire

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3280: Linking society and science: UW Madison's bee campus initiative



Location: Exhibit Hall 6

Presenting Author: Victoria Salerno – University of Wisconsin

Co-Author: James D. Crall – University of Wisconsin

Co-Author: Russell L. Groves, Ph.D. – University of Wisconsin

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3281: Love triangle? *Brassica napus*, Aster yellows, and Aster leafhoppers (Hemiptera: Cicadellidae)



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jeremy R. Irvine, BSc, AAg (he/him/his) – University of Saskatchewan

Co-Author: Berenice Romero (she/her/hers) – Louisiana State University

Co-Author: Sean M. Prager, Ph.D., FRES – University of Saskatchewan

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3282: Lower lethal temperature and time of soybean gall midge



Location: Exhibit Hall 6

Presenting Author: Pheylan Alan Anderson – University of Minnesota

Co-Author: Robert Venette – USDA-Forest Service

Co-Author: Bruce D. Potter – University of Minnesota

Co-Author: Anthony Hanson – University of Minnesota

Co-Author: Robert Koch – University of Minnesota

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3283: Marking corn silk flies (Diptera: Ulidiidae) for mark release recapture studies and adult behavioral manipulation



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Brynn Johnson – University of Florida

Co-Author: Julien Beuzelin – University of Florida

Co-Author: Sandra A. Allan – USDA-ARS

Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida

Co-Author: Philip G. Hahn – University of Florida

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3284: Meet the flies that pollinate!



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Hannah Chu (she/her/hers) – University of California

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3285: Optimizing corn rootworm monitoring locations



Location: Exhibit Hall 6

Presenting Author: Fletcher A. E. Robbins – University of Wisconsin

Co-Author: Emily Bick, BCE-Intern – University of Wisconsin

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3286: Phytohormone-mediated plant resistance reduces aphid nutritional quality and increases predator consumption



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Bijay Subedi – The Pennsylvania State University

Co-Author: Victoria Pocius – Douglas Products

Co-Author: Monica Kersch-Becker – The Pennsylvania State University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3287: Pollen from the native tree *Eucryphia cordifolia* (Ulmo) decreases DWV-A viral load and improves the immune response and survival of honeybees (*Apis mellifera* L.)



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Richard Garcia (he/him/his) – University of Concepcion

Co-Author: Camila Ramos – University of Concepcion

Co-Author: María D. López Belchí – University of Concepcion

Co-Author: Norberto Arismendi – University of Santo Tomas

Co-Author: Marisol Vargas – University of Concepcion

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3288: Seasonal population patterns of crape myrtle bark scale (*Acanthococcus lagerstroemiae*) in Clemson, South Carolina



Location: Exhibit Hall 6

Presenting Author: Samantha Kennett – Clemson University

Co-Author: Emily E. Mueller – Architect of the Capitol

Co-Author: Nilesh Timilsina – Clemson University

Co-Author: David R. Coyle – Clemson University

Student Poster Display Plant-Insect Ecosystems Student

9:00 AM – 5:00 PM MST

D3289: The beneficial bugs of Louisiana's fields



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Saurav Ranabhat (he/him/his) – Louisiana State University

Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST D3290: The direct and indirect effects of PGPR on maize plants' defense to the fall armyworm Location: Exhibit Hall 6 Presenting Author: Shravya Kolli – Texas A&M University Co-Author: Caixing Xiong – Texas A&M University Co-Author: Pascal Ayelo – Texas A&M University Co-Author: Basu D. Kafilé – Texas A&M University Co-Author: Henry Fadamiro – Texas A&M University Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST D3291: The impact of <i>Beauveria bassiana</i> on squash bugs mortality Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kayla Waters (she/her/hers) – University of Maryland Eastern Shore Co-Author: Kimberly Okpah – University of Maryland Co-Author: Tigest A. Tolosa – University of Maryland Co-Author: Simon Zebelo – University of Maryland Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST D3292: The pollination and reproductive biology of two endemic cacti of northern Arizona (<i>Pediocactus peeblesianus</i> var. <i>fickeiseniae</i> and <i>P. paradinei</i>) Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Olivia A. Steinmetz (she/her/hers) – Northern Arizona University Co-Author: Clare Aslan – Northern Arizona University Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST D3293: Volatile-mediated attraction of lacewing larvae (Neuroptera: Chrysopidae) varies among sorghum cultivars Location: Exhibit Hall 6 Presenting Author: Kassandra Gonzalez – Texas A&M University Co-Author: Emily Russavage (she/her/hers) – University of Maryland Co-Author: Micky Eubanks – Colorado State University Student Poster Display Plant-Insect Ecosystems Student
9:00 AM – 5:00 PM MST

Student Regular Poster: PBT Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3250: A medicinal chemistry approach to the fight against hemlock woolly adelgid: Selective pesticide development Location: Exhibit Hall 6 Presenting Author: Cole Stephens – University of Michigan Co-Author: Tesko Chaganti – Canton High School Co-Author: Mohamed Abdelalim – University of Michigan Co-Author: Adam Glendening – University of Connecticut Co-Author: Timothy Cernak – University of Michigan Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3251: Bee microbiome genome engineering: A symbiont-centered approach for investigation and improvement of honey bee health Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Patrick J. Lariviere – University of Texas Co-Author: A. H. M. Zuberi Ashraf – University of Texas Co-Author: Lucio Navarro-Escalante – University of Texas Co-Author: Sean Leonard – University of Texas Co-Author: Laurel G. Miller – University of Texas Co-Author: Nancy A. A. Moran – University of Texas Co-Author: Jeffrey E. Barrick – University of Texas Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3252: Effects of aphid endosymbionts on sensitivity to entomopathogen <i>Beauvaria bassiana</i> Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ashritha Dorai, Ph.D. – University of Melbourne Co-Author: Ary Hoffmann – Cesar Hoffmann Labs Co-Author: Joshua Thia – University of Melbourne Co-Author: Evatt Chirgwin – Cesar Hoffmann Labs Co-Author: Paul Umina – University of Melbourne Co-Author: Qiong Yang – University of Melbourne Co-Author: Xinyue Gu – University of Melbourne Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST

D3253: Effects of different coverings on insect succession and growth, and the implications in forensic casework  Location: Exhibit Hall 6 Presenting Author: Tessa Marie O'Donnell – Arcadia University Co-Author: Stephanie Rainer – Arcadia University Co-Author: Hope Royzycki – Arcadia University Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3254: Efficacy of soil-applied insecticides for control of wireworms  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Carlos J. Rivera – Louisiana State University Co-Author: Carlos Jokori Wiggins – Louisiana State University Co-Author: Blake E. Wilson – Louisiana State University Co-Author: Hannah J. Penn, Ph.D. (she/her/hers) – USDA-ARS Co-Author: Randy T. Richard – USDA-ARS Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3255: Evaluating <i>Tenebrio molitor</i> for the remediation of fumonisin B1 levels in livestock feed  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ryan T. Paulk – USDA-ARS Co-Author: Hamed Abbas – USDA-ARS Co-Author: Juan Morales Ramos, Ph.D. – USDA-ARS Co-Author: Maria Guadalupe Rojas, Ph.D. – USDA-ARS Co-Author: Mark Busman – USDA-ARS Co-Author: Nathan S. Little – USDA-ARS Co-Author: Heather Jordan – Mississippi State University Co-Author: Wayne Shier – University of Minnesota Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3257: Starvation and its impact on bumble bee pheromones  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Hannah Jeanette Moore (she/her/hers) – University of California Co-Author: Meghan Elysse Moore – University of California Co-Author: Kerry Elizabeth Mauck – University of California Co-Author: Hollis Woodard – University of California Co-Author: Naoki Yamanaka – University of California

Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST D3258: Parasitic nematode fatty acid and retinol binding proteins alter fly immunity  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Pakeeza Azizpor (she/her/hers) – University of California Student Poster Display Physiology, Biochemistry, and Toxicology Student
9:00 AM – 5:00 PM MST Student Regular Poster: SysEB  Student Poster Display Systematics, Evolution, and Biodiversity Student
9:00 AM – 5:00 PM MST D3294: Acoustic experience shapes post-copulatory mate-guarding song investment in Pacific field crickets (<i>Teleogryllus oceanicus</i>)  Location: Exhibit Hall 6 Presenting Author: Lili Hagg – University of Minnesota Co-Author: Marlene Zuk – University of Minnesota Student Poster Display Systematics, Evolution, and Biodiversity Student
9:00 AM – 5:00 PM MST D3295: Biodiversity of oak gall-associated <i>Torymus</i> (Hymenoptera: Chalcidoidea)  Location: Exhibit Hall 6 Presenting Author: Jackie Chitty – Rowan University Co-Author: Andrew A. Forbes – University of Iowa Student Poster Display Systematics, Evolution, and Biodiversity Student
9:00 AM – 5:00 PM MST D3296: Can stormwater ponds provide quality habitat for aquatic insects in urban areas?  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Hannah M. Bodmer (she/her/hers) – University of Toronto Co-Author: Vivian Dam – University of Toronto Co-Author: Shannon McCauley – University of Toronto Co-Author: Rosalind Murray – University of Toronto Student Poster Display Systematics, Evolution, and Biodiversity Student
9:00 AM – 5:00 PM MST

D3298: Diversity and host ranges of Eupelmidae parasites of oak gall wasps

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Fabiola Castaneda-Santiago – University of Iowa

Co-Author: Guerin E. Brown (he/him/his) – University of Iowa

Co-Author: MaKella Jo Steffensen – University of Iowa

Co-Author: Andrew A. Forbes – University of Iowa

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3299: Enforcement of mutualism by a root mealybug tending ant (genus *Acropyga*)

Location: Exhibit Hall 6

Presenting Author: Samuel Edward Proctor – Towson University

Co-Author: John S. LaPolla, Ph.D. – Towson University

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3300: First sequenced whole genome of a bot fly for phylogenomic and comparative genomic analyses (Diptera: Oestridae)

Location: Exhibit Hall 6

Presenting Author: Ezra Bailey – North Carolina State University

Co-Author: Paul Vincent Hickner – USDA-ARS

Co-Author: Brian Wiegman – North Carolina State University

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3301: From water born to airborne: The natural history of *Samea multiplicalis* and *Elophila oblitalis*

Location: Exhibit Hall 6

Presenting Author: Gisella DePiazza – University of Florida

Co-Author: Rhys Campo – Florida Museum of Natural History

Co-Author: Bert Foquet – University of Florida

Co-Author: Akito Y. Kawahara, Ph.D. – Florida Museum of Natural History

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3302: Genome size estimation of six mite species and the evolution of genome size in the Acari

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Anugerah Fajar (he/him/his) – University of Illinois

Co-Author: Jing Yang, Ph.D. – Shanxi Agricultural University

Co-Author: Yuying Zhang – Shanxi Agricultural University

Co-Author: Yifei Wang – Shanxi Agricultural University

Co-Author: Meifeng Ren – Shanxi Agricultural University

Co-Author: Austin Merchant – University of Kentucky

Co-Author: Xuguo Zhou – University of Kentucky

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3303: Is it a good rock crevice? Understanding nest-site selection of a rock cavity dwelling ant species, *Temnothorax rugatulus*, in their natural habitat

Location: Exhibit Hall 6

Presenting Author: Purbayan Ghosh – Arizona State University

Co-Author: Stephen Pratt – Arizona State University

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

D3304: Species distribution modeling of the red imported fire ant in Texas and prediction of future spread

Location: Exhibit Hall 6

Presenting Author: Surya Reddy – Jordan High School

Student Poster Display Systematics, Evolution, and Biodiversity Student

9:00 AM – 5:00 PM MST

Poster: FIT, General

Poster Display Formal and Informal Teaching

9:00 AM – 5:00 PM MST

D3305: Advancing education and research in medical entomology: Insights from a survey of life sciences departments

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Corey L. Brelsfoard – Texas Tech University

Co-Author: Rebekah C. Kading – Colorado State University

Co-Author: Nicole C. Kelp – Colorado State University

Co-Author: Joseph R. McMillan – Texas Tech University

Co-Author: Tim Burton – Colorado State University

Co-Author: Brian Foy – Colorado State University

Poster Display Formal and Informal Teaching

9:00 AM – 5:00 PM MST D3306: Communicating science and increasing engagement in participatory science projects: The case of Bugs Below Zero and winter-active aquatic insects  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Alyssa M. Anderson (she/her/hers) – Southwest Minnesota State University Co-Author: Rebecca Swenson – University of Minnesota Co-Author: Corrie Nyquist – Lund University Co-Author: Amy Schrank – University of Minnesota Co-Author: Bruce Vondracek – University of Minnesota Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3307: Creating a community outreach program to highlight the importance of honey bees and expand research opportunities for ASU students  Location: Exhibit Hall 6 Presenting Author: Jessica M. Willis – Arizona State University Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3308: Effect of soil type on pheromone enhanced movement of entomopathogenic nematodes  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Sehrish Gulzar, Ph.D. (she/her/hers) – USDA-ARS Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3309: Enhancing academic training in vector-borne diseases for undergraduate and graduate students in the Rockies and High Plains Region  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Rebekah C. Kading – Colorado State University Co-Author: Corey L. Brelsfoard – Texas Tech University Co-Author: Nicole C. Kelp – Colorado State University Co-Author: Joseph R. McMillan – Texas Tech University Co-Author: Tim Burton – Colorado State University Co-Author: Brian Foy – Colorado State University Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3311: Introducing biology students to digitally available insect collections data 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kirk J. Larsen – Luther College Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3312: Harnessing the potential of engagement: ESA student empowerment initiatives  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Anastasia M. Cooper (she/her/hers) – Auburn University Co-Author: Anastasia M. Cooper (she/her/hers) – Auburn University Co-Author: Flinn Martin O'Hara – University of Florida Co-Author: Laura Sparks – Entomological Society of America Co-Author: Lidia Gual-Gonzalez – University of South Carolina Co-Author: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa Co-Author: Jacqueline M. Maille (she/her/hers) – Kansas State University Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3313: Navigating leadership as an early career professional  Location: Exhibit Hall 6 Presenting Author: Laura Sparks – Entomological Society of America Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3314: Participatory pesticide safety education: Re-designing study materials  Location: Exhibit Hall 6 Presenting Author: Kellen Pautzke (she/her/hers) – Washington State University Co-Author: Anabella Valdovinos – Washington State University Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST D3315: PHEFA: Creating comprehensive and impactful internships and fellowships for MSI students and graduates  Location: Exhibit Hall 6 Presenting Author: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Poster Display Formal and Informal Teaching
9:00 AM – 5:00 PM MST

D3316: Project based learning in the high school classroom using entomology



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Ted Snyder, BCE (he / they) – Escuela Verde

Poster Display Formal and Informal Teaching

9:00 AM – 5:00 PM MST

D3317: STEAM K-12 curriculum development that connects youth with insects in the school garden



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Kaitlin U. Campbell (she/her/hers) – University of North Carolina

Co-Author: Kathy Cabe Trundle – Utah State University

Co-Author: Rita Hagevik – University of North Carolina

Co-Author: Aurora Hughes Villa – Utah State University

Co-Author: Katherine Vela – Utah Valley University

Co-Author: Lawrence Krissek – The Ohio State University

Poster Display Formal and Informal Teaching

9:00 AM – 5:00 PM MST

D3318: *Varroa destructor* economic injury levels and pathogens associated with colony losses in western Canada



Location: Exhibit Hall 6

Presenting Author: Nuria Morfin – The University of British Columbia

Co-Author: Leonard J. Foster – The University of British Columbia

Co-Author: Ernesto Guzman-Novoa (he/him/his) – University of Guelph

Co-Author: Paul Van Westendorp – BC Ministry of Agriculture and Food

Co-Author: Robert W. Currie – University of Manitoba

Co-Author: Heather Higo – The British Columbia Honey Producers Association

Poster Display Formal and Informal Teaching

9:00 AM – 5:00 PM MST

Poster: MUVE, General



Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3319: Alate trapping reveals *Solenopsis invicta* (Hymenoptera: Formicidae) reproductive flights in hot summer months in Coachella Valley, CA



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Rachel A. Atchison – USDA-ARS

Co-Author: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District

Co-Author: David H. Oi – USDA-ARS

Co-Author: Gabriela Harvey – Coachella Valley Mosquito and Vector Control District

Co-Author: Gerald Chuzel – Coachella Valley Mosquito and Vector Control District

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3320: Application of molecular bioinformation technology to estimate the age of necrophagous insects



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Yanjie Shang – Central South University

Co-Author: Yadong Guo (he/him/his) – Central South University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3321: Assessment of knowledge and practices of licensed clinical veterinarians in the United States on zoonotic diseases



Location: Exhibit Hall 6

Presenting Author: Sulagna Chakraborty – University of Illinois

Co-Author: Annalisa Fama – VCA Heritage Animal Hospital

Co-Author: William Sander, DVM, MPH (he/him/his)

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3322: Early investigations into the comparative role of hydrogen peroxide in social bees and links to nutritional stress



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Audrey Harrod (she/her/hers) – University of Georgia

Co-Author: Lewis Bartlett (they/them/theirs) – University of Georgia

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3323: Early season alternatives for horn fly management in stocker cattle



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Victoria Pickens (she/her/hers) – Kansas State University

Co-Author: Megan McGraw (she/her/hers) – Kansas State University

Co-Author: Cassandra Olds – Kansas State University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3324: Genetic diversity of *Reticulitermes* termites in North America 

Location: Exhibit Hall 6

Presenting Author: Allen L. Szalanski – University of Arkansas

Co-Author: James W. Austin, BCE – BASF

Co-Author: Rich H. Adams – University of Arkansas

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3325: Invasion Alert: Using machine learning to identify invasive ants 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lori Lach (she/her/hers) – James Cook University

Co-Author: Fatima Zaidi – Murdoch University

Co-Author: Hamid Laga – Murdoch University

Co-Author: Ferdous Sohel – Murdoch University

Co-Author: Mahmood Golzarian – Murdoch University

Co-Author: Ben Hoffmann – CSIRO

Co-Author: Chris Burwell – Queensland Museum

Co-Author: Melissa Thomas – Murdoch University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3326: Lipid regulation in *Solenopsis invicta* 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Mark Anthony Santana – University of Texas

Co-Author: Constance Lin – Texas A&M University

Co-Author: Pierre Lesne – Texas A&M University

Co-Author: Emily Russavage (she/her/hers) – University of Maryland

Co-Author: Micky Eubanks – Colorado State University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3327: MicroRNA profiling in body lice: Insights into parasite-host interactions 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Doeun Lee (she/her/hers) – Seoul National University College of Medicine

Co-Author: Gang Chan Lee – Seoul National University

Co-Author: SI Hyeock Lee – Seoul National University

Co-Author: Juhyeon Kim – Seoul National University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3328: Movement activity differs with reproductive status in workers of the ant *Harpegnathos saltator* 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Kevin Haight (he/him/his) – Arizona State University

Co-Author: Juergen Liebig (he/him/his) – Arizona State University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3329: Nuisance status of the net-spinning caddisfly, *Smicridea fasciata* (Trichoptera: Hydropsychidae):

Survey responses of residents on the Colorado River in Bullhead City, Arizona 

Location: Exhibit Hall 6

Presenting Author: Michael Cavallaro – City of Bullhead

Co-Author: Dawn Gouge – University of Arizona

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3330: Phenotyping cattle for susceptibility to buffalo flies (*Haematobia irritans exigua*) 

Location: Exhibit Hall 6

Presenting Author: Peter J. James – University of Queensland

Co-Author: Muhammad Kamran – University of Queensland

Co-Author: Ali Raza – University of Queensland

Co-Author: Conny Turni – University of Queensland

Co-Author: Ala Tabor – University of Queensland

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3331: Preliminary profile of gut microbiota in 3rd instar larvae of stable fly and substrate in Nebraska by shotgun sequencing 

Location: Exhibit Hall 6

Presenting Author: John Wang – USDA-ARS

Co-Author: Jerry Jerry Zhu – USDA-ARS

Co-Author: David Boxler – University of Nebraska

Co-Author: Gary Brewer – University of Nebraska

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST

D3332: Repellency and toxicity of thymol based synthetic derivatives against imported fire ants 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ginson George, Ph.D. (he/him/his) – University of Mississippi Co-Author: Farhan Mahmood Shah, Ph.D. – University of Mississippi Co-Author: Abbas Ali – University of Mississippi Co-Author: Jian Chen – USDA-ARS Co-Author: Ikhlās A. Khan – University of Mississippi Co-Author: Xing-Cong Li – University of Mississippi Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST Poster: MUVE, Vector Biology Poster Display Medical, Urban, and Veterinary Entomology	^
9:00 AM – 5:00 PM MST D3333: <i>Aedes aegypti</i> management logic for residential properties Location: Exhibit Hall 6 Presenting Author: Siavash Taravati – University of California Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3335: Detection of RNA and DNA viruses of fed ticks from animals in Asian countries Location: Exhibit Hall 6 Presenting Author: Joon-Seok Chae – Seoul National University Co-Author: Hye-Ryung Byun – Seoul National University Co-Author: Mi-Sun Rieu – Seoul National University Co-Author: Sun-Woo Han – Seoul National University Co-Author: Seong-Ryeong Ji – Seoul National University Co-Author: Hyun-Young Nam – Seoul National University Co-Author: Seulgi Seo – Seoul National University Co-Author: Chang-Yong Choi – Seoul National University Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3339: Exploring the role of <i>Culex restuans</i> in human WNV infection in the upper Midwest: A scoping review Location: Exhibit Hall 6 Presenting Author: Cassandra Durden, M.S. (she/her/hers) – Centers for Disease Control and Prevention Co-Author: Kristina Lopez – North Shore Mosquito Abatement District Co-Author: Saul Lozano – Centers for Disease Control and Prevention Co-Author: Anna Drexler – Centers for Disease Control and Prevention	

Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3340: Factors influencing modeled <i>Ixodes scapularis</i> phenology Location: Exhibit Hall 6 Presenting Author: Cynthia C. Lord – University of Florida Co-Author: Sara Farless – University of Florida Co-Author: Daniel Post – University of Florida Co-Author: Jean I. Tsao – Michigan State University Co-Author: Jannelle Couret – University of Rhode Island Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3341: Habitat suitability models for <i>Aedes aegypti</i> and <i>Aedes albopictus</i> in Santa Ana, El Salvador prior to a control intervention with <i>Wolbachia</i> Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Reinaldo L. Rivera Figueroa (he/him/his) – Centers for Disease Control and Prevention Co-Author: Roberto Barrera, Ph.D. – Centers for Disease Control and Prevention Co-Author: Luis Chaves – Indiana University Co-Author: Jose Ruiz-Valcarcel – Centers for Disease Control and Prevention Co-Author: Eduardo Romero – Ministry of Health of El Salvador Co-Author: Omar Martinez – Ministry of Health of El Salvador Co-Author: Berta Alvarez – Puerto Rico Science, Technology, Research Trust Co-Author: Clary Herrera – Centers for Disease Control and Prevention Co-Author: Francisco Serrano – Puerto Rico Science, Technology, Research Trust Co-Author: Cristhian Sanchez – Puerto Rico Science, Technology, Research Trust Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3342: Impact of sugarcane irrigation on <i>Anopheles</i> mosquito abundance and diversity in areas surround Illovo sugar estate in Dwangwa, Nkhotakota district, Malawi Location: Exhibit Hall 6 Presenting Author: Kenneth Ng'ambi – Mzuzu University Poster Display Medical, Urban, and Veterinary Entomology	
9:00 AM – 5:00 PM MST D3343: Insecticide resistance in <i>Aedes aegypti</i> populations of Ponce, Puerto Rico Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kristen Joy Adkins – Centers for Disease Control and Prevention / Entomological Society of America	

Co-Author: Gilberto Felix – Centers for Disease Control and Prevention
Co-Author: Marta Iris Diaz-Garcia – Centers for Disease Control and Prevention
Co-Author: Luis Rivera – Centers for Disease Control and Prevention
Co-Author: Roberto Barrera, Ph.D. – Centers for Disease Control and Prevention
Co-Author: Reinaldo L. Rivera Figueroa (he/him/his) – Centers for Disease Control and Prevention
Co-Author: Jose Ruiz-Valcarcel – Centers for Disease Control and Prevention
Co-Author: Ryan R. Hemme – Centers for Disease Control and Prevention

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
D3345: Multiple diplotypes contribute to the rapid evolution of pyrethroid resistance in *Aedes aegypti*


Location: Exhibit Hall 6

Presenting Author: Jennifer F. Baltzegar – Augusta University
Co-Author: Amy Morrison – University of California
Co-Author: Fred L. Gould – North Carolina State University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
D3346: Multiple vector-borne disease exposures in a rural community in Colombia: understanding the One Health approach 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lidia Gual-Gonzalez – University of South Carolina

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
D3347: Phenology and habitat associations of the invasive Asian longhorned tick from Ohio 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Risa Pesapane, Ph.D. – The Ohio State University
Co-Author: Andreas Eleftheriou – The Ohio State University
Co-Author: Benjamin S. Zeiger (he/him/his) – The Ohio State University
Co-Author: Jazmin Jennings – The Ohio State University

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
D3348: Surveillance Study of Avian Keds /Louse Flies (Diptera: Hippoboscidae) and Related Pathogens at a South Carolina zoo 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Katherine M. Brown, MPH (she/her/hers) – University of South Carolina

Co-Author: Martha Weber, DVM – Riverbanks Zoo & Garden
Co-Author: Kia Zellars – University of South Carolina
Co-Author: Michael J. Skvarla – The Pennsylvania State University
Co-Author: Wayne Knee, Ph.D. – Canadian National Collection of Insects
Co-Author: Melissa Nolan, Ph.D. – University of South Carolina

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
D3350: Threats of agrochemical usage to malaria control in Ghana 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Ernest Boampong (he/him/his) – Arizona State University (ASU)
Co-Author: Otubea Owusu Akrofi – National Malaria Elimination Program
Co-Author: Christian Atta-Obeng – National Malaria Elimination Program
Co-Author: Andy asafu-Adjaye – Noguchi Memorial Institute for Medical Research
Co-Author: Samuel Oppong – Curtin University
Co-Author: Samuel Kweku Dadzie – University of Ghana

Poster Display Medical, Urban, and Veterinary Entomology

9:00 AM – 5:00 PM MST
Poster: PBT, General 

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3351: Butylated hydroxytoluene and ethylenediaminetetraacetic acid combined with cedarwood oil as wood treatments for protection from subterranean termites and wood-decaying fungi 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Fred J. Eller, III – USDA-ARS-NCAUR

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3352: Caffeine affects sensory processing in the honey bee (*Apis mellifera*) 

Location: Exhibit Hall 6

Presenting Author: Julie A. Mustard – University of Texas
Co-Author: Jennifer Escamilla – University of Texas
Co-Author: Abigail Cortez – University of Texas

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3353: Complex odor learning in the ant *Camponotus floridanus* 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Victoria Kent – Arizona State University Co-Author: Juergen Liebig (he/him/his) – Arizona State University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3354: Differential pesticide sensitivity between <i>Apis cerana</i> and <i>Apis mellifera</i> (Hymenoptera: Apidae) and underlying key molecular factors Location: Exhibit Hall 6 Presenting Author: Youngcheon Lim – Seoul National University Co-Author: Susie Cho (she/her/hers) – Seoul National University Co-Author: Joon Hee Lee – Seoul National University Co-Author: SI Hyeock Lee – Seoul National University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3355: Effects of resistance to Bt proteins Cry1Ac and Vip3Aa on flight behavior of <i>Helicoverpa zea</i> Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Inana X. Schutze (she/her/hers) – USDA-ARS Co-Author: Benjamin Degain – University of Arizona Co-Author: Bruce E. Tabashnik (he/him/his) – University of Arizona Co-Author: Yves Carriere – University of Arizona Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3356: Fumigation effects of methyl benzoate, ethyl benzoate, and vinyl benzoate on stored grain insects Location: Exhibit Hall 6 Presenting Author: Hwal-Su Hwang – Kyungpook National University Co-Author: Md Munir Mostafiz – Teagasc Co-Author: Jun-Ran Kim – Animal and Plant Quarantine Agency Co-Author: BongSu Kim – Animal and Plant Quarantine Agency Co-Author: Keyong-Yeoll Lee – Kyungpook National University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3357: Honey bees do not form an aversive memory to sweet non-nutritious sugars	

Location: Exhibit Hall 6 Presenting Author: Alessandra Perry – University of Texas Co-Author: Julie A. Mustard – University of Texas Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3359: Revamping of the environmental impact quotient: A tool to indicate potential pesticide risk Location: Exhibit Hall 6 Presenting Author: Diana Obregon – Cornell University Co-Author: Alejandro Calixto – Cornell University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3360: Solid-state fermentation of <i>Tenebrio molitor</i> byproducts to produce proteases and chitinases Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jose Manuel Salgado, Ph.D. – University of Vigo Co-Author: Nuno Muñoz-Seijas – University of Vigo Co-Author: Helena dos Santos Fernandes (she/her/hers) – University of Vigo Co-Author: José Manuel Domínguez – University of Vigo Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3361: CANCELLED: Suppression of fall armyworm resistance by mixtures of entomopathogenic nematodes (EPNs) and insecticides Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Keith Koonter – Michigan State University Co-Author: David Mota-Sanchez, Ph.D. – Michigan State University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST Poster: PBT, Genetics and Genomics Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3362: A kinesin-12 protein contributes to Cry1Ac Bt toxin resistance in <i>Helicoverpa zea</i> Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Chan C. Heu – USDA-ARS	

Co-Author: Kyle M. Benowitz – Arizona State University
Co-Author: Luciano M. Matzkin (he/him/his) – University of Arizona
Co-Author: Carson W. Allan – University of Arizona
Co-Author: Dannialle M. LeRoy – USDA-ARS
Co-Author: Xianchun Li, Ph.D. (he/him/his) – University of Arizona
Co-Author: Yves Carriere – University of Arizona
Co-Author: Bruce E. Tabashnik (he/him/his) – University of Arizona
Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3363: Bioinformatics paradigm for in silico analysis of sequence specificity of novel sprayable dsRNA biopesticides 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Eric Gordon – GreenLight Biosciences
Co-Author: Emma De Neef – GreenLight Biosciences
Co-Author: Valeria Velasquez Zapata – GreenLight Biosciences
Co-Author: Kenneth Narva (he/him/his) – GreenLight Biosciences
Co-Author: Laurent Mezin – GreenLight Biosciences
Co-Author: Upendra Devisetty – GreenLight Biosciences
Co-Author: Krishna Sridharan, Ph.D. (he/him/his) – GreenLight Biosciences

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3365: Dual roles of a sigma glutathione S-transferase in xenobiotic adaptation of *Leptinotarsa decemlineata* 

Location: Exhibit Hall 6

Presenting Author: Sonu Koirala B K (she/her/hers) – The Pennsylvania State University
Co-Author: Timothy W. Moural (he/him/his) – The Pennsylvania State University
Co-Author: Qi-Ren Chen – The Pennsylvania State University
Co-Author: Andrei Alyokhin – University of Maine
Co-Author: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3366: Epigenetics regulation of reproduction and embryonic development in the red flour beetle *Tribolium castaneum* 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Karthi Sengodan, Ph.D. (he/him/his) – University of Kentucky
Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3367: Fitness impact of transgene elements in Cas9-expressing transgenic *Anopheles stephensi* lines 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Shivani Pranavkumar Dave – University of North Texas
Co-Author: Vanessa Macias – University of North Texas
Co-Author: Chahat Patel – University of North Texas
Co-Author: Sky Carlin – University of North Texas

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3369: Histone acetylation levels play important roles in reproduction and embryonic development of yellow fever mosquito *Aedes aegypti* L. 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Sundararajan Balasubramani – University of Kentucky
Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3370: Impact through integration: A case study of the Global Locust Initiative and NSF-Behavioral Plasticity Research Institute 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Rick Overson – Arizona State University
Co-Author: Rick Overson – Arizona State University
Co-Author: Arianne Cease – Arizona State University
Co-Author: Fabrizio Gabbiani – Baylor College of Medicine
Co-Author: Hojun Song – Texas A&M University
Co-Author: Mira Word Ries – Arizona State University
Co-Author: Audélie M.C Mechti (she/her/hers) – Texas A&M University
Co-Author: Vivian A. Peralta Santana (she/her/hers) – Texas A&M University
Co-Author: Mario Poot Pech – Yucatan Plant Health
Co-Author: Hector Medina – The National Food Safety and Quality Service (SENASA AR)
Co-Author: Behavioral Plasticity Research Institute Team – Texas A&M University

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST
D3372: Ovicidal effects of various groups of insecticides on the eggs of *Bemisia tabaci* MED (Gennadius) 

Location: Exhibit Hall 6 Presenting Author: Keyong-Yeoll Lee – Kyungpook National University Co-Author: Hwal-Su Hwang – Kyungpook National University Co-Author: Sushant Raj Sharma – Kyungpook National University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3373: The role of DNA methylation in modulating stress-related gene expression in the Colorado potato beetle (<i>Leptinotarsa decemlineata</i>) under single and combined stress conditions  Location: Exhibit Hall 6 Presenting Author: Erika M. Bueno (she/her/hers) – University of California Co-Author: Yolanda H. Chen (she/her/hers) – University of Vermont Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST Poster: PBT, Physiology and Toxicology Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3374: Advances in the semiochemistry of North American click beetles (Coleoptera: Elateridae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jacqueline Serrano (she/her/hers) – USDA-ARS Co-Author: Livy Williams, III – USDA-ARS Co-Author: Lawrence Hanks – University of Illinois Co-Author: Jocelyn Millar – University of California Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3375: Bacillus thuringiensis-derived pesticidal proteins toxic to the whitefly  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Clebson Dos Santos Tavares (he/him/his) – University of Florida Co-Author: Xinyue Wang – University of Florida Co-Author: Ruchir Mishra – University of Florida Co-Author: Bryony C. Bonning (she/her/hers) – University of Florida Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3376: Collective energetic regulation in clonal raider ant colonies (<i>Oocerea biroi</i>)  Location: Exhibit Hall 6	

Presenting Author: Ioulia Beshpalova – Providence College Co-Author: Santiago Meneses – New Jersey Institute of Technology Co-Author: Ioulia Beshpalova – Providence College Co-Author: Kaylee Mulligan – Providence College Co-Author: Grace Pierson – Providence College Co-Author: Jane S. Waters – Providence College Co-Author: Simon Garnier – New Jersey Institute of Technology Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3377: Determining abiotic factors involved in <i>Cotinis mutabilis</i> pupation  Location: Exhibit Hall 6 Presenting Author: Hunter Clark – University of Arizona Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3378: Developing versatile tactics for precision <i>Tetranychus urticae</i> management  Location: Exhibit Hall 6 Presenting Author: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University Co-Author: Said Kewedar – The Pennsylvania State University Co-Author: Qi-Ren Chen – The Pennsylvania State University Co-Author: Timothy W. Moural (he/him/his) – The Pennsylvania State University Co-Author: Douglas Walsh – Washington State University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3379: Effect of foliar micronutrients on the survival of honey bee larvae  Location: Exhibit Hall 6 Presenting Author: Reed M. Johnson – The Ohio State University Co-Author: Madeline French – The Ohio State University Poster Display Physiology, Biochemistry, and Toxicology	
9:00 AM – 5:00 PM MST D3380: Effect of synergists on cross resistance of Caribbean fruit fly <i>Anastrepha suspensa</i> to selected insecticides  Location: Exhibit Hall 6 Presenting Author: Xiangbing Yang – USDA-ARS Co-Author: Kevin R. Cloonan – USDA-ARS Co-Author: Nurhayat Tabanca – USDA-ARS	

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3381: Effects of body size and season on total and methyl mercury concentrations in orb-weaving spiders 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Maddy Pratt Hannappel (she/her/hers) – California Academy of Sciences

Co-Author: Matt M. Chumchal – Texas Christian University

Co-Author: Ray Drenner – Texas Christian University

Co-Author: Ben Barst – University of Alaska

Co-Author: Olivia Eberwein – Texas Christian University

Co-Author: Garrett Helburn – Texas Christian University

Co-Author: Cale Perry – Texas Christian University

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3382: Identification of odorant receptors responding to sex pheromones in *Maruca vitrata* (Lepidoptera: Crambidae) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Wook Hyun Cha (she/her/hers) – Kyungsung University

Co-Author: Dae-Weon Lee – KyungSung University

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3383: Immune response of the black soldier fly to *Vibrio parahaemolyticus* 

Location: Exhibit Hall 6

Presenting Author: Andrei Alyokhin – University of Maine

Co-Author: Matthew A. Moyet (he/him/his) – University of Maine

Co-Author: Edward Bernard – University of Maine

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3384: Novel Gpp34Ab1-like protein identified with single-toxin efficacy against western corn rootworm 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lindsey Behrens (she/her/hers) – Genective

Co-Author: Madison Havel – Genective USA CORP

Co-Author: Katie Dent – Genective USA CORP

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3385: Nutritional profiles of western corn rootworms on maize and artificial diets 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Man P. Huynh (he/him/his) – University of Missouri

Co-Author: Khanh-Van Ho – University of Missouri

Co-Author: Deborah Finke – University of Missouri

Co-Author: Kent Shelby – USDA-ARS

Co-Author: Bruce E. Hibbard – USDA-ARS

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

D3386: The fate of a *Solanum* steroidal alkaloid toxin in the cabbage looper (*Trichoplusia ni*): Qualitative and quantitative dimensions of detoxification 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tobias E. Ziemke (any pronouns) – Cornell University

Co-Author: Christophe Duplais – Cornell University

Co-Author: Ping Wang – Cornell University

Poster Display Physiology, Biochemistry, and Toxicology

9:00 AM – 5:00 PM MST

Poster: P-IE, Biocontrol

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3387: A path to sanitation: Controlling *Bacillus thuringiensis* in a lepidopteran mass rearing system 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jeanbaptiste Quirino – ACRPC

Co-Author: Ethan Stahura – ACRPC - USDA

Co-Author: Earl Andress – USDA-APHIS

Co-Author: Michael A. Garvey (he/him/his) – USDA

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3388: A simple evaluation of prey recognition behavior by mass reared *Coleomegilla maculata* (Coleoptera: Coccinellidae) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Eric W. Riddick, Ph.D. – USDA-ARS
Co-Author: Maria Guadalupe Rojas, Ph.D. – USDA-ARS
Co-Author: Juan Morales Ramos, Ph.D. – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3389: Annual quality control testing of aerial release machines for sterile Mexican fruit flies: Evaluating damage and flight ability 

Location: Exhibit Hall 6

Presenting Author: Mariana Aguilar – University of Texas
Co-Author: frank Dirrigl – University of Texas
Co-Author: Matthew Ciomperlik – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3390: Dermestidae family and the Khapra beetle in Korea: A biosecurity perspective 

Location: Exhibit Hall 6

Presenting Author: Hyoung-ho Mo, Ph.D. – Animal and Plant Quarantine Agency
Co-Author: Anandapadmanaban Gokulanathan – Animal and Plant Quarantine Agency
Co-Author: Suh Soo-Jung – Animal and Plant Quarantine Agency
Co-Author: Park Hong-Hyun – Animal and Plant Quarantine Agency

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3391: Do host plant resistance and parasitism regulate wheat stem sawfly damage in winter wheat? 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jeffrey D. Bradshaw – University of Nebraska
Co-Author: Vinicius Andrade – University of Nebraska
Co-Author: Cody Creech – University of Nebraska
Co-Author: Amanda Easterly – University of Nebraska
Co-Author: Katherine Frels – University of Nebraska
Co-Author: Pin-Chu Lai (she/her/hers) – University of Nebraska

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3392: Efficacy of WETCIT and Bravo fungicide in managing sooty mold and Asian citrus psyllid infestations in greenhouse environments 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Lesly Tovar – USDA-ARS
Co-Author: Casey Amanda Morales, B.S. (she/her/hers) – University of Texas
Co-Author: Emily R A Miller, B.S. – University of Texas
Co-Author: Adryenna Danielle Perez – University of Texas
Co-Author: Mayra Reyes – USDA-ARS
Co-Author: Justin Lloyd Wendel – University of Texas
Co-Author: Christopher J. Vitek – University of Texas
Co-Author: Daniel Flores – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3393: Endophytic potential of *Beauveria bassiana* in sweet orange trees 

Location: Exhibit Hall 6

Presenting Author: Pasco B. Avery (he/him/his) – University of Florida
Co-Author: Terri Lynn Price-Baker – University of Florida

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3394: Enhancing Brazilian peppertree (*Schinus terebinthifolia*) production and thrips (*Pseudophilothrips ichini*) management through fertilizer application 

Location: Exhibit Hall 6

Presenting Author: Ruben Alejandro Valverde – USDA-APHIS
Co-Author: Daniel Flores – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3395: Evaluating the efficacy of *Beauvaeria bassiana* formulations against *Diaphorina citri* in citrus orchards 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Casey Amanda Morales, B.S. (she/her/hers) – University of Texas
Co-Author: Daniela Sanchez – USDA-APHIS
Co-Author: Yareny Ramirez – USDA-ARS
Co-Author: Mayra Reyes – USDA-ARS
Co-Author: Justin Lloyd Wendel – University of Texas
Co-Author: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS
Co-Author: Christopher J. Vitek – University of Texas
Co-Author: Daniel Flores – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3396: Evaluation of a North American dryinid for biocontrol of spotted lanternfly
Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Alexandra Johnson (she/her/hers) – University of Rhode Island

Co-Author: Elizabeth Tewksbury (she/her/hers) – University of Rhode Island

Co-Author: Nick Durinzi – SUNY

Co-Author: Carly M. Tribull – Farmingdale State College

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3397: How landscape variation influences the health of native Coccinellidae among the wheat growing regions of Spain 

Location: Exhibit Hall 6

Presenting Author: Kristopher Giles – Oklahoma State University

Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University

Co-Author: Haley Butler – Oklahoma State University

Co-Author: Nina Rudin – Oklahoma State University

Co-Author: Xavier Pons – University Lleida

Co-Author: Roberto Meseguer Rosagro – University Lleida

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3398: Is photoperiod induced diapause a bet hedging strategy for *Oobius agrili*, the introduced egg parasitoid of emerald ash borer? 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Therese M. Poland (she/her/hers) – USDA-Forest Service

Co-Author: Toby R. Petrice – USDA-Forest Service

Co-Author: Gould R. Juli – USDA-APHIS

Co-Author: Forrest W. Ravlin – Michigan State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3400: Morphological, molecular, and pathogenicity characteristics of the native isolates of *Metarhizium anisopliae* against the onion in Indonesia 

Location: Exhibit Hall 6

Presenting Author: Vanity Kurnia Baihaqi – National Pingtung University Of Science And Technology

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3401: Natural parasitism of *Euschistus nigaraguensis* (Pentatomidae) eggs, in weeds surrounding the rice agroecosystem, in Panama: New approach of conservative biological control program 

Location: Exhibit Hall 6

Presenting Author: Bruno Alexis Zachrisson, Sr. – Investigador Agricola

Co-Author: Pedro Eduardo Osorio, Sr. – Instituto de Innovación Agropecuaria de Panamá

Co-Author: Guadalupe Gutierrez – Instituto de Innovación Agropecuaria de Panamá

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3402: Optimizing mass rearing of Brazilian peppertree thrips for enhanced biological control 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Nadia Lizeth Juarez (she/her/hers) – USDA-APHIS

Co-Author: Daniel Flores – USDA-APHIS

Co-Author: Isaiah Lee Garza – University of Texas

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3403: *Peganum harmala* L.: Effect on parasitism of pupal parasitoid *Dirhinus giffardii* (Hymenoptera:Chalcidoidea) and pupation of *Bactrocera zonata* (Tephritidae:Diptera), NP based IPM model 

Location: Exhibit Hall 6

Presenting Author: Junaid ur Rehman (he/him/his) – University of Mississippi

Co-Author: Ghulam Jilani – National Agriculture Research Center

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3404: Plant architecture and canopy microclimate impacts on lepidopteran egg hatch and predation of *Helicoverpa zea* (Boddie) sentinel eggs 

Location: Exhibit Hall 6

Presenting Author: Jane Pierce – New Mexico State University

Co-Author: Patricia Monk – New Mexico State University

Co-Author: Ivan Tellez – New Mexico State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3405: Population dynamics of beneficial insects in squash cultivation: Implications for integrated pest management 

Location: Exhibit Hall 6

Presenting Author: Anurag Singh, III – Fort Valley State University Co-Author: Sanower Warsi, Ph.D. – Fort Valley State University Co-Author: George N. Mbata – Fort Valley State University Co-Author: Yinping Li	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3406: Predation responses of <i>Solenopsis geminata</i> against specific prey items in vegetable fields in northeastern Mexico  Location: Exhibit Hall 6 Presenting Author: Lizeth Almendra-Paxtian, Ph.D. – Universidad Autonoma Agraria Antonio Narro Co-Author: Sergio R. Sanchez-Pena – Universidad Autonoma Agraria Antonio Narro	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3408: Reproduction of cassava mealybug parasitized by the koinobiont parasitoid <i>Anagyrus lopezi</i>  Location: Exhibit Hall 6 Presenting Author: Keiji Takasu – Kyushu University Co-Author: Dat T. Nguyen – Nong Lam University	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3409: Seasonal abundance of arthropods in sweet pepper  Location: Exhibit Hall 6 Presenting Author: Kaushalya G. Amarasekare (she/her/hers) – Tennessee State University Co-Author: Firuz Yuldashev – Tennessee State University	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST Poster: P-IE, Biodiversity and Invasive Species	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3410: Developing and ongoing projects on woodboring insects and their associates in the forest entomology group at LSU  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Elise G. Grossman (she/her/hers) – Louisiana State University Co-Author: Elise G. Grossman (she/her/hers) – Louisiana State University	

Co-Author: Crawford Johnson – USDA-Forest Service Co-Author: Todd David Johnson (he/him/his) – Louisiana State University	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3411: Don't leave readers in the dark! The MaxEnt "black box" is open, so show your work!  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Rachel R. Harman (she/her/hers) – USDA-ARS Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS Co-Author: Alison R. Gerken – USDA-ARS	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3412: Emerald ash borer (<i>Agrilus planipennis</i>) oviposition behavior in response to physical environment  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Mitchell Green – University of Massachusetts Co-Author: Jian Duan – USDA-ARS	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3413: Enhancing population control of <i>Anastrepha ludens</i> (Mexican fruit fly) through a male-specific sterile insect technique program  Location: Exhibit Hall 6 Presenting Author: Keun Chae – Texas A&M University Co-Author: Amber R. Arellano – USDA-APHIS Co-Author: Kari Pina – USDA-APHIS Co-Author: Jason Carlson – USDA-APHIS Co-Author: frank Dirrigl – University of Texas Co-Author: Daniel Flores – USDA-APHIS Co-Author: Pedro Rendon – USDA-APHIS	
Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3414: Assessing the impact of the biological control agent <i>Pseudophilothrips ichini</i> on the flush of Brazilian Peppertree (<i>Schinus terebinthifolia</i>) in the Rio Grande Valley  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Johana Castro (she/her/hers) – University of Texas Rio Grande Valley Co-Author: Adryenna Danielle Perez – University of Texas	

Co-Author: Isaiah Lee Garza – University of Texas Co-Author: Christopher J. Vitek – University of Texas Co-Author: Daniel Flores – USDA-APHIS Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3415: Exploring the eastern Joshua tree (<i>Yucca jaegariana</i>) arthropod community Location: Exhibit Hall 6 Presenting Author: Kathryn Thomas – U.S. Geological Survey Co-Author: Kathryn Busby – U.S. Geological Survey Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3416: Good things are worth the wait: Establishment of introduced parasitoids of emerald ash borer in the southeastern U.S. (TN) Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Jerome F. Grant (he/him/his) – University of Tennessee Co-Author: Bechtel David – University of Tennessee Co-Author: Gould R. Juli – USDA-APHIS Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3417: Miscellaneous notes from rearing, trapping, and collecting Buprestidae and Cerambycidae Location: Exhibit Hall 6 Presenting Author: Nadeer N. Youssef – Tennessee State University Co-Author: Jason B. Oliver – Tennessee State University Co-Author: Karla Michele Adesso – Tennessee State University Co-Author: Joshua Basham – Tennessee Department of Agriculture Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3418: <i>Ophraella communa</i> density impact on the fitness of <i>Ambrosia artemisiifolia</i> Location: Exhibit Hall 6 Presenting Author: Nicolas Desneux – Institut National de la Recherche Agronomique (INRAe) Co-Author: Zoé Rousset – Institut National de la Recherche Agronomique (INRAe) Co-Author: Maxime Dissart – Institut National de la Recherche Agronomique (INRAe) Co-Author: Vincent Lesieur – Csiro Poster Display Plant-Insect Ecosystems	

9:00 AM – 5:00 PM MST D3419: Phenology and voltinism of the ambrosia beetle <i>Anisandrus maiche</i> in central New York Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Lindsey R. Milbrath – USDA-ARS Co-Author: Jeromy Biazzo – USDA-ARS Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3420: Seasonal effects of a fuel loaded Ashe juniper (<i>Juniperus ashei</i>) burn on the soil biota Location: Exhibit Hall 6 Presenting Author: Camille Carey – Texas A&M University Co-Author: Douglas Tolleson, Ph.D. – Texas A&M University Co-Author: Morgan Treadwell, Ph.D. – Texas A&M University Co-Author: Matthew McCary, Ph.D. – Rice University Co-Author: Pete D. Teel, Ph.D. – Texas A&M University Co-Author: William Fox, Ph.D. – Texas A&M University Co-Author: Deann Burson – Texas A&M University Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3421: Stochastic modeling of Asian long-horned beetle invasion Location: Exhibit Hall 6 Presenting Author: Ethan Doherty – Clemson University Co-Author: Keisha Cook – Clemson University Co-Author: David R. Coyle – Clemson University Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST D3422: Swede midge: An emerging invasive pest in urban gardens in Minnesota Location: Exhibit Hall 6 Presenting Author: Jonathan Dregni – University of Minnesota Co-Author: Cindy Tong – University of Minnesota Co-Author: Mary Rogers – University of Minnesota Co-Author: Eric C. Burkness – University of Minnesota Co-Author: Grayshalie Melendez-Canino – University of Minnesota Poster Display Plant-Insect Ecosystems	
9:00 AM – 5:00 PM MST	

D3423: There's no place like home: Ethanol-soaked wood confers ambrosia beetles with long-lasting protection from fungal infection 

Location: Exhibit Hall 6

Presenting Author: Megan Elizabeth Moore – USDA-ARS

Co-Author: Brian Lovett – USDA-ARS

Co-Author: Lindsey R. Milbrath – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3424: Two years of surveys of the arthropod complex associated with hops (*Humulus lupulus* L.) in Nebraska 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Priscila Maria Colombo Da Luz – University of Nebraska

Co-Author: Andrea Rilakovic – University of Nebraska - Lincoln

Co-Author: Milos Zaric – University of Nebraska

Co-Author: Julie Ann Peterson – University of Nebraska

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

Poster: P-IE, Ecology



Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3425: A universal artificial diet for corn rootworm (*Diabrotica* spp.) larvae allows ease of rearing and bioassays 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Bruce E. Hibbard – USDA-ARS

Co-Author: Khanh-Van Ho – University of Missouri

Co-Author: Thu Do – University of Missouri

Co-Author: Rachael Wolf – University of Missouri

Co-Author: Adrian J. Pekarcik – USDA-ARS

Co-Author: Dalton Ludwick (he/him/his) – USDA-ARS

Co-Author: Man P. Huynh (he/him/his) – University of Missouri

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3426: Abundance and phenology of three pest fruit flies (Diptera: Tephritidae) in farmland and community gardens of Oahu (Hawaiian Islands) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Luc Leblanc – University of Idaho

Co-Author: Rick Kurashima – USDA-APHIS

Co-Author: Maxfield Sorkin – USDA-APHIS

Co-Author: Todd E. Shelly (he/him/his) – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3427: Acetic acid improves attraction and colonization of ethanol-treated tree bolts by ambrosia beetles 

Location: Exhibit Hall 6

Presenting Author: Michael E. Reding – USDA-ARS

Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3428: Are salt and fresh waterbodies indicators of early season risk to cotton? A tale of two mirid pests 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Michael J. Brewer, Ph.D. – Texas A&M University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3429: Assessing the influence of different soil types on the growth and volatile production of loblolly pine (*Pinus taeda* L.) and longleaf pine (*Pinus palustris* Mill.), two hosts of southern pine beetle (*Dendroctonus frontalis* Zimmermann) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Daniel DeButts – Louisiana State University

Co-Author: Todd David Johnson (he/him/his) – Louisiana State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3430: Behavioral and mass trapping strategies for *Prionus* in hazelnuts 

Location: Exhibit Hall 6

Presenting Author: Nik Wiman – Oregon State University

Co-Author: Heather Andrews – Oregon State University

Co-Author: Christopher Hedstrom – Pacific Biocontrol

Co-Author: Austin Carey – Oregon State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3431: Click beetles in Quebec (Canada): Identification of sex pheromones and new pest species in the province 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Julien Saguez – CÉROM

Co-Author: Wim Van Herk – Agriculture and Agri-Food Canada

Co-Author: Regine Gries – Simon Fraser University

Co-Author: Gerhard Gries – Simon Fraser University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3432: Comparing conventional and alternative habitats for native species of agrobiont lady beetles 

Location: Exhibit Hall 6

Presenting Author: Louis S. Hesler – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3433: Comparing responses to nectar limitation in the cabbage white butterfly (*Pieris rapae*) between extremes in an aridity gradient 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Madeleine Cahill – University of Arizona

Co-Author: Natasha Tigreros – University of Arizona

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3434: Death and diminishment: Parasitoid flies (Diptera: Conopidae) reduce foraging efficiency before killing their bumblebee host 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: T'ai Roulston (he/him/his) – University of Virginia

Co-Author: Anne Larsen – Princeton University

Co-Author: Amber Slatosky – University of California

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3435: Effects of jasmonate-mediated defenses on *Manduca sexta* performance and gut microbiota community 

Location: Exhibit Hall 6

Presenting Author: Danilo Ferreira Borges dos Santos – The Pennsylvania State University

Co-Author: Kaelonnah Darlich – The Pennsylvania State University

Co-Author: Monica Kersch-Becker – The Pennsylvania State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3436: Effects of varying cover crops on the density of three major orders of insects in organic soybean fields 

Location: Exhibit Hall 6

Presenting Author: Young-gyun Park (he/him/his) – Purdue University

Co-Author: Christian Krupke – Purdue University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3437: Expansion of the eastern bumble bee *Bombus impatiens* (Cresson) in British Columbia and Washington State 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Chris Looney – Washington State Department of Agriculture

Co-Author: Shawn M. Cleveland – Pacific Lutheran University

Co-Author: Chanda Bartholomew – Washington State Department of Agriculture

Co-Author: Sandra Gillespie – University of the Fraser Valley

Co-Author: Susan M. Waters – Quamash EcoResearch

Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS

Co-Author: Julie K. Combs – Washington Department of Fish and Wildlife

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3438: Five years of foliar insect herbivory on *Quercus garryana* (Garry Oak) across distinct habitats 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Sienna Painter (she/they) – Western Oregon University

Co-Author: Hannah Porter – Western Oregon University

Co-Author: Catherine Couture – Université du Québec

Co-Author: Gareth Hopkins – Western Oregon University

Co-Author: Ava Howard – Western Oregon University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3439: Freezing herbivore cues to extend the window for research into plant-consumer interactions



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Evan Preisser (he/him/his) – University of Rhode Island

Co-Author: Eirette Santiago (she/her/hers) – University of Rhode Island

Co-Author: Katherine Overstrum (she/her/hers) – University of Rhode Island

Co-Author: Brooke Pellegrini – University of Rhode Island

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3440: Growth and defense responses to herbivory cues in a woody plant species



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Santhi P. Bhavanam – Tufts University

Co-Author: Evan Preisser (he/him/his) – University of Rhode Island

Co-Author: John Orrock – University of Wisconsin

Co-Author: Colin Orians – Tufts University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3441: Improving traps for spotted lanternflies by exploiting their own signals



Location: Exhibit Hall 6

Presenting Author: Miriam F. Cooperband – USDA-APHIS

Co-Author: Kelly Murman – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3442: Interactions of ants and plants



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jiří Sedlák (he/him/his) – Research and Breeding Institute of Pomology Holovousy Ltd.

Co-Author: Pavel Pech (he/him/his) – Research and Breeding Institute of Pomology Holovousy Ltd.

Co-Author: Tomáš Bílek – Research and Breeding Institute of Pomology Holovousy Ltd.

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3443: Investigating the effects of cover crops planted before corn on the abundance of lepidopteran pests on Wisconsin farms



Location: Exhibit Hall 6

Presenting Author: Dane C. Elmquist – University of Wisconsin

Co-Author: Steve Okonek – University of Wisconsin

Co-Author: Joshua Kamps – University of Wisconsin

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3444: East meets West? A provisional checklist of the bee fauna of the Arabian Peninsula



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Joseph Monks – Natural History Museum, London

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3445: Microbial dynamics in stored product insects: Implications for temperature-mediated interactions in a warming world



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Marco Antonio Ponce – USDA-ARS

Co-Author: Dante A. Castaldi – Kansas State University

Co-Author: Jennifer Abshire – USDA-ARS

Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS

Co-Author: Alison R. Gerken – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3446: Next-generation alcohol biosensor for detecting the emission of stress-induced ethanol from trees



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Christopher M. Ranger (he/him/his) – USDA-ARS

Co-Author: Karla Michele Adesso – Tennessee State University

Co-Author: Denis Olgen Kiobia – University of Georgia

Co-Author: Jonathan Lee-Rodriguez – The Ohio State University

Co-Author: Shekhar Thapa – University of Georgia

Co-Author: Michael E. Reding – USDA-ARS

Co-Author: Glen Rains – University of Georgia

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3447: Patterns of phoretic mites across a diverse collection of urban native bees



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Nathan Vincent Comai (he/him/his) – Colorado State University

Co-Author: John Mola – Colorado State University

Co-Author: Nicole Bailey – Colorado State University
Co-Author: Nancy Bartholomew – Colorado State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3448: Quantifying gut microbial degradation of the plant toxin chlorogenic acid (CGA) and measuring the effect of CGA on grasshopper fitness 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Aidan Mitchell Skinner – University of Texas
Co-Author: Alison Ravenscraft (she/her/hers) – University of Texas
Co-Author: Ben Bechade (he/him/his) – University of Texas
Co-Author: Rachel C. Vargas (she/her/hers) – University of Texas

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3449: Radial growth of eastern hemlocks following systemic insecticide treatment to control hemlock woolly adelgid in recently infested stands in Michigan 

Location: Exhibit Hall 6

Presenting Author: Deborah G. McCullough – Michigan State University
Co-Author: Nathan W. Siegert – USDA-Forest Service
Co-Author: Phillip A. Lewis – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3450: Recent advances in understanding the biology and ecology of *Nezara viridula* (L.) 

Location: Exhibit Hall 6

Presenting Author: Jesus F. Esquivel – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3451: Saproxylic beetle community responses to varying levels of tree mortality following a significant western pine beetle, *Dendroctonus brevicomis* (Curculionidae: Curculionidae), driven mortality event in the central and southern Sierra Nevada 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jackson P. Audley (he/him/his) – USDA-Forest Service
Co-Author: Leif Mortenson – USDA-Forest Service
Co-Author: Christopher Fettig – USDA-Forest Service

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3452: Seasonal biology of annual bluegrass weevil in Virginia and North Carolina turfgrass 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Katlyn A. Catron (she/her/hers) – Virginia Tech
Co-Author: Alejandro Del-Pozo – Virginia Tech
Co-Author: Thomas P. Kuhar – Virginia Tech
Co-Author: Terri L. Billeisen – North Carolina State University
Co-Author: Kyle Matthew Bekelja – Virginia Tech
Co-Author: Kelly McIntyre (she/her/hers) – Virginia Tech
Co-Author: Emeline Daly – Virginia Tech
Co-Author: Sam Camuso – Syngenta

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3453: The fall armyworm host strains: Regional variations on a theme 

Location: Exhibit Hall 6

Presenting Author: Rod Nagoshi, Ph.D. – USDA-ARS
Co-Author: Robert L. Meagher, Jr. (he/him/his) – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3455: Wild pollinators of alfalfa seed 

Location: Exhibit Hall 6

Presenting Author: Michelle Kirchner – USDA-ARS
Co-Author: Quinn Christian – USDA-ARS
Co-Author: Douglas Walsh – Washington State University
Co-Author: Kelsey K. Graham – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
Poster: P-IE, IPM

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST
D3456: A new degree day model to predict western bean cutworm in Ontario, Canada using pheromone traps 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Josee Kelly (she/her/hers) – University of Guelph

Co-Author: Yasmine Farhan – University of Guelph Co-Author: Chris Gillard – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3457: Advances in thrips management using UV-C  Location: Exhibit Hall 6 Presenting Author: Somaiyeh Ghasemzadeh – University of Vermont Co-Author: Richard Bamford – University of Vermont Co-Author: Bruce L. Parker – University of Vermont Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3458: Analysis of phytochemicals produced by cowpeas in response to activities of insect pests and microbes in organic production systems  Location: Exhibit Hall 6 Presenting Author: Jamila Mweta – Tuskegee University Co-Author: Franklin Y. Quarcoo – Tuskegee University Co-Author: Jamila Mweta – Tuskegee University Co-Author: Conrad Bonsi – Tuskegee University Co-Author: Desmond Mortley – Tuskegee University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3459: Area-wide control of box tree moth in western New York  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Gregory S. Simmons – USDA-APHIS Co-Author: Alejandro Del-Pozo – Virginia Tech Co-Author: David J. Rivera (he/him/his) – Virginia Tech Co-Author: Eugenia Garcia Bejarano – USDA-APHIS Co-Author: Treya Gough – USDA-APHIS Co-Author: Mackenzie Wahl – USDA-APHIS Co-Author: Leila Milner – Virginia Tech Co-Author: Devin Barry Calpo (they/them/theirs) – Virginia Tech Co-Author: Britaney Hight (they/them/theirs) – Virginia Tech Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST

D3460: BASIN FLEX, a new peptide-based bioinsecticide from Vestaron Crop Protection  Location: Exhibit Hall 6 Presenting Author: Dawn Calibeo – Vestaron Corp Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3461: Can high tunnels affect onion maggot infestation of garlic crops in North Carolina?  Location: Exhibit Hall 6 Presenting Author: Peter Coffey – Virginia State University Co-Author: Sanjun Gu – Virginia State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3463: Comparison of in-furrow rootworm insecticide management options in South Dakota  Location: Exhibit Hall 6 Presenting Author: Bradley L. McManus – South Dakota State University Co-Author: Philip Rozeboom – South Dakota State University Co-Author: Adam J. Varenhorst – South Dakota State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3464: Determining the distribution of <i>Dectes</i> stem borer in South Dakota soybeans  Location: Exhibit Hall 6 Presenting Author: Zachary Loomis – South Dakota State University Co-Author: Philip Rozeboom – South Dakota State University Co-Author: Bradley L. McManus – South Dakota State University Co-Author: Adam J. Varenhorst – South Dakota State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3465: Development of a commercial celery IPM program as part of sustainable agriculture  Location: Exhibit Hall 6 Presenting Author: Gregory S. Kund – University of California Co-Author: Chow-Yang Lee, BCE – University of California Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST

D3468: Evaluation of a field detector for identifying ambrosia beetle susceptible trees  Location: Exhibit Hall 6 Presenting Author: Karla Michele Adesso – Tennessee State University Co-Author: Jason B. Oliver – Tennessee State University Co-Author: Anju Poudel – The Pennsylvania State University Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3469: Exploring alternative insecticides for managing redbanded stinkbug infestation in Louisiana soybean crops  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Leroy R. Lopez – Louisiana State University Co-Author: James Villegas – Louisiana State University Co-Author: O'Neal Edward – Louisiana State University Co-Author: Saurav Ranabhat (he/him/his) – Louisiana State University Co-Author: Jayvee Santiago Bruno (he/him/his) – Louisiana State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3470: How to select and manage ant (Hymenoptera: Formicidae) community in orchards  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Pavel Pech (he/him/his) – Research and Breeding Institute of Pomology Holovousy Ltd. Co-Author: Jiří Sedlák (he/him/his) – Research and Breeding Institute of Pomology Holovousy Ltd. Co-Author: Tomáš Bílek – Research and Breeding Institute of Pomology Holovousy Ltd. Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3471: Impact of attract-and-kill and perimeter sprays on <i>Popillia japonica</i> (Coleoptera: Scarabaeidae) in vineyards  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Emilie M. Parkanzky – University of Wisconsin Co-Author: Christelle Guedot – University of Wisconsin Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3472: Influence of overhead irrigation on foliar insecticide sprays for the red-headed flea beetle in nursery settings 

Location: Exhibit Hall 6 Presenting Author: Alejandro Del-Pozo – Virginia Tech Co-Author: Julie Brindley – Virginia Tech Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3473: Making sure the rice can grow: Managing rice seed midge in California rice  Location: Exhibit Hall 6 Presenting Author: Ian Grettenberger – University of California Co-Author: Luis Espino – University of California Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3474: Palestriped flea beetle (<i>Systema blanda</i>) control during guayule stand establishment  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Naomi Pier – University of Arizona Co-Author: Peter Ellsworth – University of Arizona Co-Author: Sam Wang – Bridgestone Americas, Inc. Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3475: Pretty (dead) in pink: Testing a novel pink pigmented facultative methyloph as a bioinsecticide  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Benjamin L. Aigner (he/him/his) – Virginia Tech Co-Author: Sean Malone – Virginia Tech Co-Author: Anne Phillips – NewLeaf Symbiotics Co-Author: Thomas P. Kuhar – Virginia Tech Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3477: Status of the European pepper moths in East Texas: Their presence, distribution, and phenology  Location: Exhibit Hall 6 Presenting Author: Rafia Akhtar Khan (she/her/hers) – Texas A&M University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST

D3478: Surveying for wheat stem sawfly in South Dakota



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Khuma K. Bhusal (she/her/hers) – South Dakota State University

Co-Author: Philip Rozeboom – South Dakota State University

Co-Author: Patrick Wagner – South Dakota State University

Co-Author: Bradley L. McManus – South Dakota State University

Co-Author: Adam J. Varenhorst – South Dakota State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3479: U.S. public pesticide policy is influenced by scientific and stakeholder comments managed by the Western IPM Center



Location: Exhibit Hall 6

Presenting Author: Alexa M. Brown, B.S. – University of Arizona

Co-Author: Matthew Baur – University of California

Co-Author: Danielle Lightle – Oregon State University

Co-Author: Katie Murray – Origionians for Food & Shelter

Co-Author: Wayne A. Dixon, II – University of Arizona

Co-Author: Peter Ellsworth – University of Arizona

Co-Author: Alfred Fournier – University of Arizona

Co-Author: Marion Murray – Utah State University

Co-Author: Natalie Hein-Ferris – University of Hawaii

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3480: Yield response of soybean to the soybean tentiform leafminer, *Macrosaccus morrisella*



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: James P. Menger (he/him/his) – University of Minnesota

Co-Author: Arthur Vieira Ribeiro – University of Minnesota

Co-Author: Robert Koch – University of Minnesota

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

Poster: P-IE, Pollinators

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3481: A new record of an adventive bee species in Indiana (Hymenoptera: Colletidae)



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jennifer Noseworthy – Indiana Wesleyan University

Co-Author: Hannah Kernen – Purdue University

Co-Author: Robert Jean – Environmental Solutions & Innovations, Inc.

Co-Author: Jacob Buck – Indiana Wesleyan University

Co-Author: Brock Harpur – Purdue University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3482: Assessing pollinator forage by genetic metabarcoding: Past insights and future applications



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Scott Comman – U.S. Geological Survey

Co-Author: Clint Otto – U.S. Geological Survey

Co-Author: Deborah Iwanowicz – United States Geological Survey

Co-Author: Michael Simanonok – United States Geological Survey

Co-Author: Autumn Smart – University of Nebraska

Co-Author: Tamara Smith – United States Fish and Wildlife Service

Co-Author: Elaine Evans (she/they) – University of Minnesota

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3483: Butterfly diversity and abundance in a restored grassland site in Cuyahoga Valley National Park



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Leo Kuck (he/him/his or they/them/theirs) – National Park Service

Co-Author: Doug Marcum – National Park Service

Co-Author: Mariamar Gutierrez Ramirez – National Park Service

Co-Author: Christie Bahlai – Kent State University

Co-Author: Thomas P. Franzem – Kent State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3484: Developing a plate-based oviposition assay for agricultural pest fruit flies



Location: Exhibit Hall 6

Presenting Author: Katrina Marie Rivera – University of Texas

Co-Author: Mariana Aguilar – University of Texas

Co-Author: frank Dirrigl – University of Texas

Co-Author: Daniel Flores – USDA-APHIS

Co-Author: Keun Chae – Texas A&M University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3485: Effects of seasonality on stable isotope partitioning in honey bees



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Katherine Kamminga – Kentucky State University

Co-Author: Thomas Webster – Kentucky State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3486: Evaluating management strategies to promote comb production during spring establishment of honey bee colonies (*Apis mellifera* L.)



Location: Exhibit Hall 6

Presenting Author: Shelby Ann Kittle – University of Nebraska

Co-Author: Autumn Smart – University of Nebraska

Co-Author: Judy Wu-Smart – University of Nebraska

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3487: Facilitating a farmer-led outreach event on improving farm resilience with pollinator habitat



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Jess Gambel (she/her/hers) – USDA-ARS

Co-Author: Alison Duff – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3488: Floral composition of pollen collected from rusty patched bumble bee (*Bombus affinis*, Cresson) nests in southeastern Minnesota



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Elaine Evans (she/they) – University of Minnesota

Co-Author: Michael Simanonok – United States Geological Survey

Co-Author: Clint Otto – U.S. Geological Survey

Co-Author: Robert Cornman – U.S. Geological Survey

Co-Author: Deborah Iwanowicz – United States Geological Survey

Co-Author: Tamara Smith – United States Fish and Wildlife Service

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3489: Influences of climate, landscape and weather on the occurrence of native pollinators



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Abigail L. Cohen – Michigan State University

Co-Author: Lincoln Best – Oregon State University

Co-Author: James DeVries – Ducks Unlimited Canada

Co-Author: Jess Vickruck – Agriculture and Agri-Food Canada

Co-Author: Paul Galpern – University of Calgary

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3490: Late for an important date: Pollination delays result in negative impacts on yield metrics in blueberries



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Beth E. Ferguson (she/her/hers) – Rutgers University

Co-Author: James Shope – Rutgers University

Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3491: New records of the American bumble bee, *Bombus pensylvanicus*, in Michigan



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Sharron Z. Miller (she/her/hers) – Michigan State University

Co-Author: Lillyanna Widdicombe – Michigan State University

Co-Author: Logan Rowe – Michigan State University

Co-Author: Rufus Isaacs – Michigan State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3492: Snapshot of foraging behavior of *Apis mellifera* through pollen metagenomics



Location: Exhibit Hall 6

Presenting Author: Robert Kuhn – Innovation Academy STEM High School

Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3493: The effect of integrated pest management on honey bee behavior and colony level health  Location: Exhibit Hall 6 Presenting Author: Kaitlyn Bresnahan – Providence College Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3494: Trapping effectiveness for greater banded hornet, <i>Vespa tropica</i> L. (Hymenoptera: Vespidae), on Guam  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Christopher A. Rosario – University of Guam Co-Author: Ross H. Miller – University of Guam Co-Author: Jacqueline Serrano (she/her/hers) – USDA-ARS Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST Poster: P-IE, Resistance  Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3495: Alfalfa weevil management in South Dakota  Location: Exhibit Hall 6 Presenting Author: Philip Rozeboom – South Dakota State University Co-Author: Bradley L. McManus – South Dakota State University Co-Author: Adam J. Varenhorst – South Dakota State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3496: Biological parameters of <i>Bemisia tabaci</i> MEAM1 and MED in soybean genotypes with different levels of total flavonoids  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Ana Paula Santana Lima (she/her/hers) – University of Nebraska Co-Author: Thais Lohaine Braga Santos – São Paulo State University Co-Author: Alisson Santana (he/him/his) – University of Nebraska Co-Author: Aline Marques Pinheiro – São Paulo State University Co-Author: Isabella Rubio Cabral – São Paulo State University Co-Author: Sinara de Nazare Santana Brito – São Paulo State University

Co-Author: Giuseppina Pace Pereira Lima – São Paulo State University Co-Author: Renate Krause Sakate – São Paulo State University Co-Author: André Luiz Lourenção – Universidade de São Paulo Co-Author: Edson L. Baldin – São Paulo State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3497: Biosynthesis of insect juvenile hormone in plants: An convergent evolution  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Feng Chen (he/him/his) – University of Tennessee Co-Author: Weijiao Wang – University of Tennessee Co-Author: Xinlu Chen – University of Tennessee Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3498: Comparison of the regional insecticide resistance of <i>Bemisia tabaci</i> collected from the pepper house in the Republic of Korea  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Donghun Kim – Kyungpook National University Co-Author: Seoyul Hwang – Kyungpook National University Co-Author: Jiseok Kim – Kyungpook National University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST D3499: Corn earworm populations in the southeastern United States are still relatively susceptible to common insecticides in laboratory bioassays  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Bhavana Patla – Louisiana State University Co-Author: Tiago H. da Silva – Louisiana State University Co-Author: Shucong Lin – Louisiana State University Co-Author: Jeffrey Davis – Louisiana State University Co-Author: Graham P. Head – Bayer Crop Science Co-Author: Xinzhi Ni – USDA-ARS Co-Author: Donald Cook – Mississippi State University Co-Author: Francis P.F. Reay-Jones – Clemson University Co-Author: Sebe Brown – University of Tennessee Co-Author: Fangneng Huang – Louisiana State University Poster Display Plant-Insect Ecosystems
9:00 AM – 5:00 PM MST

D3500: Dissecting Fraser fir Christmas tree interactions with piercing-sucking insect pests

Location: Exhibit Hall 6

Presenting Author: Swapna Priya Rajarapu – North Carolina State University

Co-Author: Sai Karthik Gade – North Carolina State University

Co-Author: Angela Chiang – North Carolina State University

Co-Author: Justin G.A. Whitehill – North Carolina State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3501: High-throughput phenotyping of resistance to aphid-vectored yellow dwarf viruses in grass seed crops

Location: Exhibit Hall 6

Presenting Author: Seth Dorman – USDA-ARS

Co-Author: Casey Cruse – USDA-ARS

Co-Author: Todd Temple – USDA-ARS

Co-Author: Hannah Rivedal – USDA-ARS

Co-Author: Nicole Anderson – Oregon State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3502: Hybrid vigor influences the estimated fitness costs and dominance levels of Bt resistance in

Helicoverpa zea

Location: Exhibit Hall 6

Presenting Author: Tiago H. da Silva – Louisiana State University

Co-Author: Shucong Lin – Louisiana State University

Co-Author: Graham P. Head – Bayer Crop Science

Co-Author: Bhavana Patla – Louisiana State University

Co-Author: Fangneng Huang – Louisiana State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3503: Insecticide resistance testing for Western flower thrip, *Frankliniella occidentalis* occurring in greenhouse red pepper cultivation areas in Korea

Location: Exhibit Hall 6

Presenting Author: Yi-seul Kim – Kyungpook National University

Co-Author: Dong-Woon Lee – Kyungpook National University

Co-Author: Min-jae Kim – Kyungpook National University

Co-Author: Hwang-bin Yu – Kyungpook National University

Co-Author: Yi-seul Kim – Kyungpook National University

Co-Author: Kyeong-woo Kim – Kyungpook National University

Co-Author: Jae-hyeon Choi – Kyungpook National University

Co-Author: Rosmery Malory Noil Erquinio – Kyungpook National University

Co-Author: Abraham Okki Mwamula – Kyungpook National University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3504: Management and mitigation of resistance in southwestern corn borer from the Cochise Valley in Arizona and New Mexico, U.S.

Location: Exhibit Hall 6

Presenting Author: Andre LB Crespo, Ph.D. – Corteva Agriscience

Co-Author: Amit Sethi – Corteva Agriscience

Co-Author: Renata Pereira – Corteva Agriscience

Co-Author: Robert Bowling – Corteva Agriscience

Co-Author: Frank Vieira – Corteva Agriscience

Co-Author: Daniel Brummel – Corteva Agriscience

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3505: Residual activity of the most common insecticides used in the Mississippi Delta to control tarnished plant bugs in cotton

Location: Exhibit Hall 6

Presenting Author: Maribel Reina Portilla – USDA-ARS

Co-Author: Nathan S. Little – USDA-ARS

Co-Author: Clint Allen – USDA-ARS

Co-Author: Yu-Cheng Zhu (he/him/his) – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3507: Utilizing native resistance for improved fall armyworm and corn earworm management in cotton-corn agroecosystem

Location: Exhibit Hall 6

Presenting Author: Megha N. Parajulee – Texas A&M University

Co-Author: Wenwei Xu – Texas A&M University

Co-Author: Raju Sapkota – Texas A&M University

Co-Author: Morgan Molsbee – Texas A&M University

Co-Author: Thomas Isakeit – Texas A&M University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

Poster: P-IE, Vectored Diseases



9:00 AM – 5:00 PM MST

D3508: Can the panel traps used for monitoring Asian citrus psyllid also provide reliable detection of Huanglongbing in California? 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Paul F. Rugman-Jones – University of California

Co-Author: Gregory S. Simmons – USDA-APHIS

Co-Author: Kris E. Godfrey – University of California

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3509: Evaluating and mitigating European foulbrood disease in honey bee colonies pollinating specialty crops 

Location: Exhibit Hall 6

Presenting Author: Benjamin Nichols – Oregon State University

Co-Author: Carolyn Breece – Oregon State University

Co-Author: Hannah M. Lucas – Oregon State University

Co-Author: Andony Melathopoulos – Oregon State University

Co-Author: Ramesh Reddy Sagili (he/him/his) – Oregon State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3510: Field phenology and virus transmission from blueberry aphids in Oregon 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Dalila Rendon – USDA-ARS

Co-Author: Madison Timmins – Oregon State University

Co-Author: Dimitri Mollov – USDA-ARS

Co-Author: Jana C. Lee – USDA-ARS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3511: Observation on corn leafhopper (*Dalbulus maidis*) and red stunt in the season 2024 in Texas state 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Fábio M. Führ (he/him/his) – Texas A&M University

Co-Author: David L. Kerns – Texas A&M University

Co-Author: Greg B. Wilson – Texas A&M University

Co-Author: Tyler Mays – Texas A&M AgriLife Extension

9:00 AM – 5:00 PM MST

D3512: Perspectives on the management of laurel wilt of avocado in South Florida 

Location: Exhibit Hall 6

Presenting Author: Carlos Andres Sendoya-Corrales – University of Florida

Co-Author: Monica Navia-Urrutia – University of Florida

Co-Author: Sara Salcedo-Sarmiento – University of Florida

Co-Author: Maria Lugo-Duque – University of Florida

Co-Author: Jonathan Crane – University of Florida

Co-Author: Romina Gazis – University of Florida

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3514: Survey of weeds as reservoirs of whitefly-transmitted viruses impacting melon crops in Yuma, AZ 

Location: Exhibit Hall 6

Presenting Author: Samuel Andres Discua Duarte – University of Arizona

Co-Author: William M. Wintermantel – USDA-ARS

Co-Author: Stepanie Slinski – University of Arizona

Co-Author: John C. Palumbo – University of Arizona

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3515: Take part in protecting U.S. agriculture! Help USDA identify potential invasive pests 

Location: Exhibit Hall 6

Presenting Author: Sage M. Thompson – USDA-ARS

Co-Author: Shannon Jarman – USDA-APHIS

Co-Author: Yilmaz Balci – USDA-APHIS

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3516: The vector regulation hypothesis: Dynamic competition between pathogen and vector behaviors regulates *Xylella fastidiosa* biofilm development in sharpshooter foreguts 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Elaine A. Backus (she/her/hers) – USDA-ARS

Co-Author: Holly Shugart – The Pennsylvania State University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

D3517: Viruses interaction in a common vector: Antagonistic effects and competitive dynamics between two tomato-infecting begomoviruses in *Bemisia tabaci* 

Location: Exhibit Hall 6

Presenting Author: Chi-Wei Tsai – National Taiwan University

Co-Author: Wei-Hua Li – National Taiwan University

Poster Display Plant-Insect Ecosystems

9:00 AM – 5:00 PM MST

Poster: SysEB, Biodiversity

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3518: A snapshot of pollinators inhabiting U.S. Army Corps of Engineers project areas in the Ouachita Mountains, Arkansas 

Location: Exhibit Hall 6

Presenting Author: Audrey Harrison, Ph.D. – USACE-ERDC

Co-Author: Reese Worthington, Ph.D. – Missouri Department of Conservation

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3519: Ant (Hymenoptera: Formicidae) diversity loss in a recently urbanized area in Querétaro, Mexico 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Javier G. Miguelena, Ph.D. – Arkansas State University

Co-Author: Luis Quintana – Arkansas State University

Co-Author: Bruno Trejo-Pimentel – Arkansas State University

Co-Author: Ximena Zamora-Prieto – Arkansas State University

Co-Author: Itzel Santillan delgadillo – Arkansas State University

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3520: Assessing a population of the rare appalachian tiger beetle (*Cicindela ancocisconensis* TW Harris) using a mark-recapture study 

Location: Exhibit Hall 6

Presenting Author: Jakob Tiler Goldner – West Virginia Division of Natural Resources

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3521: Assessing borderlands arthropod biodiversity in Organ Pipe Cactus National Monument, Arizona 

Location: Exhibit Hall 6

Presenting Author: Andrew Wesley Meeds – Arizona State University

Co-Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University

Co-Author: Michael J. Plagens

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3522: Big Bee at the University of New Hampshire 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: István Mikó – University of New Hampshire

Co-Author: Aaron Jotham Hoag – University of New Hampshire

Co-Author: Monique Raymond (she/her/hers) – University of New Hampshire

Co-Author: Corinne DiNardo – University of New Hampshire

Co-Author: Mphatso Langa – University of New Hampshire

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3523: Biodiversity of utility rights of way: Powerline clearings can be tools to combat habitat loss and fragmentation 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Hannah L. Cave Stout (she/her/hers) – Hannah L. (Cave) Stout, Ph.D.

Co-Author: Bradley D. Ross – The Pennsylvania State University

Co-Author: Carolyn G. Mahan – The Pennsylvania State University

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3524: Conservation of the saproxylic beetles in the Carpathians 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Silviu Chiriac – Vrancea Environmental Protection Agency

Co-Author: Marian D. Mirea – University of Bucharest

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3525: Experimental development and implementation of a management program against locust (Orthoptera: Acrididae) outbreaks in Fthiotis and Aghios Efstratios areas in Greece 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Antonios E. Tsagkarakis (he/him/his) – Agricultural University of Athens Co-Author: Evangelos Kontogiannis – Agricultural University of Athens Co-Author: Zoi Thanou – Agricultural University of Athens Co-Author: Georgios - Gastouniotis Maria-Bouga – Agricultural University of Athens Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3526: Hispanoptera: a Caribbean entomology study center in the Dominican Republic  Location: Exhibit Hall 6 Presenting Author: Ernesto De Jes Payano Mercado – Hispanoptera Co-Author: América Sánchez-Rosario – Hispanoptera Co-Author: Stephanie Gluski – Hispanoptera Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3527: Hyperdiversity of the raindrop treehoppers (Membracidae: Darninae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Stuart H. McKamey (he/him/his) – USDA-ARS Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3528: Initial survey of the wetland invertebrates of the Katy Prairie, a threatened prairie ecosystem  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Michelle R. Sanford, Ph.D., D-ABFE, FAAFS (she/her/hers) – Harris County Institute of Forensic Sciences Co-Author: Sara L. Ranger – Coastal Prairie Conservancy Co-Author: Ben Herzog – Coastal Prairie Conservancy Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3529: Integrating taxonomic resources: Tailored GBIF hosted portals for Gelechiidae (Lepidoptera) and Galerucinae (Coleoptera: Chrysomelidae)  Location: Exhibit Hall 6 Presenting Author: Sangmi Lee – Arizona State University Co-Author: Laura Prado – Denver Museum of Natural and Science Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST D3530: Life history and ecology of four species of Dorytomus Germar 1817 (Coleoptera: Curculionidae) associated with <i>Populus</i> spp. in Arizona  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Zane Holditch (he/him/his) – Northern Arizona University Co-Author: Gary Alpert – Northern Arizona University Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3531: Revealing hidden indigenous braconids of Korea (Hymenoptera): Research plans under the National Institute of Biological Resources' the Korean Indigenous Species Investigation Project  Location: Exhibit Hall 6 Presenting Author: Ilgoo Kang (he/him/his) – Kyungpook National University Co-Author: Michael Sharkey – The Hymenoptera Institute Co-Author: Yeon Jae Bae – Korea University Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3532: The hunt for elusive micro moths in South Florida  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Sebastian W. Palmieri (he/him/his) – University of Florida Co-Author: Alexander Rodriguez – Broward College Co-Author: David Serrano (he/him/his) – Broward College Co-Author: James E. Hayden, Jr. – FDACS Division of Plant Industry Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST Poster: SysEB, General  Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3533: A look into the microbiome of *Pheidole adrianoi*, an ant that associates with mycorrhizae



Location: Exhibit Hall 6

Presenting Author: Erin Samantha McFarland (she/her/hers) – University of Texas at Tyler

Co-Author: Jon Nicholas Seal – University of Texas

Co-Author: Katrin Kellner (she/her/hers) – University of Texas

Co-Author: Walter Tschinkel – Florida State University

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3534: Chemical defense of arthropods and plants against ants



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tomáš Bílek – Research and Breeding Institute of Pomology Holovously Ltd.

Co-Author: Pavel Pech (he/him/his) – Research and Breeding Institute of Pomology Holovously Ltd.

Co-Author: Jiří Sedláč (he/him/his) – Research and Breeding Institute of Pomology Holovously Ltd.

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3535: Comparative predatory behavior of field and laboratory-reared populations of the parasitoid

Cephalonomia stephanoderis



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Ricardo Rubin Balardin (he/him/his) – University of Puerto Rico

Co-Author: Daiane Dalla Nora – University of Puerto Rico

Co-Author: Yalliah Z. R. Figueroa – University of Puerto Rico

Co-Author: Ian C. W. Hardy – University of Helsinki

Co-Author: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3536: De novo transcriptomic resources for the cotton seed bug, *Oxycarenus hyalinipennis* Costa

(Hemiptera: Lygaeidae)



Location: Exhibit Hall 6

Presenting Author: Sam Daniel Heraghty (he/him/his) – USDA-ARS

Co-Author: Dawn Gundersen-Rindal (she/her/hers) – USDA-ARS

Co-Author: Michael E. Sparks – USDA-ARS

Co-Author: Aijun Zhang – USDA-ARS

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3537: Development of functional genomics tools in cactophilic *Drosophila*



Location: Exhibit Hall 6

Presenting Author: Luciano M. Matzkin (he/him/his) – University of Arizona

Co-Author: Carson W. Allan – University of Arizona

Co-Author: Sergio Castrezana – University of Arizona

Co-Author: Juan Hurtado – University of Arizona

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3538: Development toward new methods for the rapid distinction of wild-type and lab-reared *Anastrepha*

ludens



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Tonee A. Balingit – USDA-ARS

Co-Author: Tyler J. Raszick – USDA-APHIS-PPQ Science & Technology

Co-Author: Julian Dupuis – University of Kentucky

Co-Author: Sheina B. Sim (she/her/hers) – USDA-ARS

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3539: Disentangling the direct and indirect effects of climate change on 70 years of butterfly communities

across the U.S. Rocky Mountains



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Vaughn Michael Shirey (any/all/none) – University of California

Co-Author: Robert Guralnick – Florida Museum of Natural History

Co-Author: Melissa Guzman – University of California

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3540: Does the presence of foragers at a feeder reduce the recruitment rate in the rock ant,

Temnothorax rugatulus?



Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Supraja Rajagopal (they/them/theirs) – University of Georgia

Co-Author: Dana Wells – University of Georgia

Co-Author: Takao Sasaki – University of Georgia

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3541: Effect of diet on microbiome of wood-feeding cockroach 

Location: Exhibit Hall 6

Presenting Author: Erin Scott – University of Virginia

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3543: First record of a parasitoid wasp using adult flies as hosts (Diptera: Drosophilidae and Hymenoptera: Braconidae, Euphorinae) 

Location: Exhibit Hall 6

Presenting Author: Matthew J. Ballinger – Mississippi State University

Co-Author: Logan D. Moore – Mississippi State University

Co-Author: Toluwanimi Chris Amuwa – Mississippi State University

Co-Author: Scott R. Shaw – University of Wyoming

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3544: Genomic insights into the evolution of sociality in two yellowjacket wasps (Hymenoptera: Vespidae) 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Michael Anthony Catto (he/him/his) – Georgia Institute of Technology

Co-Author: Paige Caine – Georgia Institute of Technology

Co-Author: Sarah Elizabeth Orr – Georgia Institute of Technology

Co-Author: Brendan Hunt – University of Georgia

Co-Author: Michael Goodman – Georgia Tech

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3545: Integrative taxonomy of Ward *et al.*'s *Ceroptres* (Hymenoptera: Cynipoidea: Ceroptresini) 

Location: Exhibit Hall 6

Presenting Author: Louis F. Nastasi – The Pennsylvania State University

Co-Author: Cecil Smith – The Pennsylvania State University

Co-Author: Carly M. Tribull – Farmingdale State College

Co-Author: Charles K. Davis – The Pennsylvania State University

Co-Author: Andrew A. Forbes – University of Iowa

Co-Author: Andrew R. Deans – The Pennsylvania State University

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3547: New records and recommended methods for detecting the introduced two-spined trap-jaw ant (*Odontomachus haematodus*) in the Southeastern United States 

Location: Exhibit Hall 6

Presenting Author: Kaitlin M. Baudier, Ph.D. – University of Southern Mississippi

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3548: New roles and players in the natural enemy complex of cochineal in the Sonoran desert 

Location: Phoenix Convention Center, Exhibit Hall 6, PCC

Presenting Author: Suzanne E. Kelly (she/her/hers) – University of Arizona

Co-Author: Wendy Moore (she/her/hers) – University of Arizona

Co-Author: W. Eugene Hall – University of Arizona

Co-Author: Martha S. Hunter – University of Arizona

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3549: Older male forked fungus beetles experience higher mating success in the wild but not in the laboratory despite increased mating effort 

Location: Exhibit Hall 6

Presenting Author: Charlotte Greene – University of Virginia

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3550: Survey of regal fritillaries (*Speyeria*) in the Northern Loess Hills of Western Iowa: A comparison of prairie size with fritillary abundance 

Location: Exhibit Hall 6

Presenting Author: James Stroh – Morningside University

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST

D3551: The great grapplers: Investigating the mechanisms powering the unique Dryinidae pincer 

Location: Exhibit Hall 6

Presenting Author: Carly M. Tribull – Farmingdale State College

Co-Author: Carly M. Tribull – Farmingdale State College

Co-Author: Brendon Elias Boudinot – Smithsonian Institution

Co-Author: Thomas van de Kamp – Karlsruhe Institute of Technology

Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST D3552: The honey bee shaking signal tracks food availability  Location: Exhibit Hall 6 Presenting Author: Ashley Y. Kim – University of California Co-Author: James C. Nieh, Ph.D. – University of California Co-Author: Raúl Dueñas Ulloa – Instituto Politécnico Nacional Co-Author: Dania Abril Martínez Santana – Universidad Nacional Autónoma de México Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3554: The utility of 3RAD and traditional DNA-barcoding (COI) methods for uncovering cryptic myrmecophile species (Orthoptera: Myrmecophilidae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Christina L. Kwapich, Ph.D. – University of Central Florida Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST Poster: SysEB, Taxonomy and Systematics  Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3555: <i>Aphanogmus</i> of South Jeju Island (Hymenoptera: Ceraphronoidea)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Owen Bastille – University of New Hampshire Co-Author: Monique Raymond (she/her/hers) – University of New Hampshire Co-Author: István Mikó – University of New Hampshire Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3556: Evolution of the mitochondrial genome in ticks (Ixodidae)  Location: Exhibit Hall 6 Presenting Author: Donald B. Thomas – USDA-ARS Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3557: Fact Sheet Manager (FSM): A platform for creating user-friendly digital tools for pest identification  Location: Exhibit Hall 6

Presenting Author: Hanna Royals – Colorado State University Co-Author: Kojun Kanda – USDA-APHIS Co-Author: Melissa Islam – Colorado State University Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3559: Introducing BugBox, a software platform for AI-assisted arthropod bioinventories  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Kelton Douglas Welch – Ecdysis Foundation Co-Author: Jonathan G. Lundgren – Ecdysis Foundation Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3560: Introducing the Erebidae Ensemble: An analysis of the bioacoustic and mimetic complexes of Panamanian tiger moths (Erebidae: Arctiinae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Brandon Richard Wilson (he/him/his) – Milwaukee Public Museum Co-Author: Annika Jean Murrah, B.A. (she/her/hers) – Milwaukee Public Museum Co-Author: Nicolas J. Dowdy – Milwaukee Public Museum Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3561: Phylogenomics of the oil-collecting bees Tapinotaspidini based on UCEs: Revisiting past classifications and the recognition of two enigmatic lineages  Location: Exhibit Hall 6 Presenting Author: Antonio Aguiar – Universidade de Brasília Co-Author: Felipe Vieira Freitas – Universidade de São Paulo Co-Author: Michael G. Branstetter – USDA-ARS Co-Author: Vinicius Franceschini-Santos – Universidade de São Paulo Co-Author: Eduardo A. B. Almeida – Universidade de São Paulo Poster Display Systematics, Evolution, and Biodiversity

9:00 AM – 5:00 PM MST D3563: Structural overview of the trochanteral gear morphotypes of nymphal Fulgoromorpha  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Marissa Hanzlik (they/them/theirs) – USDA-ARS Co-Author: Michael Jansen – USDA-ARS Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3564: Taxonomic revision of <i>Hesperotettix</i> (Orthoptera: Acrididae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Shelby M. Grice (she/her/hers) – Mississippi State University Co-Author: JoVonn Hill – Mississippi Entomological Museum Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3565: The large carpenter bees of the Neotropical Region: Phylogenetics, classification and biogeography (<i>Xylocopa</i>, Apidae)  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Aline C. Martins, Ph.D. (she/her/hers) – University of Michigan Co-Author: Gabriel Melo – Federal University of Paraná Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3566: The unique cuticular morphology of the marine insect <i>Echinophthirius horridus</i>  Location: Phoenix Convention Center, Exhibit Hall 6, PCC Presenting Author: Tucker White – University of New Hampshire Co-Author: István Mikó – University of New Hampshire Co-Author: Monique Raymond (she/her/hers) – University of New Hampshire Poster Display Systematics, Evolution, and Biodiversity
9:00 AM – 5:00 PM MST D3567: To gall or not to gall, that is the question: Prevalence of cryptic galls across Cynipoidea, and new species of <i>Diastrophus</i> cryptic gallers  Location: Exhibit Hall 6 Presenting Author: Charles K. Davis – The Pennsylvania State University Co-Author: Louis F. Nastasi – The Pennsylvania State University Co-Author: Víctor Cuesta-Porta – Universitat de Barcelona Co-Author: Andrew R. Deans – The Pennsylvania State University

Co-Author: Heather M. Hines – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University Poster Display Systematics, Evolution, and Biodiversity
10:00 AM – 10:30 AM MST Exhibitor Demonstration: Macroscopic Solutions Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall) Presenting Author: Mark Smith – Macroscopic Solutions Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage
10:00 AM – 11:00 AM MST Conversation Starter: Failed Experiments Location: Phoenix Convention Center, The Hive (in the Exhibit Hall) Moderator: Rebecca T. Trout Fryxell (she/her/hers) – University of Tennessee Functions/Events/Meetings Conversation Starter
10:00 AM – 12:00 PM MST Science Policy Fellows Training Session (Invitation Only) Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America Functions/Events/Meetings Committee Meeting Science Policy
10:30 AM – 11:30 AM MST Creating an Effective Online Entomology Program: Overcoming Challenges and Ensuring Success Location: Phoenix Convention Center, 128 AB, PCC Organizer: Macey Keith – University of Arizona Organizer: Thomas Weissling – University of Nebraska Organizer: Robert Masson – University of Arizona Mini Workshop Formal and Informal Teaching
10:30 AM – 12:30 PM MST DoD Support for New Vector Control and Bite Prevention Products Organizer: Gabriela Zollner – Armed Forces Pest Management Board Organizer: Michelle G. Colacicco-Mayhugh, BCE – U.S. Army Section Symposium Medical, Urban, and Veterinary Entomology
10:30 AM – 10:45 AM MST ARIF: A platform for surveillance of militarily relevant mosquito-borne diseases  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Assaf Anyamba – National Aeronautics and Space Administration

Co-Author: Seth Gibson – USDA-ARS

Co-Author: Karly Harrod – Oak Ridge National Laboratory

Co-Author: Bhaskar Bishnoi – Oak Ridge National Laboratory

Co-Author: Heidi Tubbs – Oak Ridge National Laboratory

Co-Author: Lory Willard – USDA-ARS

Co-Author: Richard Damoah – Morgan State University

Section Symposium Medical, Urban, and Veterinary Entomology

10:45 AM – 11:00 AM MST

Overview of DWFP-funded vector bite prevention and control projects at WRAIR-AFRIMS



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Erica Lindroth, BCE (she/her/hers) – WRAIR-AFRIMS

Co-Author: Piyada Linsuwanon – U.S. Army

Co-Author: Alongkot Ponlawat – U.S. Army

Co-Author: Ratree Takhampunya – U.S. Army

Co-Author: Alyssa Mann – WRAIR-AFRIMS

Section Symposium Medical, Urban, and Veterinary Entomology

11:00 AM – 11:15 AM MST

Graphene in textiles for vector protection



Location: Phoenix Convention Center, 221 B, PCC

Presenting Author: Melynda Perry – Combat Capabilities Development Command

Co-Author: Greg Allen – USDA-ARS

Co-Author: Parker Brandwein – Combat Capabilities Development Command

Co-Author: Mitchell Gwynn – Combat Capabilities Development Command

Co-Author: Nicole Hoffman – Combat Capabilities Development Command

Co-Author: Michael Manser – Combat Capabilities Development Command

Co-Author: Edmund Norris – USDA-ARS

Co-Author: Joseph Orlando – Combat Capabilities Development Command

Co-Author: Thomas Tiano – Combat Capabilities Development Command

Section Symposium Medical, Urban, and Veterinary Entomology

11:15 AM – 11:30 AM MST

Examples of insecticide-free, mosquito bite proof garments for military uniforms and everyday life



Location: Phoenix Convention Center, 221 B

Presenting Author: Andre West – North Carolina State University

Co-Author: Jiayin Li – North Carolina State University

Co-Author: Elizabeth Kirkwood – North Carolina State University

Co-Author: Kun Luan – North Carolina State University

Co-Author: Grayson L. Cave, Ph.D. – North Carolina State University

Co-Author: Charles Apperson, Ph.D. – North Carolina State University

Co-Author: R. Michael Roe, Ph.D. – North Carolina State University

Co-Author: Emiel Den Hartog – North Carolina State University

Co-Author: Cassandra Kwon – North Carolina State University

Co-Author: Marion McCord – North Carolina State University

Section Symposium Medical, Urban, and Veterinary Entomology

11:30 AM – 11:45 AM MST

Using FDA approved food additives to control arthropods of medical importance



Location: Phoenix Convention Center, 221 B

Presenting Author: Aijun Zhang – USDA-ARS

Co-author: Cody Gale – USDA-ARS

Co-author: Edmund Norris – USDA-ARS

Co-author: Pradeep Paudel – USDA-ARS

Section Symposium Medical, Urban, and Veterinary Entomology

11:45 AM – 12:00 PM MST

Essential oil-based larvicides for mosquito control



Location: Phoenix Convention Center, 221 B

Presenting Author: Ivy Hurwitz – University of New Mexico

Co-Author: Elle Winfield – Walter Reed Army Institute of Research

Co-Author: Frederick Eyase – U.S. Army

Co-Author: Matthew Burrows – Walter Reed Army Institute of Research

Co-Author: Elizabeth Wanja – U.S. Army

Co-Author: Andrezza Campos Chagas – Walter Reed Army Institute of Research

Co-Author: Michael Workman – University of New Mexico

Co-Author: Dianne E. Peterson – University of New Mexico

Section Symposium Medical, Urban, and Veterinary Entomology

12:00 PM – 12:15 PM MST

Developing yeast microencapsulated fluralaner as a larvicide for vector control



Location: Phoenix Convention Center, 221 B

Presenting Author: Emily McDermott – University of Arkansas

Co-Author: Blythe Emily Lawson – University of Arkansas

Section Symposium Medical, Urban, and Veterinary Entomology

12:15 PM – 12:30 PM MST

Mathematical road map and textile testing standards for insecticide-free, mosquito bite proof clothing



Location: Phoenix Convention Center, 221 B Presenting Author: R. Michael Roe, Ph.D. – North Carolina State University Co-Author: Kun Luan – North Carolina State University Co-Author: Grayson L. Cave, Ph.D. – North Carolina State University	
Section Symposium Medical, Urban, and Veterinary Entomology	
10:30 AM – 12:30 PM MST Mapping Your Success – Designing and Measuring Impacts of Programs for High Impacts and Engagement Location: Phoenix Convention Center, 129 A Organizer: Sondra M. LoRe (she/her/hers) – STEM Program Evaluation, Assessment & Research Panelist: Leslie Ries – Georgetown University	
Workshop Formal and Informal Teaching	
10:30 AM – 12:30 PM MST 10-min: MUVE, Medical and Forensic Entomology Moderator: Karen M. Vail (she/her/hers) – University of Tennessee Moderator: Barbara S. Drolet (she/her/hers) – USDA-ARS	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:30 AM – 10:42 AM MST Working groups increase understanding of and confidence in working with suspected delusional infestation  Location: Phoenix Convention Center, 225 B Presenting Author: Karen M. Vail (she/her/hers) – University of Tennessee Co-Author: Nancy C. Hinkle – University of Georgia	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:42 AM – 10:54 AM MST Forensic entomology molecular informatics: Current concepts, trends, and challenges Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Yadong Guo (he/him/his) – Central South University Co-Author: Yanjie Shang – Central South University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
10:54 AM – 11:06 AM MST Humidity affects oviposition behavior of <i>Phormia regina</i> (Diptera: Calliphoridae) Location: Phoenix Convention Center, 225 B Presenting Author: Khadija Moctar – Indiana University	

Co-Author: Christine J. Picard – Indiana University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:06 AM – 11:18 AM MST Host age preference of the pupal parasitoid, <i>Spalangia Cameroni</i> (Hymenoptera: Pteromalidae) Location: Phoenix Convention Center, 225 B Presenting Author: Jimmy B. Pitzer, Jr. – USDA-ARS Co-Author: Sam Curtis – California State University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:18 AM – 11:30 AM MST Metagenomic analyses of house fly microbial communities reveals their role as sources, sentinels and disseminators of pathogens and antimicrobial resistance Location: Phoenix Convention Center, 225 B Presenting Author: Dana Nayduch – USDA-ARS Co-Author: Edward Bird – Kansas State University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:30 AM – 11:42 AM MST Potential role of house flies in mechanical transmission of vesicular stomatitis virus Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Barbara S. Drolet (she/her/hers) – USDA-ARS Co-Author: Lindsey Reister-Hendricks – USDA-ARS Co-Author: Jessica Gutierrez – USDA-ARS Co-Author: Luke Brendel – USDA-ARS Co-Author: Tanya Purvis – USDA-ARS Co-Author: Dana Nayduch – USDA-ARS	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:42 AM – 11:54 AM MST The kissing bug, <i>Rhodnius prolixus</i>, likely has a single functional photoreceptor in their eyes Location: Phoenix Convention Center, 225 B Presenting Author: Syeda Farjana Hoque – University of Cincinnati Co-Author: Michael Meece – University of Cincinnati Co-Author: Shubham Rathore – National Institute of Mental Health Co-Author: Elke Buschbeck – University of Cincinnati Co-Author: Joshua Benoit – University of Cincinnati	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	

11:00 AM – 11:30 AM MST Exhibitor Demonstration: Zantiks Ltd. Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall) Presenting Author: Bill Budenberg – Zantiks Ltd Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage
11:00 AM – 12:00 PM MST Entomology Games Committee Meeting Location: Sheraton Phoenix Downtown, Paradise Valley Organizer: Cheri Abraham – Syngenta Organizer: Cindy E. Myers – Entomological Society of America Functions/Events/MeetingsCommittee Meeting
11:00 AM – 12:00 PM MST Student Affairs Committee Meeting Location: Sheraton Phoenix Downtown, North Mountain, Sheraton Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Functions/Events/MeetingsCommittee MeetingStudent
12:00 PM – 1:00 PM MST Indigenous Entomologists Gathering (Invitation Only) Location: Phoenix Convention Center, 225 A Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Functions/Events/MeetingsDiversity, Equity, and Inclusion
12:15 PM – 1:15 PM MST Early Career Entomologists: Challenges and Triumphs Location: Phoenix Convention Center, 125 AB, PCC Organizer: Kashish Verma (she/her/hers) – University of Nebraska Organizer: Gagandeep Brar – Bayer Crop Science Organizer: Harit K. Bal – Bayer Crop Science Organizer: Sanket Shinde – University of Nebraska Organizer: Swapna Priya Rajarapu – North Carolina State University Organizer: Mandeep Tayal – Clemson University Organizer: Gurjit Singh – University of Georgia Panelist: Gabriela Inveninato Carmona – University of Nebraska Panelist: Sajjan Grover – Bayer Crop Science Panelist: De-fen Mou (she/her/hers) – University of Florida Panelist: Ramandeep Sandhi – FMC Corporation Panelist: Jinlong Han – Colorado State University Panelist: Brittany Peterson (she/her/hers) – Southern Illinois University Panelist: Amanda Pierce – U.S. Environmental Protection Agency

Mini WorkshopEarly Career
12:30 PM – 1:00 PM MST Moderator Training Location: Phoenix Convention Center, 122 A Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America GeneralModerator Training
12:30 PM – 2:00 PM MST What's New in Industry Organizer: Jesse M. Richardson – Corteva Agriscience Organizer: Julian R. Golec (he/him/his) – Corteva Agriscience Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage
12:30 PM – 12:37 PM MST Gowan product update Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC Presenting Author: Anna Howell – Gowan Company, LLC Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage
12:37 PM – 12:44 PM MST FMC product update Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC Presenting Author: Danielle Kirkpatrick – FMC Corporation Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage
12:44 PM – 12:51 PM MST Corteva product update Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC Presenting Author: Julian R. Golec (he/him/his) – Corteva Agriscience Functions/Events/MeetingsExhibit HallExhibitor Demonstration Stage

12:51 PM – 12:58 PM MST

Vestaron product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Dayna Collett – Vestaron Corporation

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

12:58 PM – 1:05 PM MST

UPL product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Cassandra Rieser – UPL

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:05 PM – 1:12 PM MST

Trécé product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Thomas Martin – Trécé

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:12 PM – 1:19 PM MST

Syngenta product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Caydee E. Savinelli (she/her/hers) – Syngenta

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:19 PM – 1:26 PM MST

Valent product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: R. Andrew Rodstrom – Valent USA

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:26 PM – 1:33 PM MST

Bayer product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Waseem Akbar – Bayer Crop Sciences

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:33 PM – 1:40 PM MST

Nichino product update 

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall), PCC

Presenting Author: Manuel Campos-Figueroa – NICHINO

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

1:00 PM – 2:00 PM MST

Science Policy Committee Meeting

Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton

Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America

Functions/Events/Meetings Committee Meeting Science Policy

1:00 PM – 2:00 PM MST

Side by Side: Comparing Four Digital Approaches for Illustrating Entomology

Location: Phoenix Convention Center, 129 A

Organizer: Jack Whisenant (They/he) – Cornell University

Mini Workshop

1:00 PM – 2:00 PM MST

Q&A with Poster Presenters

Location: Phoenix Convention Center, Exhibit Hall 6

Functions/Events/Meetings Exhibit Hall

1:00 PM – 3:00 PM MST

Infographics Toolkit: Enhancing Scientific Synthesis and Communication In and Out of the Classroom

Location: Phoenix Convention Center, 128 AB, PCC

Organizer: Hannah Chu (she/her/hers) – University of California

Organizer: Amy C. Murillo – University of California

Workshop Formal and Informal Teaching

2:00 PM – 2:30 PM MST

Exhibitor Demonstration: Union Biometrica, Inc.

Location: Phoenix Convention Center, Demonstration Stage (in the Exhibit Hall)

Presenting Author: Rock Pulak – Union Biometrica, Inc.

Functions/Events/Meetings Exhibit Hall Exhibitor Demonstration Stage

2:00 PM – 3:00 PM MST

Awards and Honors Committee Meeting

Location: Sheraton Phoenix Downtown, Paradise Valley, Sheraton

Organizer: William R. Morrison, III (he/him/his) – USDA-ARS

Organizer: Cindy E. Myers – Entomological Society of America Functions/Events/Meetings Committee Meeting	
2:00 PM – 3:00 PM MST Diversity, Equity, and Inclusion Committee Meeting Location: Sheraton Phoenix Downtown, North Mountain Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Functions/Events/Meetings Committee Meeting Diversity, Equity, and Inclusion	
2:00 PM – 3:00 PM MST Vector Biology Resources Workshop Location: Phoenix Convention Center, 226 B, PCC Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America Functions/Events/Meetings	
2:00 PM – 4:00 PM MST Symposium to Honor Michael Haverty and His Mentorship of Entomologists and Their Careers Organizer: Vernard R. Lewis, BCE (he/him/his) – University of California Organizer: Nan-Yao Su – University of Florida Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	^
2:00 PM – 2:15 PM MST A mentor, supporter, a true termitophile, and a friend Location: Phoenix Convention Center, 222 C Presenting Author: Nan-Yao Su – University of Florida Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
2:15 PM – 2:30 PM MST A great mentor: Michael Haverty Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Vernard R. Lewis, BCE (he/him/his) – University of California Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	

2:30 PM – 2:45 PM MST So many phenotypes, so little time: Adventures in chemotaxonomy Location: Phoenix Convention Center, 222 C Presenting Author: Lori Nelson – USDA-Forest Service Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
2:45 PM – 3:00 PM MST Can you repeat this experiment? How a request from Mike Haverty changed our career paths Location: Phoenix Convention Center, 222 C Presenting Author: Marion Page – USDA-Forest Service Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
3:00 PM – 3:15 PM MST My evolution as a forest research entomologist: The Haverty effect Location: Phoenix Convention Center, 222 C Presenting Author: Christopher Fettig – USDA-Forest Service Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
3:15 PM – 3:30 PM MST The terminologist guide to the galaxy: How Mike taught me to "not panic" and shaped a research career Location: Phoenix Convention Center, 222 C Presenting Author: Brian Forschler – University of Georgia Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
3:30 PM – 3:45 PM MST Tales from the hydrocarbon zone Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Ken Grace (he/him/his) – University of Hawaii at Manoa Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	

3:45 PM – 4:00 PM MST Mike gets the final words  Location: Phoenix Convention Center, 222 C Presenting Author: Michael Haverty – USDA-Forest Service Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems	
2:00 PM – 4:00 PM MST Life, the Universe, and Staphylinidae Organizer: Michael L. Ferro – Clemson University Member Symposium Systematics, Evolution, and Biodiversity	^
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 127 A Presenting Author: Michael L. Ferro – Clemson University	
2:05 PM – 2:20 PM MST Stop and smell the corpse flowers: Staphylinoid beetles and aroid pollination  Location: Phoenix Convention Center, 127 A Presenting Author: Ainsley Seago (she/her/hers) – Carnegie Museum of Natural History Member Symposium Systematics, Evolution, and Biodiversity	
2:20 PM – 2:35 PM MST Resolving the hardest puzzles in Xanthopygina (Coleoptera: Staphylinidae) systematics with new phylogenomic data  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Stylianos Chatzimanolis (he/him/his) – University of Tennessee at Chattanooga Co-Author: Adam Brunke – Canadian National Collection of Insects Member Symposium Systematics, Evolution, and Biodiversity	
2:35 PM – 2:50 PM MST Issues with the generic characters of the Holarctic <i>Batrisodes</i> generic group (Coleoptera: Staphylinidae: Pselaphinae)  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Donald Chandler – University of New Hampshire Member Symposium Systematics, Evolution, and Biodiversity	
2:50 PM – 3:05 PM MST	

Phylogeny of Nearctic <i>Lathrobium</i>  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Adam Haberski – Mississippi State University Member Symposium Systematics, Evolution, and Biodiversity	
3:05 PM – 3:20 PM MST A survey of Mycetoporinae of Wisconsin  Location: Phoenix Convention Center, 127 A Presenting Author: Ann Marsh – University of Wisconsin Member Symposium Systematics, Evolution, and Biodiversity	
3:20 PM – 3:25 PM MST Closing remarks Location: Phoenix Convention Center, 127 A Presenting Author: Michael L. Ferro – Clemson University	
2:00 PM – 4:00 PM MST Popping Protocols and Other Problems Location: Phoenix Convention Center, 222 B, PCC Organizer: Kyle K. Jordan, BCE – BASF Organizer: Rebecca T. Trout Fryxell (she/her/hers) – University of Tennessee Mini Workshop Medical, Urban, and Veterinary Entomology	
2:00 PM – 4:00 PM MST 10-min: PBT, Applied Toxicology and IPM Moderator: Dara G. Stockton, Ph.D. – USDA-APHIS Moderator: William Walker – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology	^
2:00 PM – 2:12 PM MST Comparative toxicity and efficacy of growth-regulating larvicides to Culex mosquitoes  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Grey Raven Smith – University of Nebraska Co-Author: Haley Fleetwood – University of Nebraska Co-Author: Heather Marie Hernandez – University of Nebraska Co-Author: Leslie Rault – University of Nebraska Co-Author: Troy Anderson – University of Nebraska 10-Minute Presentation Physiology, Biochemistry, and Toxicology	

2:12 PM – 2:24 PM MST Effects of sulfoxafior on caste development in the common eastern bumblebee (<i>Bombus impatiens</i>)  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Sarah Elizabeth Orr – Georgia Institute of Technology Co-Author: Kayla Murray – Georgia Institute of Technology Co-Author: Robert L. Bossard – Bossard Consulting Co-Author: Michael Goodisman – Georgia Tech 10-Minute Presentation Medical, Urban, and Veterinary Entomology
2:24 PM – 2:36 PM MST Enhancing hazelnut protection: Low-rate pheromone dispensers for filbertworm mating disruption  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Kyoo Park – Oregon State University Co-Author: Serhan Mermer – Oregon State University Co-Author: Betsey Miller – Oregon State University Co-Author: Christopher Hedstrom – Pacific Biocontrol Co-Author: Peter McGhee – Pacific Biocontrol Co-Author: Vaughn Walton – Oregon State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
2:36 PM – 2:48 PM MST Evaluation of oriental fruit fly (<i>Bactrocera dorsalis Hendel</i>) [Diptera: Tephritidae] response to methyl eugenol using lynfield traps on mango trees  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Elechi Franca Asawalam, Ph.D. – Michael Okpara University Of Agriculture Umudike Co-Author: Damian Asawalam – Michael Okpara University of Agriculture Umudike 10-Minute Presentation Physiology, Biochemistry, and Toxicology
2:48 PM – 3:00 PM MST Factors affecting success in the survival of a parasitoid wasp, <i>Diachasmimorpha longicaudata</i>  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Seo Hyun Kim – University of Georgia Co-Author: Michael R. Strand – University of Georgia Co-Author: Gaelen R. Burke – University of Georgia 10-Minute Presentation Physiology, Biochemistry, and Toxicology
3:00 PM – 3:12 PM MST

Spinosad insecticide resistance in Hawaii fruit flies: the extent of the problem, solutions, and challenges to changing approach  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Dara G. Stockton, Ph.D. – USDA-APHIS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
3:12 PM – 3:24 PM MST Understanding the National Pesticide Information Center (NPIC): who we are and what we do?  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Meredith Cocks – National Pesticide Information Center Co-Author: Serhan Mermer – Oregon State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
3:24 PM – 3:36 PM MST Investigating the honey bee virus dynamics in fire ant (<i>Solenopsis invicta</i> Buren) colonies  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Bita Valizadeh Gever – Mississippi State University Co-Author: Julie Hardy – Mississippi State University Co-Author: Jian Chen – USDA-ARS Co-Author: Esmaeil Amiri – Mississippi State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
3:36 PM – 3:48 PM MST Fire ant control targeting the Pheromone Biosynthesis Activating Neuropeptide (PBAN) Ligand-Receptor system  Location: Phoenix Convention Center, 225 B, PCC Presenting Author: Robert Kenneth Vander Meer – USDA-ARS Co-Author: Man-Yeon Choi – USDA-ARS Co-Author: Satya P. Chinta – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
2:00 PM – 4:00 PM MST 10-min: PBT, Life History Traits and Fitness 2 Moderator: Umut Toprak, Ph.D. (he/him/his) – Ankara University Moderator: Joe Hull – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology
2:00 PM – 2:12 PM MST

Transgenerational transmission of *Pseudomonas entomophila* causes host-pathogen co-adaptation



Location: Phoenix Convention Center, 224 A

Presenting Author: Krystal Maya-Maldonado, Ph.D. (she/her/hers) – Johns Hopkins University

Co-Author: Nichole Broderick (she/they) – Johns Hopkins University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:12 PM – 2:24 PM MST

Intermolt development reduces oxygen delivery and jump performance in grasshoppers



Location: Phoenix Convention Center, 224 A

Presenting Author: Scott D. Kirkton, Ph.D. – Union College

Co-Author: Grace M. Heiting – Union College

Co-Author: Sarah B. Vanasse – Union College

Co-Author: Andrew J. Sheahan – Union College

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:24 PM – 2:36 PM MST

Olfactory learning as a tool to understand odor coding in the mosquito brain



Location: Phoenix Convention Center, 224 A

Presenting Author: Genevieve M. Tauxe – University of Washington

Co-Author: Jeff Riffell – University of Washington

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:36 PM – 2:48 PM MST

Structural variations of *Drosophila* tubular lipid-binding proteins, and secretion in antenna and palps



Location: Phoenix Convention Center, 224 A, PCC

Presenting Author: Robert Renthal – University of Texas at San Antonio

Co-Author: Mkia Glover – University of Texas

Co-Author: Kevin Gutierrez – University of Texas

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:48 PM – 3:00 PM MST

The characterizing daily changes of metabolites in Northern house mosquito, *Culex pipiens*



Location: Phoenix Convention Center, 224 A

Presenting Author: Mizuki Yoshida, Ph.D. – The Ohio State University

Co-Author: Matthias Klein – McGill University

Co-Author: Megan Meuti – The Ohio State University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

3:00 PM – 3:12 PM MST

The effects of oxidative stress on the development and overwintering success of the alfalfa leafcutting bee,

Megachile rotundata



Location: Phoenix Convention Center, 224 A, PCC

Presenting Author: Kendra J. Greenlee, Ph.D. (she/her/hers) – North Dakota State University

Co-Author: Jacob B. Campbell – North Dakota State University

Co-Author: Bob Francois – Mississippi State University

Co-Author: Joseph P. Rinehart – USDA-ARS

Co-Author: Julia Bowsher – North Dakota State University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

3:12 PM – 3:24 PM MST

To be or not to be male: using RNAi to evaluate sex differentiation in *Lygus hesperus*



Location: Phoenix Convention Center, 224 A, PCC

Presenting Author: Joe Hull – USDA-ARS

Co-Author: Chan C. Heu – USDA-ARS

Co-Author: Roni J. Gross – USDA-ARS

Co-Author: Inana X. Schutze (she/her/hers) – USDA-ARS

Co-Author: Yu-Hui Wang – USDA-ARS

Co-Author: Dannialle M. LeRoy – USDA-ARS

Co-Author: Daniel Langhorst – USDA-ARS

Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS

Co-Author: Colin S. Brent (he/him/his) – USDA-ARS

10-Minute Presentation Physiology, Biochemistry, and Toxicology

3:24 PM – 3:36 PM MST

Impact of silencing trissin receptor-like on diapause and reproduction in the *Leptinotarsa decemlineata*

(Coleoptera: Chrysomelidae)



Location: Phoenix Convention Center, 224 A

Presenting Author: Umut Toprak, Ph.D. (he/him/his) – Ankara University

Co-Author: Betül Yılmaz

10-Minute Presentation Physiology, Biochemistry, and Toxicology

3:36 PM – 3:48 PM MST

Translation dynamics during the innate immune response in *Tribolium castaneum* flour beetles



Location: Phoenix Convention Center, 224 A, PCC

Presenting Author: Allyson Ray (she/her/hers) – Vanderbilt University

Co-Author: Sangeevan Vellappan – Rutgers University Co-Author: Srujana Samhita Yadavalli – Rutgers University Co-Author: Ann Thomas Tate – Vanderbilt University	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:48 PM – 4:00 PM MST Ablation of phagocytic hemocytes ameliorates the infection induced changes to the heart physiology of mosquitoes  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Julian F. Hillyer – Vanderbilt University Co-Author: Cole J. Meier – Vanderbilt University Co-Author: Shabbir Ahmed (he/him/his) – Vanderbilt University	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
2:00 PM – 5:00 PM MST Let Us Be PedANTic: Etymology and Entomology Organizer: Thomas N. Sheehan (he/him/his) – University of Georgia Organizer: May R. Berenbaum, Ph.D. (she/her/hers) – University of Illinois	
Section Symposium Systematics, Evolution, and Biodiversity	
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Thomas N. Sheehan (he/him/his) – University of Georgia	
2:05 PM – 2:25 PM MST Bugging people in ways they cannot put into words: The intrigue and importance of etymology in entomology  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Thomas N. Sheehan (he/him/his) – University of Georgia	
Section Symposium Systematics, Evolution, and Biodiversity	
2:25 PM – 2:45 PM MST Eschew obfuscation: The story of a dictionary of entomology  Location: Phoenix Convention Center, 224 B Presenting Author: David Headrick – California State Polytechnic University Co-Author: Gordon Gordh – USDA-APHIS	
Section Symposium Systematics, Evolution, and Biodiversity	

2:45 PM – 3:05 PM MST The EEB Language Project: Championing inclusive terminology in ecology and evolution  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Kathy Darragh – Indiana University Co-Author: Susan J Cheng – University of Michigan Co-Author: Kaitlyn M Gaynor – The University of British Columbia Co-Author: Alex C Moore – The University of British Columbia Co-Author: Cesar O Estien – University of California Co-Author: J W Hammon – Michigan Technological University Co-Author: Christopher Lawrence – Princeton University Co-Author: Kirby L Mills – University of Michigan Co-Author: Marcella D Baiz – University of Buffalo Co-Author: Danielle Ignace – The University of British Columbia Co-Author: Lily Khadempour – Rutgers University Co-Author: Matthew McCary, Ph.D. – Rice University Co-Author: Mallory M Rice – California State University Co-Author: Shersingh Joseph Tumber-Dávila – Dartmouth College Co-Author: Justine A Smith – University of California	
Section Symposium Systematics, Evolution, and Biodiversity	
3:05 PM – 3:25 PM MST The Better Common Names Project: A journey toward inclusive and better common names  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Angela M. Tucker, BCE (she/her/hers) – University of Tennessee	
Section Symposium Systematics, Evolution, and Biodiversity	
3:25 PM – 3:45 PM MST Pros and cons of gender agreement: Ideas for the new code edition  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Doug Yanega (he/him/his) – University of California	
Section Symposium Systematics, Evolution, and Biodiversity	
3:45 PM – 3:50 PM MST Closing remarks Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Thomas N. Sheehan (he/him/his) – University of Georgia	
2:00 PM – 5:00 PM MST Empowering Pest Management: Biological Control Strategies Against Spotted-wing Drosophila	

Organizer: Jana C. Lee – USDA-ARS Organizer: Julianna Wilson – Michigan State University Organizer: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University	⬆
Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jana C. Lee – USDA-ARS	
2:05 PM – 3:00 PM MST Panel discussion Location: Phoenix Convention Center, 131 B, PCC Panelist: Kent Daane – University of California Panelist: Angela Lovero – New Jersey Department of Agriculture Panelist: Alexander Gillett – New Jersey Department of Agriculture Panelist: Elizabeth H. Beers – Washington State University Panelist: Rufus Isaacs – Michigan State University	
3:00 PM – 3:15 PM MST Host specificity of <i>Ganaspis</i> in the field  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Paul K. Abram – AAFC Co-Author: Jesse Moon – Simon Fraser University Co-Author: Tara Gariepy – Agriculture and Agri-Food Canada	
Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
3:15 PM – 3:30 PM MST Overwintering of parasitoids of spotted-wing drosophila in the United States  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Philip Fanning – University of Maine Co-Author: Shehnaz Munnaf Chowdhury – University of Maine Co-Author: Andrew Jones – Michigan State University Co-Author: Patricia Prade (she/her/hers) – The Pennsylvania State University Co-Author: Kayla Beckwith – North Carolina State University Co-Author: Marha Flanagan – North Carolina Department of Agriculture and Consumer Services Co-Author: Gregory Wiggins – North Carolina Department of Agriculture and Consumer Services Co-Author: Hannah K. Levenson (she/her/hers) – North Carolina State University Co-Author: Julianna Wilson – Michigan State University Co-Author: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Co-Author: Gregory M. Loeb – Cornell University	

Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
3:30 PM – 4:00 PM MST Poster session Location: Phoenix Convention Center, 131 B, PCC	
3:30 PM – 4:00 PM MST SD50: Biological control in areawide program for spotted-wing drosophila  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jana C. Lee – USDA-ARS Co-Author: Elizabeth H. Beers – Washington State University Co-Author: Kent Daane – University of California Co-Author: Brian N. Hogg – USDA-ARS Co-Author: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS Co-Author: Vaughn Walton – Oregon State University	
Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display	
3:30 PM – 4:00 PM MST SD51: Effects of host fruit species and size on the efficacies of three key larval parasitoids of <i>Drosophila suzukii</i>  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Xingeng Wang – USDA-ARS Co-Author: Amanda Stout – University of Delaware Co-Author: Brooke Cherry – University of Delaware Co-Author: Kim Alan Hoelmer (he/him/his) – USDA-ARS	
Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display	
3:30 PM – 4:00 PM MST SD52: Interactions between <i>Drosophila suzukii</i> , its parasitoid <i>Ganaspis brasiliensis</i> , and the environment  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Ryan Chave – Oregon State University	
Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching Poster Display	
3:30 PM – 4:00 PM MST SD53: Investigating the behavioral response of parasitoids to olfactory cues and species competition on different berry crops  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Binita Shrestha – Cornell University	

Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD54: Investigating the impact of entomopathogenic nematodes as biological control agents of spotted wing drosophila in California 			
Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Isabel Lee-Park – University of California			
Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD55: Investigating the relationship between spotted-wing drosophila (<i>Drosophila suzukii</i>), parasitoids (<i>Ganaspis brasiliensis</i>), and entomopathogenic nematodes (<i>Steinernema feltiae</i>) in blueberries 			
Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Arden Lambert – University of Florida			
Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD56: Investigation of spotted-wing drosophila (<i>Drosophila suzukii</i>) behavior alteration with plant-derived substances 			
Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Ho Jung Yoon (she/her/hers) – Oregon State University			
Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD57: Mastering the mass rearing of <i>Ganaspis brasiliensis</i> 			
Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Juan Huang – Michigan State University			
Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD58: Measuring the effects of organically labelled insecticides on <i>Ganaspis brasiliensis</i> mortality 			
Location: Phoenix Convention Center, 131 B, PCC Presenting Author: James Brown – University of Florida			
Member Symposium	Plant-Insect Ecosystems	Formal and Informal Teaching	Poster Display
3:30 PM – 4:00 PM MST SD59: Nematodes and biology of parasitoids of spotted-wing drosophila 			

Location: Phoenix Convention Center, 131 B, PCC
Presenting Author: Nicholas McDonald (he/him/his) – Oregon State University

Member Symposium
Plant-Insect Ecosystems
Formal and Informal Teaching
Poster Display

3:30 PM – 4:00 PM MST
SD60: Optimal parasitoid densities for the mass rearing of *Leptopilina japonica* in vials and flasks

Location: Phoenix Convention Center, 131 B, PCC
Presenting Author: Benjamin Crossman Johnson – University of Maine

Member Symposium
Plant-Insect Ecosystems
Formal and Informal Teaching
Poster Display

3:30 PM – 4:00 PM MST
SD61: Oviposition of *Drosophila suzukii* in presence of *Ganaspis brasiliensis*

Location: Phoenix Convention Center, 131 B, PCC
Presenting Author: Ryan Turner (he/him/his) – Oregon State University

Member Symposium
Plant-Insect Ecosystems
Formal and Informal Teaching
Poster Display

4:00 PM – 4:15 PM MST
Ganaspis brasiliensis dispersal studies in Michigan and Oregon

Location: Phoenix Convention Center, 131 B, PCC
Presenting Author: Julianna Wilson – Michigan State University
Co-Author: Andrew Jones – Michigan State University
Co-Author: Heather Leach – Michigan State University
Co-Author: Juan Huang – Michigan State University
Co-Author: Steven Van Timmeren – Michigan State University
Co-Author: Rufus Isaacs – Michigan State University
Co-Author: Ryan Lee Paul – Oregon State University
Co-Author: Nicholas McDonald (he/him/his) – Oregon State University
Co-Author: Jana C. Lee – USDA-ARS

Member Symposium
Plant-Insect Ecosystems
Formal and Informal Teaching

4:15 PM – 4:30 PM MST
Assessments of nontarget impacts on *Ganaspis brasiliensis* Ihering (Hymenoptera: Figitidae)

Location: Phoenix Convention Center, 131 B, PCC
Presenting Author: Vaughn Walton – Oregon State University
Co-Author: Ryan Chave – Oregon State University

Member Symposium
Plant-Insect Ecosystems
Formal and Informal Teaching

4:30 PM – 4:45 PM MST

Compatibility of commonly used insecticides with exotic and resident parasitoids of spotted-wing drosophila  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Ashfaq Sial – University of Georgia Co-Author: Subin Babu Neupane – University of Georgia Co-Author: Cera Jones – University of Georgia Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
4:45 PM – 5:00 PM MST Developing the next generation of horticultural entomologists through guided research  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Mary Rogers – University of Minnesota Member Symposium Plant-Insect Ecosystems Formal and Informal Teaching	
2:00 PM – 5:00 PM MST One Health Approaches to Vector-borne Disease Surveillance and Control Organizer: Heather Kopsco (she/her/hers) – Columbia University Organizer: Yasmin Tavares – Columbia University Section Symposium Medical, Urban, and Veterinary Entomology	
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 221 B Presenting Author: Yasmin Tavares – Columbia University	
2:05 PM – 2:28 PM MST Islands in the stream: Impact of flood-induced landscape changes on mosquito community composition in the Brazilian Pantanal, with implications for arbovirus transmission  Location: Phoenix Convention Center, 221 B Presenting Author: Kristin Sloyer – University of Texas Co-Author: Daniel Moura de Aguiar – Federal University of Mato Grosso Co-Author: Rachel Vieira Paes de Barros – Federal University of Mato Grosso Co-Author: Edson Viana Massoli Jr. – Federal University of Mato Grosso Co-Author: Adrian A. Castellanos – Cary Institute of Ecosystem Studies Co-Author: Barbara A. Han – Cary Institute of Ecosystem Studies Co-Author: Kathryn A. Hanley (she/her/hers) – New Mexico State University Co-Author: Nikos Vasilakis – University of Texas Section Symposium Medical, Urban, and Veterinary Entomology	

2:28 PM – 2:51 PM MST Vector potential index: A trait-based metric bridging competence to contribution  Location: Phoenix Convention Center, 221 B Presenting Author: Amely Bauer – University of Florida Co-author: Nathan Burkett-Cadena – University of Florida Co-author: Lawrence Reeves – University of Florida Co-author: Barry W. Alto – University of Florida Co-author: Lindsay Campbell – University of Florida Section Symposium Medical, Urban, and Veterinary Entomology	
2:51 PM – 3:14 PM MST Geographical epidemiology of <i>Hyalomma anatolicum</i> and <i>Rhipicephalus microplus</i> in Pakistan  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Abrar Hussain – University of Illinois Co-Author: Sabir Hussain – University of Southern Mississippi Co-Author: Ao Yu – Stanford University Co-Author: Csaba Varga – University of Illinois Co-Author: Giulio De Leo – Stanford University Co-Author: Rebecca Lee Smith, DVM (she/her/hers) – University of Illinois Section Symposium Medical, Urban, and Veterinary Entomology	
3:14 PM – 3:24 PM MST Break Location: Phoenix Convention Center, 221 B	
3:24 PM – 3:47 PM MST Integrated tick-borne disease management and prevention across urban gradients  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Maria Diuk-Wasser – Columbia University Co-Author: Jonathan Bastard – Columbia University Co-Author: Daniel Ruiz Carrascal – Columbia University Co-Author: Maria Pilar Fernandez – Washington State University Co-Author: Marie Lilly – Columbia University Co-Author: Heather Kopsco (she/her/hers) – Columbia University Co-Author: Meredith VanAcker – Columbia University Section Symposium Medical, Urban, and Veterinary Entomology	
3:47 PM – 4:10 PM MST Utilizing a multi-pronged One Health approach to understand drivers of vector-borne diseases  Location: Phoenix Convention Center, 221 B	

Presenting Author: Sulagna Chakraborty – University of Illinois Co-author: Brian Allan, Ph.D. – University of Illinois Co-author: Becky Smith, Ph.D., DVM (she/her/hers) – University of Illinois Co-author: William Sander, DVM, MPH (he/him/his) Co-author: Flavia Andrade, Ph.D. (she/her/hers) – University of Illinois Co-author: Nora Mateus-Pinilla, Ph.D., DVM (she/her/hers) – Illinois Natural History Survey Section Symposium Medical, Urban, and Veterinary Entomology
4:10 PM – 4:33 PM MST Living the sweet life: Sugar feeding ecology in <i>Culicoides</i> and practical applications for targeted control  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Bethany McGregor (she/her/hers) – USDA Co-Author: Chip F. Markwardt – Kansas State University Co-Author: Travis Davis – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology
4:33 PM – 4:56 PM MST Developing and implementing an integrative pest management (IPM) program for the Florida kissing bug: Lessons learned from the field  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Norman Beatty, MD (he/him/his) – University of Florida Co-Author: Chanakya Bhosale – Nova Southeastern University Co-Author: Carson Torhorst – University of Florida Co-Author: Nathan Burkett-Cadena – University of Florida Co-Author: Faith M. Oi – University of Florida Co-Author: Bernardo M. Peniche – University of California Co-Author: Samantha M. Wisely – University of Florida Section Symposium Medical, Urban, and Veterinary Entomology
4:56 PM – 5:00 PM MST Closing remarks Location: Phoenix Convention Center, 221 B Presenting Author: Yasmin Tavares – Columbia University
2:00 PM – 5:00 PM MST Systematic Entomology Laboratory and Partners: Interplay of Systematics, Collections, and Agriculture Organizer: Michael W. Gates (he/him/his) – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems ^

2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 226 A Presenting Author: Michael W. Gates (he/him/his) – USDA-ARS
2:05 PM – 2:20 PM MST Systematic Entomology Laboratory: Research, information, service  Location: Phoenix Convention Center, 226 A Presenting Author: Michael W. Gates (he/him/his) – USDA-ARS Co-Author: Lourdes Chamorro – USDA Co-Author: Elizabeth Lebow – USDA-Forest Service Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
2:20 PM – 2:35 PM MST CANCELLED: Development of genomic and population toolkits for potato aphid: Helping the potato industry prepare for post-neonicotinoid resurgence of potato leafroll virus  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Christopher Owen (he/him/his) – USDA-ARS Co-Author: Rebecca A. Clement (she/her/hers) – USDA-APHIS Co-Author: Yelena Pacheco (she/her/hers) – USDA-ARS Co-Author: Gary Miller – Systematic Entomology Laboratory Co-Author: Andrew Jensen – Northwest Potato Consortium Co-Author: Elizabeth Murray – Washington State University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
2:35 PM – 2:50 PM MST Rising tides and floating boats: Enhancing the U.S. National Insect Collection to leverage research and taxonomic services  Location: Phoenix Convention Center, 226 A Presenting Author: Paul Goldstein – USDA-ARS Co-Author: Ryan St. Laurent – Smithsonian Institution Co-Author: Christopher Owen (he/him/his) – USDA-ARS Co-Author: Melvin Adkins – New College of Florida Co-Author: Richard Bridges Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
2:50 PM – 3:00 PM MST Break Location: Phoenix Convention Center, 226 A

3:00 PM – 3:15 PM MST Phylogenomics-enabled identification and evolutionary analysis in <i>Anastrepha</i> fruit flies (Diptera: Tephritidae) and <i>Liriomyza</i> leafminers (Diptera: Agromyzidae)  Location: Phoenix Convention Center, 226 A Presenting Author: Brian Wiegman – North Carolina State University Co-Author: Sonja Scheffer – USDA-ARS Co-Author: Allen Norrbom – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST Systematics research in support of effective biological control  Location: Phoenix Convention Center, 226 A Presenting Author: Matthew Buffington – USDA-ARS Co-Author: Jeffrey Sosa-Calvo – Smithsonian Institution Co-Author: Elijah Talamas – Florida State Collection of Arthropods Co-Author: Chang-Ti Tang – University of Edinburgh Co-Author: Robert Kula – USDA-ARS Co-Author: Robert L. Kresslein – USDA-ARS Co-Author: Michael W. Gates (he/him/his) – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:30 PM – 3:45 PM MST Identification Technology Program: Facilitating the development and communication of diagnostic resources for the detection of pestiferous insects  Location: Phoenix Convention Center, 226 A Presenting Author: Kojun Kanda – USDA-APHIS Co-Author: Hanna Royals – USDA-APHIS Co-Author: Aimee Ward – USDA-APHIS Co-Author: Melissa Islam – Colorado State University Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
3:45 PM – 3:55 PM MST Break Location: Phoenix Convention Center, 226 A
3:55 PM – 4:10 PM MST Museum to murder hornets: How SEL support enables rapid field responses to potential invasions  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Nathan Roeuche – Washington State Department of Agriculture Co-Author: Chris Looney – Washington State Department of Agriculture

Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
4:10 PM – 4:25 PM MST Microscopy research in SEL: Electron and confocal microscopy unit  Location: Phoenix Convention Center, 226 A, PCC Presenting Author: Michael Jansen – USDA-ARS Co-Author: Marissa Hanzlik (they/them/theirs) – USDA-ARS Co-Author: Austin Fife – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
4:25 PM – 4:40 PM MST Defining species boundaries in the red imported fire ant (<i>Solenopsis invicta</i>) through integrated approaches  Location: Phoenix Convention Center, 226 A Presenting Author: Jeffrey Sosa-Calvo – Smithsonian Institution Co-Author: Ted R. Schultz – Smithsonian Institution Co-Author: Marina S. Ascunce – USDA-ARS Co-Author: Sanford Porter – USDA-ARS Co-Author: Michael W. Gates (he/him/his) – USDA-ARS Co-Author: Robert Kula – USDA-ARS Co-Author: Matthew Buffington – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity Plant-Insect Ecosystems
4:40 PM – 4:50 PM MST Closing remarks Location: Phoenix Convention Center, 226 A Presenting Author: Michael W. Gates (he/him/his) – USDA-ARS
2:00 PM – 5:00 PM MST Looking Beyond the Obvious: Employing Novel HTP Tools to Decipher Plant-insect Interactions Organizer: Sajjan Grover – Bayer Crop Science Organizer: Camila Hofman – Bayer Crop Science Section Symposium Plant-Insect Ecosystems
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 122 A Presenting Author: Sajjan Grover – Bayer Crop Science
2:05 PM – 2:25 PM MST

The insect eavesdropper: Bridging lab research and field applications in entomology  Location: Phoenix Convention Center, 122 A Presenting Author: Emily Bick, BCE-Intern – University of Wisconsin Section Symposium Plant-Insect Ecosystems
2:25 PM – 2:45 PM MST Phenotyping sorghum responses to fall armyworm infestation  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Joe Louis – University of Nebraska Co-Author: Kumar Shrestha – University of Nebraska Co-Author: Sanket Shinde – University of Nebraska Section Symposium Plant-Insect Ecosystems
2:45 PM – 3:05 PM MST Applying image-based plant phenotyping and photosynthetic measurements to decipher the interactive effects of fatty acid metabolism and ROS signaling on insect resistance, plant growth, and development  Location: Phoenix Convention Center, 122 A Presenting Author: Fiona L. Goggin – University of Arkansas Co-Author: Hillary Fischer – Michigan State University Co-Author: Jiamei Li – University of Arkansas Co-Author: Suxing Liu – University of Arizona Co-Author: Argelia Lorence – Arkansas State University Section Symposium Plant-Insect Ecosystems
3:05 PM – 3:15 PM MST Break  Location: Phoenix Convention Center, 122 A
3:15 PM – 3:35 PM MST Detection of insect-induced crop damages using satellites, drones, sensors, and machine learning  Location: Phoenix Convention Center, 122 A Presenting Author: Yong-lak Park – West Virginia University Section Symposium Plant-Insect Ecosystems
3:35 PM – 3:55 PM MST A view from above: Using drones for pest detection and monitoring  Location: Phoenix Convention Center, 122 A Presenting Author: Brian McCornack – Kansas State University

Co-Author: Ivan Grijalva – Kansas State University Co-Author: Trevor Witt – Kansas State University Section Symposium Plant-Insect Ecosystems
3:55 PM – 4:15 PM MST Phenotyping resistance and modeling risk factors associated with aphid-vectored yellow dwarf viruses in perennial grass seed crops  Location: Phoenix Convention Center, 122 A Presenting Author: Seth Dorman – USDA-ARS Co-Author: Hannah Rivedal – USDA-ARS Co-Author: Nicole Anderson – Oregon State University Co-Author: Darrin Walenta – Oregon State University Co-Author: Casey Cruse – USDA-ARS Co-Author: Todd Temple – USDA-ARS Co-Author: Rodney Cooper – USDA-ARS Section Symposium Plant-Insect Ecosystems
4:15 PM – 4:35 PM MST Panel discussion Location: Phoenix Convention Center, 122 A
4:35 PM – 4:40 PM MST Closing remarks Location: Phoenix Convention Center, 122 A Presenting Author: Sajjan Grover – Bayer Crop Science
2:00 PM – 5:00 PM MST Neurophysiological Basis of Olfactory Communication and Odor Detection in Insects Organizer: Juergen Liebig (he/him/his) – Arizona State University Organizer: Jessie Ebie (she/her/hers) – Arizona State University Section Symposium Physiology, Biochemistry, and Toxicology
2:00 PM – 2:20 PM MST The effect of social experience on gene expression, circuit function, and behaviors in <i>Drosophila</i>  Location: Phoenix Convention Center, 122 B Presenting Author: Pelin C. Volkan – Duke University Co-Author: Chengcheng Du – Duke University Co-Author: Jesus Emiliano Sotelo Fonseca – Duke University Co-Author: Marta Rozados Barreiro – Duke University Co-Author: Shayna Scott – Duke University Co-Author: Ashley Jia – Duke University

Co-Author: Shania Appadoo – Duke University Co-Author: Yuta Mabuchi – Columbia University Co-Author: Nilay Yapici – Cornell University Co-Author: Corbin Jones – University of North Carolina	
Section Symposium Physiology, Biochemistry, and Toxicology	
2:20 PM – 2:40 PM MST Strain variation as a window into the neural logic of <i>Drosophila</i> mate choice  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Anna Ryba (she/her/hers) – Rockefeller University Co-Author: Philipp Brand – Rockefeller University Co-Author: Florian Hollunder – Rockefeller University Co-Author: Yarden Wiesnfeld – Rockefeller University Co-Author: Vanessa Ruta – Rockefeller University	
Section Symposium Physiology, Biochemistry, and Toxicology	
2:40 PM – 3:00 PM MST Moth pheromones: Olfactory processing of behaviorally relevant blends  Location: Phoenix Convention Center, 122 B Presenting Author: Neil J. Vickers – University of Utah	
Section Symposium Physiology, Biochemistry, and Toxicology	
3:00 PM – 3:20 PM MST The organization of the clonal raider ant antennal lobe  Location: Phoenix Convention Center, 122 B Presenting Author: Dominic D. D. Frank – Rockefeller University Co-Author: Daniel J. C. Kronauer – Rockefeller University	
Section Symposium Physiology, Biochemistry, and Toxicology	
3:20 PM – 3:40 PM MST Break Location: Phoenix Convention Center, 122 B	
3:40 PM – 4:00 PM MST Development of odorant receptor neurons in ants  Location: Phoenix Convention Center, 122 B Presenting Author: Hua Yan – University of Florida Co-Author: Bogdan Sieriebriennikov – University of Florida Co-Author: Kayli R. Sieber (she/her/hers) – University of Florida	

Section Symposium Physiology, Biochemistry, and Toxicology	
4:00 PM – 4:20 PM MST Domestication alters signals used by specialist pollinators to detect squash flowers (<i>Cucurbita</i> sp.)  Location: Phoenix Convention Center, 122 B Presenting Author: Avehi Singh – The Pennsylvania State University Co-Author: Andrew J. Myrick – The Pennsylvania State University Co-Author: Nathaniel B. McCartney – The Pennsylvania State University Co-Author: Kristin K. Brucha-De Luca – University of the Bahamas Co-Author: Swayamjit Ray – Cornell University Co-Author: Jared G. Ali – The Pennsylvania State University Co-Author: Margarita M. Lopez-Urbe – The Pennsylvania State University	
Section Symposium Physiology, Biochemistry, and Toxicology	
4:20 PM – 4:40 PM MST Effects of active sensing in associative learning in the honey bee, <i>Apis mellifera</i>  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Hong Lei – Arizona State University Co-Author: Mainak Patel – College of William and Mary Co-Author: Maksim Bazhenov – University of California Co-Author: Brian H. Smith – Arizona State University Co-Author: Shawn T. Mahoney, II – Arizona State University Co-Author: Ariana Bashar – Arizona State University Co-Author: Nisha Kulkarni – Arizona State University Co-Author: Harry H. Lei – Arizona State University	
Section Symposium Physiology, Biochemistry, and Toxicology	
2:00 PM – 5:00 PM MST 10-min: SysEB, Invasive Species, Diagnostics, and Biocontrol Moderator: Telmah Telmadarrehei, Ph.D. – University of Florida Moderator: Silvie Huijben – Arizona State University	
10-Minute Presentation Systematics, Evolution, and Biodiversity	
2:00 PM – 2:12 PM MST Evaluation of tri-signature X-ray computed tomography for larvae-in-fruit infestation inspection  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Yao-Te Cheng – Stanford University Co-Author: Hong Chen – USDA-APHIS Co-Author: Amy L. Roda – USDA-APHIS Co-Author: Lambertus Hesselink – Stanford University	

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:12 PM – 2:24 PM MST

Helicoverpa zea and *Helicoverpa armigera* hybridization in the New World: Designing a test for identifying hybrids 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Roger Lawrie – University of Puerto Rico

Co-Author: Steven Massey – University of Puerto Rico

Co-Author: Jose Carlos Verle Rodrigues (he/him/his) – USDA-APHIS

Co-Author: Paola Agosto Miranda – University of Puerto Rico

Co-Author: Consuelo Estevez de Jensen – University of Puerto Rico

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:24 PM – 2:36 PM MST

Shining light on species delimitation: How spectrophotometry could unravel the *Chrysobothris femorata* species complex 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Alfred Daniel Johnson – Tennessee State University

Co-Author: Cynthia L. Perkovich, Ph.D. (she/her/hers) – Ashland University

Co-Author: Anjin Chang – Tennessee State University

Co-Author: Karla Michele Adesso – Tennessee State University

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:36 PM – 2:48 PM MST

Importance of entomological surveillance during outbreak 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Amarpal Singh Bhadauriya, Ph.D. – Nagpur University Nagpur

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:48 PM – 3:00 PM MST

Assessing patterns of fall armyworm movement across the continental United States 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Ashley E. Tessnow – Texas A&M University

Co-Author: Robert L. Meagher, Jr. (he/him/his) – USDA-ARS

Co-Author: Rod Nagoshi, Ph.D. – USDA-ARS

Co-Author: Todd M. Gilligan – USDA-APHIS

Co-Author: Andie C. Miller – Texas A&M University

Co-Author: Jason West – Texas A&M University

Co-Author: Greg Sword – Texas A&M University

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:00 PM – 3:12 PM MST

Geographic potential of the elm zigzag sawfly, *Aproceros leucopoda* in North America 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Claudia Nunez-Penichet – University of Kansas

Co-Author: Zenia P. Ruiz Utrilla – University of Kansas

Co-Author: Daniel Rojas – University of Kansas

Co-Author: Joanna L. Corimanya – University of Kansas

Co-Author: Kier Mitchel E. Pitogo – University of Kansas

Co-Author: Weverton C. F. Trindade – Federal University of Paraná

Co-Author: Andres Felipe Herrera Motta (he/him/his) – University of Kansas

Co-Author: A. Townsend Peterson – University of Kansas

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:12 PM – 3:24 PM MST

Break

Location: Phoenix Convention Center, 127 B, PCC

3:24 PM – 3:36 PM MST

Invasive scale insects in Florida: The crossroads of regulatory and taxonomic entomology 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Erin Powell – Florida State Collection of Arthropods

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:36 PM – 3:48 PM MST

Assessing sperm storage in two biotypes of *Calomela intemerata*: A potential biological control of earleaf acacia 

Location: Phoenix Convention Center, 127 B, PCC

Presenting Author: Telmah Telmadarrehei, Ph.D. – University of Florida

Co-Author: Eloise Lamie – University of Florida

Co-Author: Sara Elizabeth Salgado Astudillo – University of Florida

Co-Author: Emily Le Falchier (she/her/hers) – University of Florida

Co-Author: Melissa Smith – USDA-ARS

Co-Author: Matthew F. Purcell (he/him/his) – CSIRO

Co-Author: Carey Minter – University of Florida

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:48 PM – 4:00 PM MST

Functional characterization of five nudivirus core genes in *Venturia canescens* virus-like particles 

Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Meng Mao – University of Georgia Co-Author: Corinne M. Stouthamer – University of Georgia Co-Author: Ange D. Lorenzi – University of Georgia Co-Author: Michael R. Strand – University of Georgia Co-Author: Gaelen R. Burke – University of Georgia	10-Minute Presentation Systematics, Evolution, and Biodiversity
4:00 PM – 4:12 PM MST Ecological attributes of the single, successful <i>Calosoma</i> (Coleoptera: Carabidae) introduction to the Hawaiian Islands  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: James K. Liebherr – Cornell University Co-Author: Janis N. Matsunaga – Hawaii Department of Land and Natural Resources Co-Author: Ann E. Hajek – Cornell University	10-Minute Presentation Systematics, Evolution, and Biodiversity
4:12 PM – 4:24 PM MST Selective pressures for insecticide resistance: May the selective force be with us  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Silvie Huijben – Arizona State University	10-Minute Presentation Systematics, Evolution, and Biodiversity
4:24 PM – 4:36 PM MST Preference, survival, and fitness of the invasive larger grain borer <i>Prostephanus truncatus</i> (Horn) on acorns of three native oak species  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Qinglei Ming (he/him/his) – Kansas State University Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS Co-Author: Kun Yan Zhu – Kansas State University Co-Author: James F. Campbell – USDA-ARS Co-Author: Erin D. Scully – USDA-ARS	10-Minute Presentation Systematics, Evolution, and Biodiversity
4:36 PM – 4:48 PM MST A comparative morphological study of red palm weevil (<i>Rhynchophorus ferrugineus</i>) from Pakistan and palmetto weevil (<i>Rhynchophorus cruentatus</i>) (Coleoptera: Curculionidae) from Florida  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Mujahid Manzoor, Ph.D. – University of the Punjab	

10-Minute Presentation Systematics, Evolution, and Biodiversity	
4:48 PM – 5:00 PM MST Introgression in invasive insects  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Rebecca A. Clement (she/her/hers) – USDA-APHIS	10-Minute Presentation Systematics, Evolution, and Biodiversity
2:00 PM – 6:00 PM MST Empowering Entomologists: Navigating Extension Pathways Organizer: Patricia Prade (she/her/hers) – The Pennsylvania State University Organizer: James Villegas – Louisiana State University	Section Symposium Formal and Informal Teaching
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Patricia Prade (she/her/hers) – The Pennsylvania State University	
2:05 PM – 2:30 PM MST Captivated and curious: Taking on the challenge of educating disinterested audiences  Location: Phoenix Convention Center, 129 B Presenting Author: Jody Green, BCE – Nebraska Extension in Lancaster County	Section Symposium Formal and Informal Teaching
2:30 PM – 2:55 PM MST Approaches to outreach and extension across countries and communities  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Priyadarshini Chakrabarti Basu – Mississippi State University	Section Symposium Formal and Informal Teaching
2:55 PM – 3:20 PM MST Communication improvements in extension: Catering your subject to audience needs  Location: Phoenix Convention Center, 129 B Presenting Author: Terri L. Billeisen – North Carolina State University	Section Symposium Formal and Informal Teaching
3:20 PM – 3:45 PM MST	

Forest health program in Texas: Education and training for landowners and professionals  Location: Phoenix Convention Center, 129 B Presenting Author: Demian Gomez – Texas A&M University Section Symposium Formal and Informal Teaching
3:45 PM – 4:00 PM MST Break Location: Phoenix Convention Center, 129 B
4:00 PM – 4:25 PM MST Navigating new territories: An extension entomologist's journey from the Midwest to the Bayou  Location: Phoenix Convention Center, 129 B Presenting Author: Aaron R. Ashbrook – Louisiana State University Section Symposium Formal and Informal Teaching
4:25 PM – 4:50 PM MST The research-extension feedback loop for scientific progress  Location: Phoenix Convention Center, 129 B Presenting Author: Robert Orpet – Washington State University Section Symposium Formal and Informal Teaching
4:50 PM – 5:15 PM MST Challenges and opportunities in developing an agronomic crops extension program in south Florida  Location: Phoenix Convention Center, 129 B Presenting Author: Matthew VanWeelden – University of Florida Section Symposium Formal and Informal Teaching
5:15 PM – 5:55 PM MST Panel discussion Location: Phoenix Convention Center, 129 B
5:55 PM – 6:00 PM MST Closing remarks Location: Phoenix Convention Center, 129 B Presenting Author: James Villegas – Louisiana State University
2:00 PM – 6:00 PM MST Queer Entomology: A Retelling of Entomology Through a Queer Lens Organizer: Vilas Brown (they/them/theirs) – Colorado State University

Organizer: Lauren Esposito – CAS Organizer: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Organizer: Olivia Grace Carter – Colorado State University Member Symposium Diversity, Equity, and Inclusion
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 225 A Presenting Author: Vilas Brown (they/them/theirs) – Colorado State University
2:05 PM – 2:22 PM MST The importance of queer visibility of STEM  Location: Phoenix Convention Center, 225 A Presenting Author: Lauren Esposito – CAS Member Symposium Diversity, Equity, and Inclusion
2:22 PM – 2:39 PM MST A brief history of queer entomology from insects to the people who study them  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Vilas Brown (they/them/theirs) – Colorado State University Member Symposium Diversity, Equity, and Inclusion
2:39 PM – 2:56 PM MST The role of identity: Engaging in conversations about influencing science  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Archie-Em Walker – Colorado State University Member Symposium Diversity, Equity, and Inclusion
2:56 PM – 3:13 PM MST The history of gender and geographic diversity among spider taxonomists  Location: Phoenix Convention Center, 225 A Presenting Author: Katherine O. Montana – California Academy of Sciences Co-Author: Jacob Aaron Gorneau – California Academy of Sciences Co-Author: Franklyn Cala-Riquelme – California Academy of Sciences Co-Author: Sarah C. Crews – California Academy of Sciences Co-Author: Luigie D. Aléquin (he/him/his) – California Academy of Sciences Co-Author: Amin al-Jamal – California Academy of Sciences Co-Author: Kimberly S. Marta – Universidade do Vale do Rio dos Sinos Co-Author: Cláudia Xavier – Universidade Federal do Pará

Co-Author: Anna Holmquist (she/her/hers) – California Academy of Sciences Co-Author: Lauren Esposito – CAS Member Symposium Diversity, Equity, and Inclusion
3:13 PM – 3:30 PM MST Pathways to success: Navigating STEM as a non-traditional student  Location: Phoenix Convention Center, 225 A Presenting Author: Olivia Grace Carter – Colorado State University Member Symposium Diversity, Equity, and Inclusion
3:30 PM – 3:47 PM MST Lessons learned from a decade of queer performance and entomology: Teaching, outreach, and extension  Location: Phoenix Convention Center, 225 A Presenting Author: Lewis Bartlett (they/them/theirs) – University of Georgia Member Symposium Diversity, Equity, and Inclusion
3:47 PM – 4:03 PM MST Panel discussion Location: Phoenix Convention Center, 225 A
4:03 PM – 4:19 PM MST Break Location: Phoenix Convention Center, 225 A
4:19 PM – 4:36 PM MST Exploring mimetic butterfly wing pattern diversity and queer identity  Location: Phoenix Convention Center, 225 A Presenting Author: Renato Nunes – City University of New York Co-Author: David J. Lohman – University of New York Member Symposium Diversity, Equity, and Inclusion
4:36 PM – 4:53 PM MST Finding my voice as a queer entomologist  Location: Phoenix Convention Center, 225 A Presenting Author: Abigail Hayes – University of Connecticut Member Symposium Diversity, Equity, and Inclusion
4:53 PM – 5:10 PM MST

Unearthing identity: The pitfalls of a queer scientist  Location: Phoenix Convention Center, 225 A, PCC Presenting Author: Brittany Kohler – University of California Member Symposium Diversity, Equity, and Inclusion
5:10 PM – 5:27 PM MST Comparative phylogeography of Lesser Antillean arachnid endemics  Location: Phoenix Convention Center, 225 A Presenting Author: Luigie D. Aléquin (he/him/his) – California Academy of Sciences Co-Author: Franklyn Cala-Riquelme – California Academy of Sciences Co-Author: Rayna C. Bell – California Academy of Sciences Co-Author: Lauren Esposito – CAS Member Symposium Diversity, Equity, and Inclusion
5:27 PM – 5:44 PM MST Experiences as a trans nonbinary systematist in the field, collections, and internationally  Location: Phoenix Convention Center, 225 A Presenting Author: Erin Krichilsky – Columbia University Member Symposium Diversity, Equity, and Inclusion
5:44 PM – 6:00 PM MST Panel discussion Location: Phoenix Convention Center, 225 A
2:00 PM – 6:00 PM MST Challenges of Generating Field-relevant Data for Tomorrow’s Insect-protected Plants Organizer: Jennifer Fridley (she/her/hers) – Bayer Crop Science Organizer: Kimberly Morrell (she/her/hers) – Bayer Crop Science Section Symposium Physiology, Biochemistry, and Toxicology
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Jennifer Fridley (she/her/hers) – Bayer Crop Science
2:05 PM – 2:30 PM MST Lessons learned from 10 years of field and lab work with western bean cutworm, a unique lepidopteran pest  Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Julie Ann Peterson – University of Nebraska Co-Author: Priscila Maria Colombo Da Luz – University of Nebraska Co-Author: Ana Paula Santana Lima (she/her/hers) – University of Nebraska Co-Author: Andrea Rilakovic – University of Nebraska - Lincoln Co-Author: Alisson Da Silva – University of Nebraska Section Symposium Physiology, Biochemistry, and Toxicology
2:30 PM – 2:45 PM MST Navigating the complexities of rearing and sustaining resistant insect colonies derived from global field populations  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Evelien Van Ekert – Syngenta Co-Author: Travis Hootman – Syngenta Co-Author: Zhimou Wen – Syngenta Co-Author: Matt Bramlett – Syngenta Research Triangle Park Co-Author: Mikiyoung Lee – Syngenta Co-Author: Fernando Mantouvane – Syngenta Co-Author: Betiana Parody – Syngenta Section Symposium Physiology, Biochemistry, and Toxicology
2:45 PM – 3:00 PM MST Methods and studies of life history traits of lepidopteran pests to support IPM/IRM recommendations  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Silvana V. Paula-Moraes – University of Florida Section Symposium Physiology, Biochemistry, and Toxicology
3:00 PM – 3:15 PM MST Challenges and considerations for generating field-relevant efficacy data on lepidopteran insect pests of corn  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Kimberly Morrell (she/her/hers) – Bayer Crop Science Co-Author: Peter Jensen – Bayer Crop Science Section Symposium Physiology, Biochemistry, and Toxicology
3:15 PM – 3:25 PM MST Break Location: Phoenix Convention Center, 126 A, PCC
3:25 PM – 3:40 PM MST

Bt resistance and challenges for rearing and establishing resistant colonies of <i>Helicoverpa zea</i>  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Fei Yang – University of Minnesota Co-Author: David L. Kerns – Texas A&M University Section Symposium Physiology, Biochemistry, and Toxicology
3:40 PM – 3:55 PM MST Challenges developing a ThryvOn cotton assay for field collected thrips populations  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Anders Huseth – North Carolina State University Co-Author: Renee Ackerman – North Carolina State University Co-Author: Bailey Allison – North Carolina State University Co-Author: Abigail Waters – North Carolina State University Co-Author: Gabbie Frech – North Carolina State University Section Symposium Physiology, Biochemistry, and Toxicology
3:55 PM – 4:10 PM MST Translating laboratory-generated data into field-relevant insights: Connecting insect biology and performance on insect-protected plants  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Amit Sethi – Corteva Agriscience Co-Author: Benchie Ortegon – Corteva Agriscience Co-author: Sefriyani Johan – Corteva Agriscience Co-author: Matt Wihlm – Corteva Agriscience Co-author: Kelly Jordan – Corteva Agriscience Co-author: Casey Oster – Corteva Agriscience Co-author: Chad Benson – Corteva Agriscience Co-author: Sandra Lass – Corteva Agriscience Co-author: Zach Ballou – Corteva Agriscience Co-author: Taylor Klunker – Corteva Agriscience Co-author: Leigh Christensen – Corteva Agriscience Co-author: Relanie Humpal – Corteva Agriscience Co-author: Alec Leners – Corteva Agriscience Co-author: Mary Santos – Corteva Agriscience Co-author: Roberto Estrada – Corteva Agriscience Co-author: Renata Ramos Pereira – Corteva Agriscience Co-author: Andre LB Crespo, Ph.D. – Corteva Agriscience Section Symposium Physiology, Biochemistry, and Toxicology
4:10 PM – 4:25 PM MST

Combining laboratory and field research to generate field-relevant data on resistance to Bt corn by western corn rootworm  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Aaron J. Gassmann – Iowa State University Section Symposium Physiology, Biochemistry, and Toxicology
4:25 PM – 4:35 PM MST Break Location: Phoenix Convention Center, 126 A, PCC
4:35 PM – 4:50 PM MST Complex mechanisms of pink bollworm resistance to Bt cotton  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS Section Symposium Physiology, Biochemistry, and Toxicology
4:50 PM – 5:05 PM MST Characterizing resistance risks in insect control traits: Challenges in determining dose and dominance  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Jennifer Fridley (she/her/hers) – Bayer Crop Science Section Symposium Physiology, Biochemistry, and Toxicology
5:05 PM – 5:20 PM MST EPA revisions to the IRM plan for lepidopteran pests of Bt plant-incorporated protectants and the use of field-based monitoring data for resistance mitigation  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Kara Welch – Environmental Protection Agency Section Symposium Physiology, Biochemistry, and Toxicology
5:20 PM – 5:45 PM MST Discussion Location: Phoenix Convention Center, 126 A, PCC
2:00 PM – 6:00 PM MST 12th Latin/Hispanic Symposium: Insect Science Without Borders Organizer: Rosa E. Lozano (she/her/hers) – Corteva Agriscience Organizer: Steven Reyna – Bayer Crop Science Organizer: Ana R. Cabrera (she/her/hers) – Bayer Crop Science Organizer: Carlos Esquivel Palma – Bayer Crop Science



Organizer: Ricky Lara (he/him/his) – University of California Organizer: Leslie A. Aviles Lopez – Purdue University Organizer: Arani Cuevas-Sanchez – University of Texas Organized Meeting
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Rosa E. Lozano (she/her/hers) – Corteva Agriscience
2:05 PM – 2:40 PM MST Insects can change your life: Experiences from a Hispanic entomologist  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Armando Falcon-Brindis, Ph.D. – University of Idaho Organized Meeting
2:40 PM – 3:00 PM MST The role of entomology in the Department of Defense  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Maria Gonzalez-Morales – DHA: Defense Center for Public Health-Aberdeen Organized Meeting
3:00 PM – 3:20 PM MST My experiences in academia, industry, and extension: Finding my career path as a Latino entomologist in the U.S.  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Samuel Andres Discua Duarte – University of Arizona Organized Meeting
3:20 PM – 3:30 PM MST Break Location: Phoenix Convention Center, 226 C, PCC
3:30 PM – 3:50 PM MST Breaking barriers: The journey from academia to industry as a first-gen immigrant  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Daiana De Souza – BASF Organized Meeting

3:50 PM – 4:10 PM MST Vamos para adelante: The future of SomosEnto  Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Steven Reyna – Bayer Crop Science Organized Meeting	
4:10 PM – 4:15 PM MST Break Location: Phoenix Convention Center, 226 C, PCC	
4:15 PM – 5:10 PM MST Panel discussion Location: Phoenix Convention Center, 226 C, PCC	
5:10 PM – 5:15 PM MST Community affairs Location: Phoenix Convention Center, 226 C, PCC	
5:15 PM – 5:35 PM MST SomosEnto excellence awards Location: Phoenix Convention Center, 226 C, PCC	
5:35 PM – 5:40 PM MST Closing remarks Location: Phoenix Convention Center, 226 C, PCC Presenting Author: Rosa E. Lozano (she/her/hers) – Corteva Agriscience	
2:00 PM – 6:00 PM MST Pollinator Work on Federal Lands Organizer: Michelle L. Boone (she/her/hers) – National Park Service Organizer: Jonathan Berenguer Uhuad Koch – USDA-ARS Section Symposium Plant-Insect Ecosystems	
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Michelle L. Boone (she/her/hers) – National Park Service	
2:05 PM – 2:20 PM MST National Park Service pollinator inventory projects  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Michelle L. Boone (she/her/hers) – National Park Service	

Section Symposium Plant-Insect Ecosystems	
2:20 PM – 2:35 PM MST Bumble bee inventory and assessment on US federal lands  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Leif Richardson – Xerces Society for Invertebrate Conservation Co-Author: Rich Hatfield – Xerces Society for Invertebrate Conservation Co-Author: Hillary Sardiñas – California Department of Fish and Wildlife Co-Author: Dylan Winkler – California Department of Fish and Wildlife Section Symposium Plant-Insect Ecosystems	
2:35 PM – 2:50 PM MST Spatiotemporal patterns of pollinator diversity across national forests of the Southeast: A survey of the Experimental Forest Network  Location: Phoenix Convention Center, 124 AB Presenting Author: Michael Ulyshen – USDA-Forest Service Section Symposium Plant-Insect Ecosystems	
2:50 PM – 3:05 PM MST Are sites with rusty patched bumble bees special? Pathogen and pesticide patterns across the range of a federally endangered bumble bee Location: Phoenix Convention Center, 124 AB Presenting Author: John Mola – Colorado State University Co-Author: Justin Palmer – Illinois State University Co-Author: Ravi Timsina – Illinois State University Co-Author: Benjamin Sadd – Illinois State University Co-Author: Ian S. Pearse – United States Geological Survey Section Symposium Plant-Insect Ecosystems	
3:05 PM – 3:20 PM MST NRCS Plants Pollinator Interactions Database  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Christine Taliga – USDA Co-Author: Diana Cox-Foster – USDA-ARS Co-Author: Cynthia Parr – USDA Co-Author: Elizabeth Hill – USDA-ARS Section Symposium Plant-Insect Ecosystems	
3:20 PM – 3:30 PM MST Break	

Location: Phoenix Convention Center, 124 AB
3:30 PM – 3:45 PM MST Two bee or not two bee: Quantifying small pollinators on large landscapes  Location: Phoenix Convention Center, 124 AB Presenting Author: Olivia Carril – Bureau of Land Management Section Symposium Plant-Insect Ecosystems
3:45 PM – 4:00 PM MST Three methods used to survey bees in historic orchards at Capitol Reef National Park, Utah  Location: Phoenix Convention Center, 124 AB Presenting Author: Bryan Tronstad – University of Wyoming Co-Author: Lusha M. Tronstad, Ph.D. – University of Wyoming Co-Author: Kristen Engdahl – National Park Service Co-Author: Joseph Fife – National Park Service Co-Author: Emily Hagerott – National Park Service Co-Author: Daniel Jackson – National Park Service Co-Author: Fritz Maslan – National Park Service Co-Author: Morgan Wehtje – National Park Service Co-Author: Corrina Yobp – National Park Service Section Symposium Plant-Insect Ecosystems
4:00 PM – 4:15 PM MST Using mark-release-recapture and distance sampling methods to estimate population size of Oregon silverspot butterflies  Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Izzy Bur (she/her/hers) – Washington State University Co-author: Cheryl B. Schultz – Washington State University Co-author: Erica Henry – Washington State University Co-author: Rich Van Buskirk – Pacific University Section Symposium Plant-Insect Ecosystems
4:15 PM – 4:30 PM MST How feasible are non-lethal surveys of wild bees on NPS lands?  Location: Phoenix Convention Center, 124 AB Presenting Author: Jessie Thuma – Tufts University Co-Author: Rachael Winfree – Rutgers University Co-Author: Max William McCarthy – Rutgers University Co-Author: Nicholas Dorian – Chicago Botanic Garden Co-Author: Elyse Talley – Rutgers University

Co-Author: Elizabeth Crone (she/her/hers) – University of California
Section Symposium Plant-Insect Ecosystems
4:30 PM – 4:45 PM MST Non-lethal bee surveys leveraging eDNA and image-based methods  Location: Phoenix Convention Center, 124 AB Presenting Author: Nevin Cullen – USDA-ARS Co-Author: Jonathan Berenguer Uhuad Koch – USDA-ARS Co-Author: Michael G. Branstetter – USDA-ARS Section Symposium Plant-Insect Ecosystems
4:45 PM – 4:55 PM MST Break Location: Phoenix Convention Center, 124 AB
4:55 PM – 5:10 PM MST Forests for the bees: Enhancing pollinator habitat in log landings  Location: Phoenix Convention Center, 124 AB Presenting Author: Aliza Fassler – University of Massachusetts Co-Author: Susannah Lerman – USDA-Forest Service Co-Author: David King – USDA-Forest Service Co-Author: Lauren Pile Knapp – USDA-Forest Service Co-Author: John Kabrick – USDA-Forest Service Co-Author: Deborah Page-Dumroese – USDA-Forest Service Co-Author: Cheryl Coon – Hoosier National Forest Co-Author: Mark Vukovich – Shawnee National Forest Co-Author: Brian Davidson – Mark Twain National Forest Co-Author: Megan York-Harris – Mark Twain National Forest Section Symposium Plant-Insect Ecosystems
5:10 PM – 5:25 PM MST Creating a buzz: Efforts to seed new yellow-faced bee populations using translocations  Location: Phoenix Convention Center, 124 AB Presenting Author: Sheldon Plentovich – United States Fish and Wildlife Service Co-Author: Paul Krushelnysky – University of Hawaii Co-Author: Molly O'Grady – University of Hawaii Co-Author: Maria Aihara-Sasaki – University of Hawaii Co-Author: Cynthia King Section Symposium Plant-Insect Ecosystems

5:25 PM – 5:40 PM MST Wind turbines altered the bee and butterfly assemblages along a 28 km gradient of infrasound  Location: Phoenix Convention Center, 124 AB Presenting Author: Lusha M. Tronstad, Ph.D. – University of Wyoming Co-Author: Michelle Weschler, MSc – University of Wyoming Co-Author: Amy Storey – University of Wyoming Co-Author: Joy Handley – Bureau of Land Management Co-Author: Bryan Tronstad – University of Wyoming Section Symposium Plant-Insect Ecosystems
5:40 PM – 5:55 PM MST Collaborating for consilience research and stewardship across landscapes and cultures  Location: Phoenix Convention Center, 124 AB Presenting Author: Melanie Margarita Kirby, MSc – Institute of American Indian Arts Section Symposium Plant-Insect Ecosystems
5:55 PM – 6:00 PM MST Closing remarks Location: Phoenix Convention Center, 124 AB, PCC Presenting Author: Michelle L. Boone (she/her/hers) – National Park Service
2:00 PM – 6:00 PM MST A Formidable Foe to Agriculture: Sweetpotato Whitefly, <i>Bemisia tabaci</i> Organizer: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia Organizer: Alvin M. Simmons – USDA-ARS Organizer: Judith K. Brown (she/her/hers) – University of Arizona Organizer: Allen Moore – University of Georgia Member Symposium Plant-Insect Ecosystems
2:00 PM – 2:15 PM MST Molecular evidence shows that intraspecific hybridization has shaped the evolution of cassava <i>Bemisia tabaci</i> Sub-Saharan Africa cryptic species  Location: Phoenix Convention Center, 130, PCC Presenting Author: Jorge Paredes – Saginaw Valley State University Co-Author: Judith K. Brown (she/her/hers) – University of Arizona Member Symposium Plant-Insect Ecosystems
2:15 PM – 2:30 PM MST

The global whitefly parasitoids handbook: An identification manual to their most effective natural enemies  Location: Phoenix Convention Center, 130, PCC Presenting Author: Andrew Polaszek (he/him/his) – Natural History Museum, London UK Co-Author: Zachary Lahey – USDA-ARS Member Symposium Plant-Insect Ecosystems
2:30 PM – 2:45 PM MST Molecular phylogenetics of <i>Eretmocerus</i> Haldeman (Hymenoptera: Aphelinidae) imported and released in the United States for control of an invasive species of <i>Bemisia</i> Quaintance & Baker (Hemiptera: Aleyrodidae)  Location: Phoenix Convention Center, 130, PCC Presenting Author: Zachary Lahey – USDA-ARS Co-Author: John Goolsby – USDA-ARS Co-Author: Don Vacek – USDA-APHIS Co-Author: Andrew Polaszek (he/him/his) – Natural History Museum, London UK Co-Author: Alvin M. Simmons – USDA-ARS Co-Author: Sharon Andreason – USDA-ARS Member Symposium Plant-Insect Ecosystems
2:45 PM – 3:00 PM MST An overview of whitefly transmitted viruses in GA landscape  Location: Phoenix Convention Center, 130, PCC Presenting Author: Sudeep Bag – University of Georgia Member Symposium Plant-Insect Ecosystems
3:00 PM – 3:15 PM MST Parallel analysis of gut and salivary glands proteomes-transcriptomes of the <i>Bemisia tabaci</i> NAFME cryptic species to identify effectors involved in whitefly-squash leaf curl virus transmission  Location: Phoenix Convention Center, 130, PCC Presenting Author: Judith K. Brown (she/her/hers) – University of Arizona Co-Author: Meenal Vyas – University of Arizona Co-Author: Chandra Sarapalli – University of Arizona Member Symposium Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST Specificity in virus transmission by two important <i>Bemisia tabaci</i> cryptic species  Location: Phoenix Convention Center, 130, PCC

Presenting Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia Co-Author: Scott Adkins – USDA-ARS Co-Author: Judith K. Brown (she/her/hers) – University of Arizona Co-Author: Alvin M. Simmons – USDA-ARS Member Symposium Plant-Insect Ecosystems
3:30 PM – 3:35 PM MST Break Location: Phoenix Convention Center, 130, PCC
3:35 PM – 3:50 PM MST Identification of begomovirus coat protein interacting partner(s) from <i>Bemisia tabaci</i>  Location: Phoenix Convention Center, 130, PCC Presenting Author: Banani Mondal – University of Georgia Co-Author: Saptarshi Ghosh – University of Florida Co-Author: Sudeep Pandey – University of Georgia Co-Author: Michael Anthony Catto (he/him/his) – Georgia Institute of Technology Co-Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia Member Symposium Plant-Insect Ecosystems
3:50 PM – 4:05 PM MST Host plant species is a predominant determinant of begomovirus and whitefly interactions: A case study  Location: Phoenix Convention Center, 130, PCC Presenting Author: Sudeep Pandey – University of Georgia Co-Author: Michael Anthony Catto (he/him/his) – Georgia Institute of Technology Co-Author: Saurabh Gautam – Alliance of Pest Control Districts Co-Author: Habibu Mugerwa – University of Georgia Co-Author: Rajagopalbabu Srinivasan (he/him/his) – University of Georgia Member Symposium Plant-Insect Ecosystems
4:05 PM – 4:20 PM MST Avoiding whitefly-transmitted sweet potato leaf curl virus: Strategies for sweetpotato breeding and production  Location: Phoenix Convention Center, 130, PCC Presenting Author: Sharon Andreason – USDA-ARS Co-Author: Phillip Wadl – USDA-ARS Member Symposium Plant-Insect Ecosystems
4:20 PM – 4:35 PM MST

Improving resistance to whiteflies (Hemiptera: Aleyrodidae): Evaluating <i>Citrullus colocynthis</i> versus cultivated watermelon  Location: Phoenix Convention Center, 130, PCC Presenting Author: Petrina McKenzie-Reynolds – USDA-ARS Member Symposium Plant-Insect Ecosystems
4:35 PM – 4:40 PM MST Break Location: Phoenix Convention Center, 130, PCC
4:40 PM – 4:45 PM MST Poster session Location: Phoenix Convention Center, 130, PCC
4:40 PM – 4:45 PM MST SD49: Biological and chemical control of whiteflies  Location: Phoenix Convention Center, 130, PCC Presenting Author: Jawwad Qureshi – University of Florida Member Symposium Plant-Insect Ecosystems Poster Display
4:45 PM – 5:00 PM MST Plant chemicals biosynthetic strategies and plant defense mechanisms against selected natural enemies of whiteflies  Location: Phoenix Convention Center, 130, PCC Presenting Author: Isiaka Owolabi – University of Georgia Co-Author: Petrina McKenzie-Reynolds – USDA-ARS Co-Author: Gaelen R. Burke – University of Georgia Member Symposium Plant-Insect Ecosystems
5:00 PM – 5:15 PM MST Effects of intercropping marigold, cowpea and insecticidal soap on whitefly population in organic squash  Location: Phoenix Convention Center, 130, PCC Presenting Author: Oscar E. Liburd – University of Florida Co-Author: Marice Lopez – USDA-ARS Member Symposium Plant-Insect Ecosystems
5:15 PM – 5:30 PM MST The entomopathogenic approach to whitefly management and its compatibility with insecticides 

Location: Phoenix Convention Center, 130, PCC Presenting Author: Jermaine D. Perier (he/him/his) – University of Georgia Co-Author: David I. Shapiro-Ilan – USDA-ARS Co-Author: Alvin M. Simmons – USDA-ARS Co-Author: Michael D. Toews – University of Georgia Member Symposium Plant-Insect Ecosystems	
2:00 PM – 6:00 PM MST Larry Larson Symposium Harnessing the Power of Insect Science to Solve the World’s Most Urgent Needs Organizer: Boris A. Castro (he/him/his) – Corteva Agriscience Organizer: Amanda Jacobson – Corteva Agriscience Organizer: Luis Gomez – Corteva Agriscience Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	^
2:00 PM – 2:15 PM MST Introductory remarks Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Boris A. Castro (he/him/his) – Corteva Agriscience	
2:15 PM – 2:40 PM MST How insect pesticide risk assessments contribute to environmental health Location: Phoenix Convention Center, 126 C Presenting Author: Niranjana Krishnan – University of Maryland Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	
2:40 PM – 3:05 PM MST Protecting grains and processed food products from insects through novel technologies Location: Phoenix Convention Center, 126 C Presenting Author: Kaliramesh Siliveru – Kansas State University Co-Author: Deanna S. Scheff (she/her/hers) – USDA-ARS Co-Author: Bhadriraju Subramanyam – Kansas State University Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	
3:05 PM – 3:30 PM MST Challenges in the studies of the biology and management of subterranean termites Location: Phoenix Convention Center, 126 C Presenting Author: Aaron Mullins – University of Florida Co-Author: Nan-Yao Su – University of Florida	

Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	
3:30 PM – 3:40 PM MST Break Location: Phoenix Convention Center, 126 C	
3:40 PM – 4:05 PM MST Emerging technologies on mosquito control Location: Phoenix Convention Center, 126 C Presenting Author: Sanjay Basu – Oxitec Ltd. Co-Author: Kevin Gorman (he/him/his) – Oxitec Ltd. Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	
4:05 PM – 4:30 PM MST Biologicals and their impact on food security Location: Phoenix Convention Center, 126 C Presenting Author: Karla Medina – CERTIS Biologicals Section Symposium Plant-Insect Ecosystems Medical, Urban, and Veterinary Entomology	
4:30 PM – 4:50 PM MST Panel discussion Location: Phoenix Convention Center, 126 C	
4:50 PM – 4:55 PM MST Closing remarks Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Boris A. Castro (he/him/his) – Corteva Agriscience	
2:00 PM – 6:00 PM MST The Importance of Undergraduate Teaching and Research in Entomology on Academia and on the Community Organizer: Denise Gemmellaro (she/her/hers) – Kean University Organizer: Krystal Hans (she/her/hers) – Purdue University Organizer: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Section Symposium Formal and Informal Teaching	^
2:00 PM – 2:10 PM MST Introductory remarks Location: Phoenix Convention Center, 131 C Presenting Author: Denise Gemmellaro (she/her/hers) – Kean University	
2:10 PM – 2:30 PM MST	

What can research do for undergraduate students? (And also, what can undergraduate students do for research?)  Location: Phoenix Convention Center, 131 C Presenting Author: Denise Gemmellaro (she/her/hers) – Kean University Section Symposium Formal and Informal Teaching
2:30 PM – 2:50 PM MST Engaging student learners with real-world experiential education: Undergraduate research in entomology courses to prepare future forensic scientists  Location: Phoenix Convention Center, 131 C Presenting Author: Krystal Hans (she/her/hers) – Purdue University Section Symposium Formal and Informal Teaching
2:50 PM – 3:10 PM MST Assignments to first author papers: Engaging undergraduate researchers in the classroom  Location: Phoenix Convention Center, 131 C Presenting Author: Lauren M. Weidner, Ph.D., D-ABFE (she/her/hers) – Arizona State University Section Symposium Formal and Informal Teaching
3:10 PM – 3:25 PM MST Break Location: Phoenix Convention Center, 131 C
3:25 PM – 3:45 PM MST Student perceptions of forensic entomology  Location: Phoenix Convention Center, 131 C Presenting Author: Vanessa Cooper – Purdue University Co-Author: Krystal Hans (she/her/hers) – Purdue University Section Symposium Formal and Informal Teaching
3:45 PM – 4:05 PM MST Educating and empowering undergraduate students on the importance of insect ecosystem services using interactive displays  Location: Phoenix Convention Center, 131 C Presenting Author: Helen Craig (she/her/hers) – University of Maryland Co-Author: Bill O. Lamp – University of Maryland Section Symposium Formal and Informal Teaching

4:05 PM – 4:25 PM MST Bridging the gap: Innovations in teaching entomology to biology majors in a nonorganismal-focused department  Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Mirian Watts (she/her/hers) – East Carolina University Section Symposium Formal and Informal Teaching
4:25 PM – 4:40 PM MST Break Location: Phoenix Convention Center, 131 C
4:40 PM – 5:00 PM MST From the farm system to Entoquest: Introducing the fascinating world of entomology to undergraduates  Location: Phoenix Convention Center, 131 C Presenting Author: Thomas P. Kuhar – Virginia Tech Section Symposium Formal and Informal Teaching
5:00 PM – 5:20 PM MST Navigating the job market and succeeding as an undergraduate-focused professor  Location: Phoenix Convention Center, 131 C Presenting Author: Carly M. Tribull – Farmingdale State College Section Symposium Formal and Informal Teaching
5:20 PM – 5:50 PM MST Panel discussion Location: Phoenix Convention Center, 131 C
5:50 PM – 6:00 PM MST Closing remarks Location: Phoenix Convention Center, 131 C Presenting Author: Denise Gemmellaro (she/her/hers) – Kean University
2:00 PM – 6:00 PM MST Meeting the Needs of Tomorrow: Can Forest Entomology Be a Model for Insect Science in the Future? Organizer: Todd David Johnson (he/him/his) – Louisiana State University Organizer: Kayla I. Perry (she/her/hers) – The Ohio State University Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
2:00 PM – 2:15 PM MST

Introductory remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Todd David Johnson (he/him/his) – Louisiana State University
2:15 PM – 2:35 PM MST There is nothing more practical than good theory  Location: Phoenix Convention Center, 121 C Presenting Author: Matthew Ayres – Dartmouth College Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
2:35 PM – 2:55 PM MST Historical contributions of forest entomology to the advancement of insect science  Location: Phoenix Convention Center, 121 C Presenting Author: Daniel Herms – The Davey Tree Expert Company Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
2:55 PM – 3:15 PM MST What did I just step on? Perspectives on connecting belowground to aboveground systems in forest entomology  Location: Phoenix Convention Center, 121 C Presenting Author: Natalie Clay – University of Arkansas Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
3:15 PM – 3:35 PM MST Simple models for complex questions: How can we improve our hind- and forecasting of forest insects?  Location: Phoenix Convention Center, 121 C Presenting Author: Mike Howe – USDA-ARS Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
3:35 PM – 3:50 PM MST Break Location: Phoenix Convention Center, 121 C
3:50 PM – 4:10 PM MST Broadening perspectives: Shaping forest entomology through cross-regional and international collaborations  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Richard W. Hofstetter (he/him/his) – Northern Arizona University

Co-Author: Luis Bonifacio – Instituto Nacional de Investigación Agrária e Veterinária Co-Author: Deepa Pureswaran – Natural Resources Canada Co-Author: Kier D. Klepzig – The Jones Center Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
4:10 PM – 4:30 PM MST Paradigm shifts in insect disturbance ecology in managed forest ecosystems  Location: Phoenix Convention Center, 121 C Presenting Author: Kamal J.K. Gandhi – University of Georgia Section Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity
4:30 PM – 5:05 PM MST Panel discussion Location: Phoenix Convention Center, 121 C
5:05 PM – 5:10 PM MST Closing remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Todd David Johnson (he/him/his) – Louisiana State University
2:00 PM – 6:00 PM MST Women of Today Empowering Women of Tomorrow for Leadership Roles Across Careers in Insect Science Organizer: Lauren Beebe (she/her/hers) – Texas A&M University Organizer: Chloe Hawkings (she/her/hers) – Rutgers University Organizer: Jocelyn Holt – Rice University Organizer: Julia Clare Wooby – Purdue University Member Symposium Diversity, Equity, and Inclusion
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 221 A Presenting Author: Chloe Hawkings (she/her/hers) – Rutgers University
2:05 PM – 2:25 PM MST A young woman scientist navigating an entomological career in academia and in leadership roles: We can thrive!  Location: Phoenix Convention Center, 221 A Presenting Author: Lina Bernaola – Texas A&M University Member Symposium Diversity, Equity, and Inclusion

2:25 PM – 2:45 PM MST Skill-transfer: Navigating the move from a PhD to corporate  Location: Phoenix Convention Center, 221 A Presenting Author: Crys Wright – McKinsey & Company Member Symposium Diversity, Equity, and Inclusion
2:45 PM – 3:05 PM MST The role of identifiers in USDA APHIS PPQ's safeguarding continuum  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Xanthe Shirley – USDA APHIS PPQ Co-Author: Natalie Hernandez – USDA-ARS Member Symposium Diversity, Equity, and Inclusion
3:05 PM – 3:25 PM MST Gender equality in army science  Location: Phoenix Convention Center, 221 A Presenting Author: Meaghan Pimsler – Combat Capabilities Development Command Member Symposium Diversity, Equity, and Inclusion
3:25 PM – 3:40 PM MST Break Location: Phoenix Convention Center, 221 A
3:40 PM – 4:00 PM MST How I became an entomologist: The ABCs and XYZs of women studying insect science  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Hongmei Li-Byarlay – Central State University Member Symposium Diversity, Equity, and Inclusion
4:00 PM – 4:20 PM MST Finding success as a researcher in the federal government after academia  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Karen C. Poh (she/her/hers) – USDA-ARS Member Symposium Diversity, Equity, and Inclusion
4:20 PM – 4:40 PM MST Academic professional: Academia without the research or the tenure-track 

Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Kelly Carruthers (she/her/hers) – University of Georgia Member Symposium Diversity, Equity, and Inclusion
4:40 PM – 5:00 PM MST Don't give up, 'cause you have friends: From unemployed to ESA leader  Location: Phoenix Convention Center, 221 A Presenting Author: Rayda K. Krell, Ph.D. – Corteva Agriscience Member Symposium Diversity, Equity, and Inclusion
5:00 PM – 5:20 PM MST Dead men tell no tales, but insects do: Role of forensic entomologists in criminal and civil litigation  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Samantha J. Sawyer, Ph.D., M-ABFE (she/her/hers) – Curry College Member Symposium Diversity, Equity, and Inclusion
5:20 PM – 5:25 PM MST Closing remarks Location: Phoenix Convention Center, 221 A Presenting Author: Chloe Hawkings (she/her/hers) – Rutgers University
2:00 PM – 6:00 PM MST Early Career Professional Recognition Symposium and Town Hall Organizer: Scott T. O'Neal – Corteva Agriscience Organizer: Anastasia M. Cooper (she/her/hers) – Auburn University Organizer: Ellis Johnson – Eurofins Agrosience Services Member Symposium Early Career
2:00 PM – 2:05 PM MST Introductory remarks Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Scott T. O'Neal – Corteva Agriscience

2:05 PM – 2:35 PM MST From <i>Varroa</i> to <i>Vespa</i> : Unraveling the challenges to honey bee survival across Asia  Location: Phoenix Convention Center, 131 A Presenting Author: Madison Sankovitz – University of Colorado Co-Author: Samuel Ramsey – University of Colorado Member Symposium Systematics, Evolution, and Biodiversity Early Career
2:35 PM – 3:05 PM MST Good bugs and bad bugs across time and space: A crash course in the diversity and creativity of modern classical biological control programs  Location: Phoenix Convention Center, 131 A Presenting Author: Nicole F. Quinn – University of Florida Member Symposium Plant-Insect Ecosystems Early Career
3:05 PM – 3:15 PM MST Break Location: Phoenix Convention Center, 131 A
3:15 PM – 3:45 PM MST Hemocytes pleiotropic effects on midgut homeostasis and immunity are agonists of <i>Plasmodium falciparum</i> infection  Location: Phoenix Convention Center, 131 A Presenting Author: Victor Manuel Jonathan Cardoso-Jaime (he/him/his) – Johns Hopkins University Co-Author: George Dimopoulos – Johns Hopkins University Member Symposium Medical, Urban, and Veterinary Entomology Early Career
3:45 PM – 4:15 PM MST Evaluating underserved grower needs through a needs assessment of southwest Washington's cranberry and shellfish growers  Location: Phoenix Convention Center, 131 A Presenting Author: Laura Joan Kraft – Washington State University Co-Author: Nicole Naar – University of Washington Member Symposium Formal and Informal Teaching Early Career
4:15 PM – 4:25 PM MST Break Location: Phoenix Convention Center, 131 A
4:25 PM – 4:55 PM MST

Honey bee immune response to sublethal concentrations of clothianidin goes beyond the macronutrients found in artificial diets  Location: Phoenix Convention Center, 131 A Presenting Author: Pierre Lau (he/him/his) – USDA-ARS Co-Author: Giovanni Tundo – USDA-ARS Co-Author: Joel Caren – USDA-ARS Co-Author: Weiqiang Zhang (he/him/his) – USDA-ARS Co-Author: Yu-Cheng Zhu (he/him/his) – USDA-ARS Member Symposium Physiology, Biochemistry, and Toxicology Early Career
4:55 PM – 5:55 PM MST Town Hall Location: Phoenix Convention Center, 131 A
5:55 PM – 6:00 PM MST Closing remarks Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Scott T. O'Neal – Corteva Agriscience
2:00 PM – 6:00 PM MST Rising Stars of Entomology Award Symposium Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Organizer: Michelle Garwei Au (she/her/hers) – University of Hawai'i at Mānoa Organizer: Alexis Alsdorf – North Carolina State University Organizer: Flinn Martin O'Hara – University of Florida Member Symposium Student
2:00 PM – 2:10 PM MST Introductory remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University
2:10 PM – 2:45 PM MST Integrating novel tactic long-lasting insecticide netting into integrated pest management programs for food facilities  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Sabita Ranabhat (she/her/hers) – Kansas State University Co-Author: Kun Yan Zhu – Kansas State University Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS Member Symposium Plant-Insect Ecosystems Student

2:45 PM – 3:20 PM MST Development of a web-based platform for designing effective and eco-friendly double-stranded RNA-based insecticides  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Doga Cedden – University of Göttingen Co-Author: Gregor Bucher – University of Göttingen Member Symposium Physiology, Biochemistry, and Toxicology Student
3:20 PM – 3:30 PM MST Break Location: Phoenix Convention Center, 126 B
3:30 PM – 4:05 PM MST Ecology and evolution of melanin pigmentation plasticity in a complex world  Location: Phoenix Convention Center, 126 B Presenting Author: Sarah Elizabeth Britton (she/her/hers) – University of Arizona Co-Author: Goggy Davidowitz (he/him/his) – University of Arizona Member Symposium Systematics, Evolution, and Biodiversity Student
4:05 PM – 4:40 PM MST A new bioassay technique to assess insecticide impacts on an introduced larval endoparasitoid of emerald ash borer  Location: Phoenix Convention Center, 126 B Presenting Author: Preetpal Singh – University of Toronto Co-Author: Christian MacQuarrie – Canadian Forest Service Co-Author: Sandy Smith – University of Toronto Member Symposium Plant-Insect Ecosystems Student
4:40 PM – 4:50 PM MST Break Location: Phoenix Convention Center, 126 B
4:50 PM – 5:25 PM MST Buzz kill: Insecticide resistance in <i>Culex</i> mosquito populations  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Kylee Noel (she/her/hers) – University of Illinois Urbana-Champaign Co-Author: Chris Stone – Illinois Natural History Survey Member Symposium Medical, Urban, and Veterinary Entomology Student

5:25 PM – 5:35 PM MST Closing remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University
2:00 PM – 6:00 PM MST 10-min: P-IE, IPM - Field Crops Moderator: Maria Teresa Aguiar Cordero – University of Saskatchewan Moderator: Michael D. Rethwisch – University of California 10-Minute Presentation Plant-Insect Ecosystems
2:00 PM – 2:12 PM MST Alfalfa (<i>Medicago sativa</i>) growth responses to aphids and insecticides in the low desert  Location: Phoenix Convention Center, 127 C Presenting Author: Michael D. Rethwisch – University of California Co-Author: Kassandra Allan – University of California Co-Author: Nathan Tribby – University of California Co-Author: Carla Pryor – University of California 10-Minute Presentation Plant-Insect Ecosystems
2:12 PM – 2:24 PM MST Analysis of <i>Lygus</i> feeding behavior associated with scarring damage in faba bean seeds  Location: Phoenix Convention Center, 127 C Presenting Author: Maria Teresa Aguiar Cordero – University of Saskatchewan 10-Minute Presentation Plant-Insect Ecosystems
2:24 PM – 2:36 PM MST Assessing thrips dispersal and TSWV transmission dynamics in Florida peanut production regions  Location: Phoenix Convention Center, 127 C Presenting Author: Manisha Yadav – University of Florida Co-Author: Isaac L. Esquivel – North Florida Research and Education Center 10-Minute Presentation Plant-Insect Ecosystems
2:36 PM – 2:48 PM MST Botanical compounds as an alternative to control <i>Striacosta albicosta</i> and its sublethal effects on the ladybug <i>Hippodamia convergens</i>  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Ana Paula Santana Lima (she/her/hers) – University of Nebraska

Co-Author: Alisson Santana (he/him/his) – University of Nebraska Co-Author: Edson L. Baldin – São Paulo State University Co-Author: Julie Ann Peterson – University of Nebraska	
10-Minute Presentation Plant-Insect Ecosystems	
2:48 PM – 3:00 PM MST Changes in the populations of lepidopteran pests in sweet corn in Quebec: What about pest management strategies?  Location: Phoenix Convention Center, 127 C Presenting Author: Maxime Lefebvre, Ph.D. – Insurance Regulatory and Development Authority	
10-Minute Presentation Plant-Insect Ecosystems	
3:00 PM – 3:12 PM MST Effect of an insecticide-fungicide tank mix on bee activity and soybean yield  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Lillian Johnson – The Ohio State University Co-Author: Luke Hearon – The Ohio State University Co-Author: Chia-Hua Lin – The Ohio State University Co-Author: Laura Lindsey – The Ohio State University Co-Author: Reed M. Johnson – The Ohio State University	
10-Minute Presentation Plant-Insect Ecosystems	
3:12 PM – 3:24 PM MST Break Location: Phoenix Convention Center, 127 C	
3:24 PM – 3:36 PM MST Evaluating the susceptibility of red sunflower seed weevils to pyrethroid insecticides  Location: Phoenix Convention Center, 127 C Presenting Author: Philip Rozeboom – South Dakota State University Co-Author: Patrick Wagner – South Dakota State University Co-Author: Bradley L. McManus – South Dakota State University Co-Author: Adam J. Varenhorst – South Dakota State University	
10-Minute Presentation Plant-Insect Ecosystems	
3:36 PM – 3:48 PM MST Evaluation of resistance in the southwestern corn borer (<i>Diatraea grandiosella</i>) to purified Bt proteins in the Southwestern U.S..  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Haley Kennedy – Texas A&M University	

Co-Author: Jane Pierce – New Mexico State University Co-Author: Peter Ellsworth – University of Arizona Co-Author: Sebe Brown – University of Tennessee Co-Author: David L. Kerns – Texas A&M University	
10-Minute Presentation Plant-Insect Ecosystems	
3:48 PM – 4:00 PM MST From resistance breakers to RNAi: Targeting fall armyworm (<i>Spodoptera frugiperda</i>) detoxification genes for sustainable management  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Ismaila A. Aderolu, Ph.D. (he/him/his) – University of Abuja Co-Author: Akeem Abolade Oyerinde – University of Abuja	
10-Minute Presentation Plant-Insect Ecosystems	
4:00 PM – 4:12 PM MST Impact of planting date, host-plant resistance and insecticide applications on <i>Melanaphis sorghi</i> and grain sorghum yield  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Osariyekemwen Uyi – University of Georgia Co-Author: Xinzhi Ni – USDA-ARS Co-Author: David David Buntin – University of Georgia Co-Author: Michael D. Toews – University of Georgia	
10-Minute Presentation Plant-Insect Ecosystems	
4:12 PM – 4:24 PM MST Inter-and intra-specific competition between corn rootworm: Insights for pest management  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: David S. Wangila – University of Minnesota Co-Author: James Bing – Corteva Agriscience Co-Author: Timothy Nowatzki, BCE – Corteva Agriscience Co-Author: Adrian J. Pekarcik – USDA-ARS Co-Author: Fei Yang – University of Minnesota	
10-Minute Presentation Plant-Insect Ecosystems	
4:24 PM – 4:36 PM MST Long-term evaluation of the yield benefits of Bt corn in the southeastern United States  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Francis P.F. Reay-Jones – Clemson University Co-Author: David David Buntin – University of Georgia	

Co-Author: Dominic Reisig – North Carolina State University 10-Minute Presentation Plant-Insect Ecosystems
4:36 PM – 4:48 PM MST Break Location: Phoenix Convention Center, 127 C
4:48 PM – 5:00 PM MST No-choice assay of <i>Helicoverpa zea</i> on soybean tissues  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Andrea Caprini Sagiorato – North Carolina State University Co-Author: Dominic Reisig – North Carolina State University Co-Author: Taynara Possebom (she/her/hers) – North Carolina State University 10-Minute Presentation Plant-Insect Ecosystems
5:00 PM – 5:12 PM MST Potato leafhopper infestation and nitrogen deficiency detection in green beans using drone-based multispectral imaging  Location: Phoenix Convention Center, 127 C Presenting Author: Bivek Bhusal – University of Connecticut Co-Author: Ana I. Legrand – University of Connecticut Co-Author: Chandni Witharana – University of Connecticut 10-Minute Presentation Plant-Insect Ecosystems
5:12 PM – 5:24 PM MST Preliminary host range assessment for the red sunflower seed weevil  Location: Phoenix Convention Center, 127 C Presenting Author: Jeffrey Daniel Cluever – USDA-ARS Co-Author: Jarrad R. Prasifka – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
5:24 PM – 5:36 PM MST Push-pull companion cropping for ecological fall armyworm management  Location: Phoenix Convention Center, 127 C Presenting Author: Amanuel Tamiru – International Center of Insect Physiology and Ecology 10-Minute Presentation Plant-Insect Ecosystems
5:36 PM – 5:48 PM MST

Tarnished plant bug management strategies in Mid-Southern U.S. cotton  Location: Phoenix Convention Center, 127 C Presenting Author: Tyler B. Towles – Mississippi State University Co-Author: Whitney Crow – Mississippi State University Co-Author: Donald Cook – Mississippi State University Co-Author: Hunter Lipsey – Mississippi State University Co-Author: Mary Jane Lytle – Mississippi State University 10-Minute Presentation Plant-Insect Ecosystems
5:48 PM – 6:00 PM MST Temporal and spatial population dynamics of corn earworm (<i>Helicoverpa zea</i>) in hemp fields in Delmarva peninsula  Location: Phoenix Convention Center, 127 C Presenting Author: Tigist A. Tolosa – University of Maryland Co-Author: Shellyann A. Henry – University of Maryland Co-Author: Simon Zebelo – University of Maryland 10-Minute Presentation Plant-Insect Ecosystems
2:00 PM – 6:00 PM MST 10-min: P-IE, Invasive Species Moderator: Dylan J. Beal – UC ANR Moderator: Douglas G. Pfeiffer – Virginia Tech 10-Minute Presentation Plant-Insect Ecosystems
2:00 PM – 2:12 PM MST AI-driven insights into microbiome dynamics: Enhancing pest management through machine learning and statistical modelling  Location: Phoenix Convention Center, 122 C Presenting Author: Rishi Bhandari – USDA-ARS Co-Author: Joseph Ringbauer – USDA-ARS Co-Author: David S. Kang – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
2:12 PM – 2:24 PM MST An examination of cuticular sensory structures on nymphal instars and adults of spotted lanternfly  Location: Phoenix Convention Center, 122 C Presenting Author: Douglas G. Pfeiffer – Virginia Tech Co-Author: Jonathan Eisenback – Virginia Tech

10-Minute Presentation	Plant-Insect Ecosystems
2:24 PM – 2:36 PM MST	
Can white fringetree serve as a refuge for emerald ash borer?	
Location: Phoenix Convention Center, 122 C	
Presenting Author: Don Cipollini, Ph.D. – Wright State University	
10-Minute Presentation	Plant-Insect Ecosystems
2:36 PM – 2:48 PM MST	
Cotton seed bug, <i>Oxycarenus hyalinipennis</i> (Hemiptera: Lygaeidae): A potential new threat to California's cotton industry and native malvaceous plants	
Location: Phoenix Convention Center, 122 C, PCC	
Presenting Author: Christina D. Hoddle (she/her/hers) – University of California	
Co-Author: Colin S. Brent (he/him/his) – USDA-ARS	
Co-Author: Mark S. Hoddle, Ph.D. D.Sc. (he/him/his) – University of California	
10-Minute Presentation	Plant-Insect Ecosystems
2:48 PM – 3:00 PM MST	
Economic and ecological impacts of invasive insect pests: Research efforts and knowledge gaps	
Location: Phoenix Convention Center, 122 C, PCC	
Presenting Author: Kiran Jonathan Horrocks – Agroscope	
Co-Author: Joerg Romeis (he/him/his) – Agroscope	
Co-Author: Jana Collatz – Agroscope	
10-Minute Presentation	Plant-Insect Ecosystems
3:00 PM – 3:12 PM MST	
Efficacy of new sources of PTFE dispersions (Fluon) for treating panel traps on longhorned beetle (Coleoptera: Cerambycidae) trap catch	
Location: Phoenix Convention Center, 122 C, PCC	
Presenting Author: Emily KL Franzen – Xavier University	
Co-Author: Ann Ray – Xavier University	
10-Minute Presentation	Plant-Insect Ecosystems
3:12 PM – 3:24 PM MST	
Break	
Location: Phoenix Convention Center, 122 C	
3:24 PM – 3:36 PM MST	
Emerald ash borer host range expansion: Implications for the invasion in Oregon	

Location: Phoenix Convention Center, 122 C, PCC	
Presenting Author: Heather L. Callahan (she/her/hers) – ORISE	
Co-Author: Max Ragozzino – Oregon Department of Agriculture	
Co-Author: Douglas Tallamy – University of Delaware	
Co-Author: Jian Duan – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
3:36 PM – 3:48 PM MST	
Ethyl formate and low temperature combination treatment for disinfestation of oriental fruit flies in mandarins	
Location: Phoenix Convention Center, 122 C	
Presenting Author: TaeHyung Kwon – USDA-ARS	
Co-Author: ByungHo Lee – Kyungpook National University	
Co-Author: BongSu Kim – Animal and Plant Quarantine Agency	
Co-Author: Dong H. Cha – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
3:48 PM – 4:00 PM MST	
Factors influencing egg diapause in the twolined spittlebug (<i>Prosapia bicincta</i>) in Hawaii	
Location: Phoenix Convention Center, 122 C	
Presenting Author: Maisha Lucas – University of Hawaii	
Co-Author: Mark G. Wright – University of Hawaii	
Co-Author: Mark S. Thorne – University of Hawaii	
10-Minute Presentation	Plant-Insect Ecosystems
4:00 PM – 4:12 PM MST	
Field trials of pesticides and mycoinsecticides against spotted lanternfly (<i>Lycorma delicatula</i>) egg masses	
Location: Phoenix Convention Center, 122 C	
Presenting Author: Jason Tyler Bielski (he/him/his) – Virginia Tech	
Co-Author: Douglas G. Pfeiffer – Virginia Tech	
10-Minute Presentation	Plant-Insect Ecosystems
4:12 PM – 4:24 PM MST	
Finding the Western Hemisphere source of the fall armyworm invading Africa and Asia	
Location: Phoenix Convention Center, 122 C	
Presenting Author: Rod Nagoshi, Ph.D. – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems

4:24 PM – 4:36 PM MST From infestation to control: Managing black fig fly, a new invasive pest in California's fig orchards  Location: Phoenix Convention Center, 122 C Presenting Author: Valeh Ebrahimi (she/her/hers) – University of California Co-Author: Amanda Clark – University of California Co-Author: Houston Wilson (he/him/his) – University of California 10-Minute Presentation Plant-Insect Ecosystems
4:36 PM – 4:48 PM MST Break Location: Phoenix Convention Center, 122 C
4:48 PM – 5:00 PM MST Heat treatments to kill eggs of two invasive insects: Spotted lanternfly and spongy moth  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Nooshin Zandi Sohani, Ph.D. (she/her/hers) – West Virginia University Co-Author: Melody A. Keena (she/her/hers) – USDA-Forest Service Co-Author: Anthony Cullen – USDA-ARS Co-Author: Michael R. Gallagher – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
5:00 PM – 5:12 PM MST Impact of canopy and groundcover management on <i>Drosophila suzukii</i> (Diptera: Drosophilidae) in Eastern Washington cherry orchards  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Dylan J. Beal – UC ANR Co-Author: Peter Smytheman – Washington State University Co-Author: Tobin Northfield – Washington State University Co-Author: Elizabeth H. Beers – Washington State University 10-Minute Presentation Plant-Insect Ecosystems
5:12 PM – 5:24 PM MST Meticulous methods for a boring beetle: A protocol to determine the efficacy of emerald ash borer biocontrol  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Elizabeth Marie Clifton, Ph.D. (she/her/hers) – University of New Hampshire Co-Author: Gould R. Juli – USDA-APHIS Co-Author: Theresa Murphy – USDA-APHIS Co-Author: Jeff R. Gamas – University of New Hampshire

10-Minute Presentation Plant-Insect Ecosystems
5:24 PM – 5:36 PM MST Small hive beetle: An emerging Washington State honey bee pest  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Bri Price (she/her/hers) – Washington State University Co-Author: Brandon Kingsley Hopkins, Ph.D., M.S. – Washington State University 10-Minute Presentation Plant-Insect Ecosystems
5:36 PM – 5:48 PM MST Timing of female spotted lanternfly reproductive development across its present range in the US  Location: Phoenix Convention Center, 122 C Presenting Author: Julie M. Urban – The Pennsylvania State University 10-Minute Presentation Plant-Insect Ecosystems
5:48 PM – 6:00 PM MST Economic impact of the invasive spotted lanternfly (<i>Lycorma delicata</i>, Hemiptera: Fulgoridae) In the two largest grape production areas of New York  Location: Phoenix Convention Center, 122 C Presenting Author: Allan Pinto – Cornell University Co-Author: Flor Edith Acevedo – The Pennsylvania State University Co-Author: Brian Eshenaur – Cornell Cooperative Extension Co-Author: Michela Centinari – The Pennsylvania State University Co-Author: Alejandro Calixto – Cornell University Co-Author: Miguel Gomez – Cornell University 10-Minute Presentation Plant-Insect Ecosystems
2:00 PM – 6:00 PM MST 10-min: SysEB, Systematics, Phylogenetics, and Evolution 2 Moderator: Anthony I. Cognato – Michigan State University Moderator: Ryan Alexander St Laurent (he/him/his) – University of Colorado Boulder 10-Minute Presentation Systematics, Evolution, and Biodiversity
2:00 PM – 2:12 PM MST The Afrotropical bristle flies (Diptera: Tachinidae)  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: John O. Stireman, III – Wright State University Co-Author: Pierfilippo Cerretti – Sapienza University of Rome Co-Author: James E. O'Hara – Agriculture and Agri-Food Canada

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:12 PM – 2:24 PM MST

Ultraconserved probe design for phylogenetic analysis of assassin flies and their relatives (Diptera: Asiloidea) 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Allan Cabrero – Smithsonian Institution

Co-Author: Charlotte H. E. Alberts – Smithsonian Institution

Co-Author: Ziad Khouri (he/him/his) – University of California

Co-Author: Jovana M. Jasso-Martinez – Universidad Nacional Autónoma de México

Co-Author: Torsten Dikow – Smithsonian Institution

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:24 PM – 2:36 PM MST

Ecology and evolution of *Hemiceras* (Lepidoptera: Notodontidae), a species-rich moth genus endemic to the Americas 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Ryan Alexander St Laurent (he/him/his) – University of Colorado Boulder

Co-Author: Paul Goldstein – USDA-ARS

Co-Author: Scott Miller – Smithsonian Institution

Co-Author: Daniel Janzen – University of Pennsylvania

Co-Author: Winnie Hallwachs – University of Pennsylvania

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:36 PM – 2:48 PM MST

Checklists of the Ceraphronoidea, Cynipoidea, Evanioidea, Stephanoidea and Trigonalyoidea (Hymenoptera) of Canada, Alaska and Greenland 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Andy Bennett – Canadian National Collection of Insects

Co-Author: Matthew Buffington – USDA-ARS

Co-Author: Andrew R. Deans – The Pennsylvania State University

Co-Author: Mattias Forshage – Swedish Museum of Natural History

Co-Author: George Melika – National Food Chain Safety Office

Co-Author: István Mikó – University of New Hampshire

10-Minute Presentation Systematics, Evolution, and Biodiversity

2:48 PM – 3:00 PM MST

Aquatic moths of the Area de Conservación Guanacaste and the genus *Aulacodes* in Costa Rica (Crambidae: Acentropinae) 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Jacob Bethin (he/him/his) – University of Florida

Co-Author: Maria Alma Solis (she/her/hers) – USDA-ARS

Co-Author: Eugenie Phillips-Rodriguez – Guanacaste Dry Forest Conservation Fund

Co-Author: Winnie Hallwachs – University of Pennsylvania

Co-Author: Daniel Janzen – University of Pennsylvania

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:00 PM – 3:12 PM MST

Phycitinae (Pyralidae) of the Tarahumara region of northwestern Mexico 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Maria Alma Solis (she/her/hers) – USDA-ARS

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:12 PM – 3:24 PM MST

Break

Location: Phoenix Convention Center, 132 A, PCC

3:24 PM – 3:36 PM MST

How to make a wasp: Characterizing wasp-like traits of tiger moths 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Annika Jean Murrah, B.A. (she/her/hers) – Milwaukee Public Museum

Co-Author: Nicolas J. Dowdy – Milwaukee Public Museum

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:36 PM – 3:48 PM MST

Phylogenetic analysis of Lathrotelinae (Lepidoptera: Crambidae) 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: James E. Hayden, Jr. – FDACS Division of Plant Industry

10-Minute Presentation Systematics, Evolution, and Biodiversity

3:48 PM – 4:00 PM MST

Can DNA sequences from one hundred genes resolve *Euwallacea* phylogeny? 

Location: Phoenix Convention Center, 132 A, PCC

Presenting Author: Anthony I. Cognato – Michigan State University

Co-Author: Patrick S. Gorring, Ph.D. – Michigan State University

Co-Author: Sarah Smith – Michigan State University

10-Minute Presentation Systematics, Evolution, and Biodiversity

4:00 PM – 4:12 PM MST Monumental progress in the systematics of the minute clubbed beetles: The first large-scale molecular phylogeny of the Monotomidae (Coleoptera: Nitiduloidea)  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Thomas C. McElrath – Illinois Natural History Survey Co-Author: Gavin Martin – Laramie County Community College Co-Author: Gareth S. Powell – North Carolina State University 10-Minute Presentation Systematics, Evolution, and Biodiversity
4:12 PM – 4:24 PM MST The current status of beetle (Coleoptera) genome sequencing: Illuminating genome architecture and the evolution of beetle diversity  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Terrence P. Sylvester – University of Memphis Co-Author: Duane D. McKenna – University of Memphis 10-Minute Presentation Systematics, Evolution, and Biodiversity
4:24 PM – 4:36 PM MST The ground beetles in the trees: Phylogeny and evolutionary diversification of the lebiomorph harpalines  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Beulah Hannah Garner – Natural History Museum, London Co-Author: Alfred P. Vogler – Natural History Museum, London Co-Author: Aileen Scott – Imperial College 10-Minute Presentation Systematics, Evolution, and Biodiversity
4:36 PM – 4:48 PM MST Break Location: Phoenix Convention Center, 132 A, PCC
4:48 PM – 5:00 PM MST Phylogenetics using historical DNA from dried specimens: Possibilities and limitations in large (Cerambycidae) and small (Scolytinae) beetles  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Patrick S. Gorrington, Ph.D. – Michigan State University Co-Author: Anthony I. Cognato – Michigan State University 10-Minute Presentation Systematics, Evolution, and Biodiversity
5:00 PM – 5:12 PM MST

Phylogenomics reveals new insights into the phylogeny and evolution of Cerambycidae s.l.  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Kevin Michael Moran – University of Memphis Co-Author: Rich H. Adams – University of Arkansas Co-Author: Stephanie Haddad – University of Memphis Co-Author: Robert F. Mitchell (he/him/his) – The Pennsylvania State University Co-Author: Rongrong Shen – University of Memphis Co-Author: Na Ra Shin – University of Memphis Co-Author: Terrence P. Sylvester – University of Memphis Co-Author: Duane D. McKenna – University of Memphis 10-Minute Presentation Systematics, Evolution, and Biodiversity
5:12 PM – 5:24 PM MST An update to the planthoppers (Hemiptera: Fulgoromorpha) of the United States  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Charles R. Bartlett – University of Delaware Co-Author: Stephen W. Wilson – University of Central Missouri 10-Minute Presentation Systematics, Evolution, and Biodiversity
5:24 PM – 5:36 PM MST Dectocephalinae leafhoppers (Hemiptera: Cicadellidae) from Pakistan with descriptions of two new genera and seven new species  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Hassan Naveed, Ph.D. – Jiangsu University 10-Minute Presentation Systematics, Evolution, and Biodiversity
5:36 PM – 5:48 PM MST From UCEs to geography: Setting the stage for spatial phylogenomics and diet evolution of Miridae  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Michael Forthman – California Department of Food and Agriculture Co-Author: Christiane Weirauch – University of California Co-Author: Sarah Elise Schroeder – University of California Co-Author: Veronica Tyts (she/her/hers) – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity
2:00 PM – 6:00 PM MST 10-min: MUVE, Mosquito Physiology, Surveillance, and Control Moderator: Michael Riehle, Ph.D. – University of Arizona

Moderator: Arunas Jonas Damijonaitis – Envu



10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:00 PM – 2:12 PM MST

Innovating mosquito control with industrial minerals and sugar bait systems 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Kaiying Chen, Ph.D. (she/her/hers) – North Carolina State University

Co-Author: Grayson L. Cave, Ph.D. – North Carolina State University

Co-Author: Reuben Akwei Garshong, Ph.D. (he/him/his) – North Carolina State University

Co-Author: Loganathan Ponnusamy, Ph.D. (he/him/his) – North Carolina State University

Co-Author: Gissella M. Vasquez – U.S. Naval Medical Research Unit SOUTH

Co-Author: Ryan T. Larson, Ph.D. – U.S. Navy

Co-Author: R. Michael Roe, Ph.D. – North Carolina State University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:12 PM – 2:24 PM MST

Transfer of pyriproxyfen to nectar sources and insect pollinators associated with autodissemination approaches used for mosquito control 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Corey L. Brelsfoard – Texas Tech University

Co-Author: Sri Jyosthna Kanchariapalli – Texas Tech University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:24 PM – 2:36 PM MST

Temperature-inducible nix: A novel approach for sustainable mosquito population control 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Shih-Che Weng, Ph.D. (he/him/his) – University of California

Co-Author: Shih-Che Weng, Ph.D. (he/him/his) – University of California

Co-Author: Ming Li – University of California

Co-Author: Omar S. Akbari – University of California

10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:36 PM – 2:48 PM MST

It's basic physiology: Targeting the mosquito midgut with high pH activated larvicidal compounds 

Location: Phoenix Convention Center, 222 A

Presenting Author: Michael Riehle, Ph.D. – University of Arizona

Co-Author: Lindsay Guzman – Stanford University

Co-Author: Anjalee Wijetunge – University of Arizona

Co-Author: Brendan Riske – University of Arizona

Co-Author: John Jewett – University of Arizona

10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:48 PM – 3:00 PM MST

Flupyradifurone: A new mode of action for urban pest control 

Location: Phoenix Convention Center, 222 A

Presenting Author: Arunas Jonas Damijonaitis – Envu

Co-Author: Alexander Ko, Ph.D. – Envu

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:00 PM – 3:12 PM MST

Sterile insect farms: How one company is rearing an army of non-gmo, non-*Wolbachia* sterile mosquitoes to combat insecticide-resistant species 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Brent Douglas Phelan – Rad Source Technologies, Inc.

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:12 PM – 3:24 PM MST

Break

Location: Phoenix Convention Center, 222 A

3:24 PM – 3:36 PM MST

Grain polymer microparticles with toxic silver nanoparticle cargo are lethal to *Culicoides sonorensis* biting midge larvae 

Location: Phoenix Convention Center, 222 A

Presenting Author: Cameron James Osborne (he/him/his) – University of Arkansas

Co-Author: Amie Elizabeth Norton – Kansas State University

Co-Author: Lee W. Cohnstaedt (he/him/his) – USDA-ARS

Co-Author: Jeff Whitworth – Kansas State University

Co-Author: Kristopher Silver (he/him/his) – Kansas State University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:36 PM – 3:48 PM MST

Optimizing the performance of mosquito gravid traps for improved disease surveillance and control 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Dia-Eldin Ahmed Elnaiem – University of Maryland

Co-Author: Fatima Taha – University of Maryland

Co-Author: Khalila Ramadhan – University of Maryland

Co-Author: Abdelhafiz Ahmedeltayeb – University of Maryland

Co-Author: Mobolaji Okulate – University of Maryland

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:48 PM – 4:00 PM MST

48-hour surveillance of *Aedes aegypti* activity along an urbanisation gradient reveals substantial nocturnal and outdoor biting in Burkina Faso 

Location: Phoenix Convention Center, 222 A

Presenting Author: Athanase Badolo, Ph.D. – Université Joseph Ki-Zerbo

Co-Author: Aboubacar Sombié – Université Joseph Ki-Zerbo

Co-Author: K. Hyacinthe Toé – Université Joseph Ki-Zerbo

Co-Author: Awa Gnémé – Université Joseph Ki-Zerbo

Co-Author: W. Mathias Ouédraogo – Université Joseph Ki-Zerbo

Co-Author: Alfred Tiono – Groupe de Recherche Action en Santé

Co-Author: Franck Remoué – Institut National de la Recherche Agronomique (INRAE)

Co-Author: Carlo Costantini – Institut National de la Recherche Agronomique (INRAE)

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:00 PM – 4:12 PM MST

Identification of the active invasion of *Aedes aegypti* mosquitoes in the rural Peruvian Amazon 

Location: Phoenix Convention Center, 222 A

Presenting Author: Kara Mackenzie Fikrig, Ph.D. – Cornell University

Co-Author: Arnold Omar Noriega Delgado – Universidad Nacional de la Amazonia Peruana

Co-Author: Rosa Angelina Rodriguez Vasquez – Prisma

Co-Author: John Bardales Cardenas – Prisma

Co-Author: José Rivas – Prisma

Co-Author: Becker Reyna Aspajo – Gerencia Regional de Salud Loreto

Co-Author: Gissella M. Vasquez – U.S. Naval Medical Research Unit SOUTH

Co-Author: Ryan T. Larson, Ph.D. – U.S. Navy

Co-Author: Amy Morrison – University of California

Co-Author: Laura Harrington – Cornell University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:12 PM – 4:24 PM MST

Mapping the distribution of invertebrate non target organism in three villages in western Burkina Faso prior the implementation of genetic control tool against malaria vectors 

Location: Phoenix Convention Center, 222 A

Presenting Author: Franck Yao, Ph.D. – Institut de Recherche en Science de la Sante

Co-Author: Abdoul-Azize Millogo – Institute for Social Studies

Co-Author: Patric Stephane Epopa – Institut de Recherche en Science de la Sante

Co-Author: Hyacinthe Guel – Institut de Recherche en Science de la Sante

Co-Author: Seni Ilboudo – Institut de Recherche en Science de la Sante

Co-Author: Ibrahim Diabate – Institut de Recherche en Science de la Sante

Co-Author: Ali Ouari – Institut de Recherche en Science de la Sante

Co-Author: Frederic Tripet – Swiss TPH

Co-Author: Tilly Collins – Harper Adams University

Co-Author: Abdoulaye Diabate – Institut de Recherche en Science de la Sante

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:24 PM – 4:36 PM MST

Break

Location: Phoenix Convention Center, 222 A

4:36 PM – 4:48 PM MST

Insecticide resistance profiles and voltage-sensitive sodium channel mutations in *Aedes albopictus* mosquitoes from island populations 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Jehan Zeb, Ph.D. – Centre for Immunology and Infection

Co-Author: Lam Tommy – Centre for Immunology and Infection

Co-Author: Shaolin Han, Ph.D. – Centre for Immunology and Infection

Co-Author: Yunshi Liao – Centre for Immunology and Infection

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:48 PM – 5:00 PM MST

Resistance to s-methoprene and *Lysinibacillus sphaericus* in *Culex pipiens* from the Chicago area 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Kristina Lopez – North Shore Mosquito Abatement District

Co-Author: Patrick Irwin – Northwest Mosquito Abatement District

Co-Author: Justin Harbison, Ph.D. – Loyola University Chicago

Co-Author: Susan M. Paskewitz (she/her/hers) – University of Wisconsin

Co-Author: Lyric Bartholomay – University of Wisconsin

Co-Author: Mark Clifton – North Shore Mosquito Abatement District

10-Minute Presentation Medical, Urban, and Veterinary Entomology

5:00 PM – 5:12 PM MST

Measuring insecticide resistance in a vacuum: Exploring next steps to link resistance data with mosquito control efficacy 

Location: Phoenix Convention Center, 222 A, PCC

Presenting Author: Aine Lehane – NEVBD - Cornell University

Co-Author: Casey Parker-Crockett – Azellis

Co-Author: Edmund Norris – USDA-ARS

Co-Author: Sarah Wheeler – Sacramento-Yolo Mosquito and Vector Control District

Co-Author: Laura Harrington – Cornell University 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
5:12 PM – 5:24 PM MST Environmental DNA in mosquito breeding sites: A monitoring tool for mosquito species and exploration of biological control agents  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Shaolin Han, Ph.D. – Centre for Immunology and Infection 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
5:24 PM – 5:36 PM MST Mapping mosquito-borne disease risks in Houston: An eco-epidemiological approach  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Morgan Jibowu – Texas Children’s Hospital Co-Author: Max Vigilant – Harris County Mosquito and Vector Control Co-Author: Melissa Nolan, Ph.D. – University of South Carolina Co-Author: Ryan Rampuhl Co-Author: Heather T. Essigmann, PhD, MPH Co-Author: Abiodun Oluyomi, PhD Co-Author: Eric Brown Co-Author: Sarah Gunter (she/her/hers) – Baylor College of Medicine 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
5:36 PM – 5:48 PM MST Nutritional provisioning by a simple microbial community enables <i>Aedes aegypti</i> development in detritus-devoid environments  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Yin Wang (he/him/his) – University of Georgia Co-Author: Derek T. Huck – University of Georgia Co-Author: Vincent G. Martinson (he/him/his) – University of New Mexico Co-Author: Michael R. Strand – University of Georgia 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
2:00 PM – 6:00 PM MST 10-min: MUVE, Tick Talks Moderator: Gillian Eastwood, Ph.D. – Virginia Tech Moderator: Ashley C. Kennedy, BCE (she/her/hers) – Delaware Division of Fish & Wildlife Mosquito Control 10-Minute Presentation Medical, Urban, and Veterinary Entomology	

2:00 PM – 2:12 PM MST Considerations for improved recommendations for the Cattle Fever Tick Control Program  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Phillip Kaufman – Texas A&M University Co-Author: Brandon N. Lyons (he/him/his) – Texas A&M University Co-Author: Donald B. Thomas – USDA-ARS 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
2:12 PM – 2:24 PM MST Molecular cloning and characterization of glutamate-gated chloride channels and implications of ivermectin resistance mechanisms in the cattle tick, <i>Rhipicephalus microplus</i>  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Xinyue Huang – Texas A&M University Co-Author: Phillip Kaufman – Texas A&M University Co-Author: Sarah Maestas – University of Texas Co-Author: Pia Olafson – USDA-ARS 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
2:24 PM – 2:36 PM MST Genotypic mutations indicative of pesticide resistance in temperate and tropical <i>Rhipicephalus sanguineus sensu lato</i> ticks in a Rocky Mountain spotted fever endemic area of Arizona  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Maureen Brophy (she/her/hers) – Centers for Disease Control and Prevention Co-Author: Nathan Stone – Northern Arizona University Co-Author: Naomi Drexler – Centers for Disease Control and Prevention Co-Author: Christopher Paddock – Centers for Disease Control and Prevention Co-Author: Gilbert Kersh – Centers for Disease Control and Prevention Co-Author: Harty Bendle – San Carlos Apache Tribe Co-Author: David L. Wagner – Northern Arizona University Co-Author: William Nicholson – Centers for Disease Control and Prevention Co-Author: Johanna Salzer – Centers for Disease Control and Prevention 10-Minute Presentation Medical, Urban, and Veterinary Entomology	
2:36 PM – 2:48 PM MST Laboratory and semi-field studies of biominerals to control the American dog tick, <i>Dermacentor variabilis</i>  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Reuben Akwei Garshong, Ph.D. (he/him/his) – North Carolina State University Co-Author: Elise . A. Richardson, Ph.D. (she/her/hers) – North Carolina State University	

Co-Author: Grayson L. Cave, Ph.D. – North Carolina State University

Co-Author: Kaiying Chen, Ph.D. (she/her/hers) – North Carolina State University

Co-Author: Gissella M. Vasquez – U.S. Naval Medical Research Unit SOUTH

Co-Author: Ryan T. Larson, Ph.D. – U.S. Navy

Co-Author: R. Michael Roe, Ph.D. – North Carolina State University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

2:48 PM – 3:00 PM MST

Shelter dogs as patients and predictors of tick risks in Ohio



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Risa Pesapane, Ph.D. – The Ohio State University

Co-Author: Colleen Shockling Dent – Gigi's

Co-Author: Jed Henning – The Ohio State University

Co-Author: Julia Beckett – The Ohio State University

Co-Author: Ningzhu Bai – The Ohio State University

Co-Author: Yiming Chu – The Ohio State University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:00 PM – 3:12 PM MST

Ticks (Acari: Ixodidae) infesting companion animals in Delaware: Results from a statewide passive surveillance program and molecular survey



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Ashley C. Kennedy, BCE (she/her/hers) – Delaware Division of Fish & Wildlife Mosquito Control

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:12 PM – 3:24 PM MST

Break

Location: Phoenix Convention Center, 221 C, PCC

3:24 PM – 3:36 PM MST

Beyond bites: Evaluating attitudes and beliefs related to ticks, Lyme disease, and a Lyme disease vaccine



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Emily D. Struckhoff – The Pennsylvania State University

Co-Author: Shannon Cruz – The Pennsylvania State University

Co-Author: Yanitza A. Cruz Crespo – The Pennsylvania State University

Co-Author: Malu Tejada – The Pennsylvania State University

Co-Author: Erika T. Machtinger (she/her/hers) – The Pennsylvania State University

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:36 PM – 3:48 PM MST

Alternative tick control methodology: A rodent and tick bait for controlling white-footed mice (*Peromyscus leucopus*) and blacklegged ticks (*Ixodes scapularis*), the respective pathogen host and vector of Lyme

disease spirochetes



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: David Poche – Genesis Laboratories, Inc.

Co-Author: Richard Poche – Genesis Laboratories, Inc.

10-Minute Presentation Medical, Urban, and Veterinary Entomology

3:48 PM – 4:00 PM MST

CRISPR/Cas12a DNA detection of *Borrelia burgdorferi* in black-legged ticks (*Ixodes scapularis*)



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: William Landesman (he/him/his) – Vermont State University

Co-Author: Maya Suarez – Vermont State University

Co-Author: Taylor Hudson – Innovative Genomics Institute

Co-Author: Samantha Bedore – Vermont State University

Co-Author: Matthew Hayden – Dartmouth College

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:00 PM – 4:12 PM MST

Sublethal pesticide exposure increases tick overwintering survival



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Kennan Jeannet Oyen – USDA-ARS

Co-Author: Thomas Arya – University of Cincinnati

Co-Author: Benjamin Davies – University of Cincinnati

Co-Author: Elise Didion – University of Cincinnati

Co-Author: Joshua Benoit – University of Cincinnati

10-Minute Presentation Medical, Urban, and Veterinary Entomology

4:12 PM – 4:24 PM MST

Characterization of carbon dioxide release rates for a novel tick trap (Acarina)



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Christopher Downs – BanfieldBio, Inc.

Co-Author: Alyssa S. Branca – BanfieldBio, Inc.

Co-Author: Jillian Joiner (she/her/hers) – BanfieldBio, Inc.

Co-Author: Daniel Marshall – Washington State University

Co-Author: Christopher Wheeler – Chris Wheeler Consulting LLC

Co-Author: Devin Rihtarshich – BanfieldBio, Inc.

Co-Author: John H. Borden – JHB Consulting

Co-Author: Michael Banfield – BanfieldBio, Inc.
10-Minute Presentation Medical, Urban, and Veterinary Entomology
4:24 PM – 4:36 PM MST Break Location: Phoenix Convention Center, 221 C, PCC
4:36 PM – 4:48 PM MST Combatting ticks: The power of prescribed burning in reducing tick numbers and preventing pathogen transmission to humans and animals  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Andrea Salazar – Kansas State University Co-Author: Herman A. Griesse (he/him/his) – Kansas State University Co-Author: Victoria Pickens (she/her/hers) – Kansas State University Co-Author: Cassandra Olds – Kansas State University
10-Minute Presentation Medical, Urban, and Veterinary Entomology
4:48 PM – 5:00 PM MST Defining the transmission risk profile of three <i>Ehrlichia</i> species using statewide surveillance of tick populations in South Carolina  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Kayla Bramlett – University of South Carolina Co-Author: Lidia Gual-Gonzalez – University of South Carolina Co-Author: Emily Owens Pickle – University of South Carolina Co-Author: Kyndall Dye-Braumuller, BCE – University of South Carolina Co-Author: Melissa Nolan, Ph.D. – University of South Carolina Co-Author: Madeleine Meyer – University of South Carolina Co-Author: Kia Zellars – University of South Carolina Co-Author: Chris Evans – South Carolina Department of Public Health Co-Author: Lauren Rustin – South Carolina Department of Public Health
10-Minute Presentation Medical, Urban, and Veterinary Entomology
5:00 PM – 5:12 PM MST Park size and trail environment influence seasonal tick-borne pathogen transmission risk in Nashville metropolitan area parks, Tennessee  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Abelardo C. Moncayo – Tennessee Department of Health Co-Author: Brent Newman – Tennessee Department of Health
10-Minute Presentation Medical, Urban, and Veterinary Entomology

5:12 PM – 5:24 PM MST Tick-borne arboviruses: Evidence and awareness of Heartland, Bourbon, and Powassan viruses circulating in Virginia  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Gillian Eastwood, Ph.D. – Virginia Tech Co-Author: Ahmed Garba – Virginia Tech Co-Author: Jennifer Riley – Blue Ridge Wildlife Center Co-Author: Alexandra Cumbie – ECPI University
10-Minute Presentation Medical, Urban, and Veterinary Entomology
5:24 PM – 5:36 PM MST Ticks taking over Tennessee: A snapshot of the past five years  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Vishvapali C. Kobbekaduwa, Ph.D. (she/her/hers) – University of Tennessee/Department of Entomology and Plant Pathology Co-Author: Rebecca Butler – University of Tennessee Co-Author: Katy V. Smith (she/her/hers) – University of Tennessee Co-Author: Rebecca T. Trout Fryxell (she/her/hers) – University of Tennessee
10-Minute Presentation Medical, Urban, and Veterinary Entomology
2:30 PM – 3:30 PM MST Education and Outreach Committee Meeting Location: Sheraton Phoenix Downtown, Deer Valley Organizer: David Serrano (he/him/his) – Broward College Organizer: Kristie Reddick (she/her/hers) – The Bug Chicks Organizer: Emily Kraus – University of Florida
Functions/Events/Meetings Committee Meeting
2:30 PM – 3:30 PM MST Field Sketching and Nature Journaling: Engaging New Audiences Location: Phoenix Convention Center, 129 A Organizer: Jack Whisenant (They/he) – Cornell University
Mini Workshop
2:30 PM – 3:30 PM MST Conversation Starter: Birding Location: Phoenix Convention Center, The Hive (in the Exhibit Hall) Moderator: Evan Waite (he/him/his) – Arizona State University
Functions/Events/Meetings Conversation Starter

3:00 PM – 5:00 PM MST Graduating Soon? Next Steps on Your Career Path Organizer: Natasha Hiromi Umezu – University of Nebraska Organizer: Hannah Stowe – University of Nebraska Organizer: Andrea Rilakovic – University of Nebraska - Lincoln Organizer: Kashish Verma (she/her/hers) – University of Nebraska	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
3:00 PM – 3:02 PM MST Introductory remarks Location: Phoenix Convention Center, 223, PCC Presenting Author: Natasha Hiromi Umezu – University of Nebraska	
3:02 PM – 3:17 PM MST From campus to crop fields: A blueprint for new graduates entering the agri-industry Location: Phoenix Convention Center, 223, PCC Presenting Author: Marc Lewis Fisher – Corteva Agriscience	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
3:17 PM – 3:32 PM MST Entomologists without borders: Landing a job and succeeding in the land of opportunity Location: Phoenix Convention Center, 223 Presenting Author: Sujaya Rao – University of Minnesota	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
3:32 PM – 3:47 PM MST Paving a career path towards the USDA-ARS: Preparing for roles in federal scientific research Location: Phoenix Convention Center, 223 Presenting Author: Brad S. Coates – USDA-ARS	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
3:47 PM – 3:57 PM MST Break Location: Phoenix Convention Center, 223	
3:57 PM – 4:12 PM MST Developing your brand after graduation Location: Phoenix Convention Center, 223	

Presenting Author: Victoria A. Kleczewski (she/her/hers) – Syngenta	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
4:12 PM – 4:27 PM MST Demystifying the negotiation process – Tips for success Location: Phoenix Convention Center, 223 Presenting Author: Laura Lavine – Washington State University	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
4:27 PM – 4:42 PM MST Know yourself (and the market): Key insights for graduate students Location: Phoenix Convention Center, 223 Presenting Author: Daniela Pezzini – Bayer Crop Science	Member Symposium Plant-Insect Ecosystems Physiology, Biochemistry, and Toxicology Student
4:42 PM – 4:57 PM MST Panel discussion Location: Phoenix Convention Center, 223	
4:57 PM – 5:00 PM MST Closing remarks Location: Phoenix Convention Center, 223, PCC Presenting Author: Natasha Hiromi Umezu – University of Nebraska	
3:30 PM – 4:30 PM MST Awards and Honors Canvassing Committee Meeting Location: Sheraton Phoenix Downtown, North Mountain Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America	Functions/Events/Meetings Committee Meeting
3:30 PM – 5:00 PM MST Publications Council Location: Sheraton Phoenix Downtown, Paradise Valley, Sheraton Organizer: Jessica McEwan – Entomological Society of America	Functions/Events/Meetings Publications
4:00 PM – 5:00 PM MST PACT Networking Reception (Invitation Only) Location: Sheraton Phoenix Downtown, Deer Valley, Sheraton Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America	

Functions/Events/Meetings	
4:00 PM – 5:30 PM MST Orthoptera Networking Event — Locust Plasticity and More! Location: Sheraton Phoenix Downtown, Camelback Organizer: Mira Word Ries – Arizona State University Organizer: Rick Overson – Arizona State University Organizer: Arianne Cease – Arizona State University Functions/Events/Meetings	
4:30 PM – 6:30 PM MST International Branch Meeting Organizer: Hongmei Li-Byarlay – Central State University Organizer: Veronique Martel (she/her/hers) – Natural Resources Canada Organizer: Tania Zaviezo – Pontificia Universidad Catolica de Chile Organized Meeting	^
4:30 PM – 4:40 PM MST Welcome and introductory remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Hongmei Li-Byarlay – Central State University	
4:40 PM – 4:45 PM MST Recognition of newly elected officers Location: Phoenix Convention Center, 127 A Presenting Author: Veronique Martel (she/her/hers) – Natural Resources Canada	
4:45 PM – 4:55 PM MST News from the ESA Governing Board Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Julien Saguez – CÉROM	
4:55 PM – 5:05 PM MST Treasurer's report Location: Phoenix Convention Center, 127 A Presenting Author: Livy Williams, III – USDA-ARS	
5:05 PM – 5:15 PM MST Updates from committee chairs Location: Phoenix Convention Center, 127 A Presenting Author: Boyd Mori – University of Alberta	
5:15 PM – 5:20 PM MST	

Passing of the gavel Location: Phoenix Convention Center, 127 A	
5:20 PM – 5:35 PM MST John Henry Comstock Award winner presentation Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Alice C. Assmar (she/her/hers) – McGill University Organized Meeting	
5:35 PM – 5:50 PM MST Distinguished Scientist Award winner presentation Location: Phoenix Convention Center, 127 A Presenting Author: Maya L. Evenden – University of Alberta Organized Meeting	
5:50 PM – 6:05 PM MST Early Career Research and Leadership Award winner presentation Location: Phoenix Convention Center, 127 A Presenting Author: Sajjan Grover – Bayer Crop Science Organized Meeting	
6:05 PM – 6:15 PM MST Announcement of the 2025 IB Virtual Symposium and closing remarks Location: Phoenix Convention Center, 127 A Presenting Author: Veronique Martel (she/her/hers) – Natural Resources Canada	
6:15 PM – 6:30 PM MST Networking and refreshments Location: Phoenix Convention Center, 127 A	
5:00 PM – 7:00 PM MST Entomology Games - Final Round Location: Phoenix Convention Center, North Ballroom Organizer: David Plotkin – University of Florida Organizer: Cheri Abraham – Syngenta Functions/Events/Meetings Student	
5:00 PM – 8:00 PM MST IOBC-NRS Annual Meeting Location: Phoenix Convention Center, 131 B, PCC Organizer: Mark S. Hoddle, Ph.D. D.Sc. (he/him/his) – University of California	

Organizer: Ricky Lara (he/him/his) – University of California Functions/Events/Meetings	
6:00 PM – 7:00 PM MST 12th Latin/Hispanic Symposium: SomosEnto Mixer Location: Phoenix Convention Center, 226 C Organizer: Ricky Lara (he/him/his) – University of California Organizer: Leslie A. Aviles Lopez – Purdue University Functions/Events/Meetings	
6:00 PM – 8:30 PM MST Korean Young Entomologists (KYE) Organizer: Jinmo Koo (he/him/his) – University of California Organizer: Donghun Kim – Kyungpook National University Organizer: Sangwoo Seok – University of Florida Organized Meeting	
6:00 PM – 6:10 PM MST Introductory remarks Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jinmo Koo (he/him/his) – University of California	
6:10 PM – 6:20 PM MST Effect of food particle on shelter tube construction in Asian subterranean termite, <i>Coptotermes gestori</i> (Wasmann) (Blattodea: Rhinotermitidae) Location: Phoenix Convention Center, 224 A Presenting Author: Kukhyun Lim – University of Florida Organized Meeting	
6:20 PM – 6:30 PM MST Simple production method of the predatory mite <i>Neoseiulus californicus</i> and its application to the strawberry cultivar Location: Phoenix Convention Center, 224 A Presenting Author: Hwal-Su Hwang – Kyungpook National University Co-Author: Keyong-Yeoll Lee – Kyungpook National University Organized Meeting	
6:30 PM – 6:40 PM MST	

Resolving confusion in the native distribution of <i>Aedes (Hulecoeteomyia) koreicus</i> (Diptera: Culicidae)  Location: Phoenix Convention Center, 224 A Presenting Author: Sangwoo Seok – University of Florida Co-Author: Motoyoshi Mogi – Saga University Co-Author: Yoosook Lee – University of Florida Organized Meeting	
6:40 PM – 6:50 PM MST Comparative distribution and population genetics of bisexual and parthenogenetic the Asian longhorned tick, <i>Haemaphysalis longicornis</i>, in the South Korea Location: Phoenix Convention Center, 224 A Presenting Author: Jiseok Kim – Kyungpook National University Organized Meeting	
6:50 PM – 7:00 PM MST Tick management interventions and insights from vector and host ecology Location: Phoenix Convention Center, 224 A Presenting Author: Sung-Joo Lee – Columbia University Co-Author: Maria Diuk-Wasser – Columbia University Organized Meeting	
7:00 PM – 7:10 PM MST Tick attachment and rapid blood feeding mediated by two dopamine receptors of the Asian longhorned tick, <i>Haemaphysalis longicornis</i> Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Seoyul Hwang – Kyungpook National University Organized Meeting	
7:10 PM – 7:20 PM MST The effect of midgut microbiota in blood meal digestion in <i>Aedes aegypti</i> Location: Phoenix Convention Center, 224 A Presenting Author: Keonhee Kim – University of Georgia Organized Meeting	
7:20 PM – 7:30 PM MST	

CRISPR/Cas9-mediated knockout of scarlet gene produces eye color mutants in the soybean looper, <i>Chrysodeixis includens</i>  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Sujin Lee – Mississippi State University Organized Meeting
7:30 PM – 7:40 PM MST Break Location: Phoenix Convention Center, 224 A
7:40 PM – 7:55 PM MST Characterization of pro-viral proteins in secreted saliva of <i>Varroa destructor</i>  Location: Phoenix Convention Center, 224 A Presenting Author: Sanghyeon Kim – University of Florida Co-Author: Daniel Swale – University of Florida Organized Meeting
7:55 PM – 8:10 PM MST Life table analysis for insects: Diploidy vs. haplodiploidy  Location: Phoenix Convention Center, 224 A Presenting Author: Young-gyun Park (he/him/his) – Purdue University Organized Meeting
8:10 PM – 8:25 PM MST Effect of pine wood nematode, <i>Bursaphelenchus xylophilus</i> prevention tree injection on the occurrence of boring pests in pine forest  Location: Phoenix Convention Center, 224 A Presenting Author: Dong-Woon Lee – Kyungpook National University Co-Author: Sang-myeong Lee – SM Biovision Co Co-Author: Young-hak Jeong – SM Biovision Co Organized Meeting
8:25 PM – 8:30 PM MST Closing remarks Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jinmo Koo (he/him/his) – University of California
6:30 PM – 9:30 PM MST Overseas Chinese Entomologists Association Location: Phoenix Convention Center, 121 C, PCC

Organizer: Ting Li – Alabama State University Organizer: Hongmei Li-Byarlay – Central State University Functions/Events/Meetings
7:00 PM – 8:00 PM MST Student Awards Ceremony Location: Phoenix Convention Center, North Ballroom, PCC Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Organizer: Jacqueline M. Maille (she/her/hers) – Kansas State University Organizer: Kadie Elizabeth Britt – Colorado State University Organizer: James Villegas – Louisiana State University Plenary Student
7:00 PM – 8:00 PM MST Editor Reception Location: Sheraton Phoenix Downtown, Camelback, Sheraton Organizer: Jessica McEwan – Entomological Society of America Functions/Events/Meetings Publications
7:00 PM – 9:00 PM MST North American Dipterists Society Meeting Location: Phoenix Convention Center, 222 A Organizer: Jessica Paula Gillung (she/her/hers) – McGill University Functions/Events/Meetings
7:00 PM – 9:00 PM MST Society of Overseas Nepalese Entomologists Meeting Location: Phoenix Convention Center, 127 C, PCC Organizer: Rekha Bhandari (she/her/hers) – Michigan State University Organizer: Pragya Kiju – Clemson University Organizer: Kushal Naharki – West Virginia University Organizer: Anjana Duwal (she/her/hers) – Louisiana State University Organizer: Anju Poudel – The Pennsylvania State University Organizer: Saurav Ranabhat (he/him/his) – Louisiana State University Organizer: Binita Sigdel – Tennessee State University Functions/Events/Meetings
7:00 PM – 9:30 PM MST The Coleopterists Society Meeting and Mixer Location: Phoenix Convention Center, 224 B Organizer: Lourdes Chamorro – USDA

Organizer: Maxwell Barclay – Natural History Museum, London Functions/Events/Meetings	
7:00 PM – 10:00 PM MST Taiwanese Entomologist Association Meeting Organizer: De-fen Mou (she/her/hers) – University of Florida Organizer: Ching-Wen Tan – National Chung Hsing University Organizer: Ling-Hsiu Liao – University of Illinois Organized Meeting	
7:00 PM – 7:05 PM MST Introductory remarks Location: Phoenix Convention Center, 122 C, PCC Presenting Author: De-fen Mou (she/her/hers) – University of Florida	
7:05 PM – 7:20 PM MST Impact of viral infection on baiting efficiency in red imported fire ants, <i>Solenopsis invicta</i> Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Fang-Ling Chloe Liu – Virginia Tech Co-Author: Wei-Jun Lin – National Taiwan University Co-Author: Chin-Cheng Scotty Yang – Virginia Tech Organized Meeting	
7:20 PM – 7:35 PM MST The prevalence and abundance of mite ectoparasites on house mice in urban cities in New Jersey Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Jin-Jia Yu – Rutgers University Co-Author: Changlu Wang – Rutgers University Organized Meeting	
7:35 PM – 7:50 PM MST Advancing mosquito control: Integrating SEPARATOR and CRISPR-based Strategies for Effective Biocontrol of <i>Aedes aegypti</i> Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Shih-Che Weng, Ph.D. (he/him/his) – University of California Co-Author: Ming Li – University of California Co-Author: Omar S. Akbari – University of California Organized Meeting	

7:50 PM – 8:00 PM MST Break Location: Phoenix Convention Center, 122 C, PCC	
8:00 PM – 8:15 PM MST Mission-oriented research for agricultural insect vector management Location: Phoenix Convention Center, 122 C, PCC Presenting Author: De-fen Mou (she/her/hers) – University of Florida Organized Meeting	
8:15 PM – 8:30 PM MST The challenge of invasive pest species and the potential of native parasitoids as natural allies Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Ching-Wen Tan – National Chung Hsing University Co-Author: Ching-Cheng Wang – National Chung Hsing University Co-Author: Yu-Chen Lin – National Chung Hsing University Co-Author: Ting-Wen Wang – National Chung Hsing University Organized Meeting	
8:30 PM – 8:50 PM MST Discussion Location: Phoenix Convention Center, 122 C, PCC	
8:50 PM – 8:55 PM MST Closing remarks Location: Phoenix Convention Center, 122 C, PCC Presenting Author: De-fen Mou (she/her/hers) – University of Florida	
8:00 PM – 9:00 PM MST Governing Board Reception Location: Sheraton Phoenix Downtown, Valley Overlook Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Organizer: Chris J. Stelzig, CAE – Entomological Society of America Functions/Events/Meetings	
8:00 PM – 9:30 PM MST Early Career Professionals Mixer Location: Arizona Wilderness, Patio Functions/Events/Meetings Early Career	
8:00 PM – 10:30 PM MST	

Student Reception Location: 810 Billiards & Bowling, 810 Billiards & Bowling Functions/Events/Meetings Student
8:30 PM – 10:00 PM MST Korean Young Entomologists (KYE) Mixer Location: Phoenix Convention Center, 224 A, PCC Organizer: Jinmo Koo (he/him/his) – University of California Organizer: Sangwoo Seok – University of Florida Organizer: Donghun Kim – Kyungpook National University Functions/Events/Meetings
Wednesday, November 13, 2024
5:45 AM – 10:45 AM MST Tour: Hot Air Ballooning  Location: Sheraton Phoenix Downtown, Porte Cochere/Driveway, Sheraton Functions/Events/Meetings
7:00 AM – 8:30 AM MST Founders' Memorial Lecture and Awards Recognition Breakfast Location: Phoenix Convention Center, North Ballroom Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Panelist: Lars Chittka – Queen Mary University of London Plenary
7:00 AM – 12:00 PM MST Registration and Information Center Location: Phoenix Convention Center, North Ballroom Foyer General Registration and Information Center
7:00 AM – 12:00 PM MST Presentation Preview Room (PPR) Location: Phoenix Convention Center, 121 A General Presentation Preview Room (PPR)
7:00 AM – 6:00 PM MST Coat and Bag Check Location: Phoenix Convention Center, Exhibit Hall Foyer General

7:00 AM – 6:00 PM MST Relaxation Retreat Location: Phoenix Convention Center, Patio 3 General Relaxation Retreat
7:00 AM – 6:00 PM MST Lactation Room Location: Phoenix Convention Center, Green Room General
8:30 AM – 9:15 AM MST 2025 Strategic Outlook and Member Forum Location: Phoenix Convention Center, North Ballroom Organizer: Jennifer A. Henke, BCE (she/her/hers) – Coachella Valley Mosquito and Vector Control District Organizer: Lina Bernalola – Texas A&M University Plenary
9:00 AM – 12:00 PM MST Exhibit Hall Location: Phoenix Convention Center, Exhibit Hall 6 General Exhibit Hall
9:30 AM – 10:30 AM MST Promoting Safe and Equitable Field Practices in Entomology Location: Phoenix Convention Center, 125 AB, PCC Organizer: Dylan J. Beal – UC ANR Mini Workshop Diversity, Equity, and Inclusion
9:30 AM – 11:30 AM MST Beyond Graduation: Navigating the Professional Landscape Organizer: Luis Alberto Ochoa Cadena (he/him/his) – New Mexico State University Organizer: Erick Javier Martinez – The Ohio State University Organizer: Sara Elizabeth Salgado Astudillo – University of Florida Organizer: Vilma M. Montenegro – University of Florida Organizer: Leslie A. Aviles Lopez – Purdue University Member Symposium Early Career Student



9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 122 B Presenting Author: Vilma M. Montenegro – University of Florida
9:35 AM – 9:45 AM MST How soft skills matter in your technical career  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Jesse M. Richardson – Corteva Agriscience Co-Author: Rosana Serikawa – Corteva Agriscience Member Symposium Early Career Student
9:45 AM – 9:55 AM MST Seeking and unlocking opportunities: Shaping your profile for entomology careers in industry  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Carlos Esquivel Palma – Bayer Crop Science Co-Author: Ana R. Cabrera (she/her/hers) – Bayer Crop Science Co-Author: Chitvan Khajuria – Bayer Crop Science Co-Author: Christopher R. Brown (he/him/his) – Bayer Crop Science Co-Author: Steven Reyna – Bayer Crop Science Co-Author: Frankie Stubbins (he/him/his) – Bayer Crop Science Co-Author: Harit K. Bal – Bayer Crop Science Member Symposium Early Career Student
9:55 AM – 10:05 AM MST You can still teach! It doesn't have to be in academia  Location: Phoenix Convention Center, 122 B Presenting Author: Michelle Hartzer, BCE (she/her/hers) – 360 Pest and Food Safety Consulting Member Symposium Early Career Student
10:05 AM – 10:10 AM MST Break Location: Phoenix Convention Center, 122 B
10:10 AM – 10:20 AM MST After the swarm: How entomology careers can take you places  Location: Phoenix Convention Center, 122 B Presenting Author: Eric Rebek – FMC Corporation Co-Author: Danielle Kirkpatrick – FMC Corporation

Member Symposium Early Career Student
10:20 AM – 10:30 AM MST Defining purpose for your career  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Kimberly Morrell (she/her/hers) – Bayer Crop Science Member Symposium Early Career Student
10:30 AM – 10:40 AM MST Thriving abroad: Navigating career in industry as a non-US citizen  Location: Phoenix Convention Center, 122 B Presenting Author: Sajjan Grover – Bayer Crop Science Member Symposium Early Career Student
10:40 AM – 10:45 AM MST Break Location: Phoenix Convention Center, 122 B
10:45 AM – 11:25 AM MST Open Q&A Location: Phoenix Convention Center, 122 B
11:25 AM – 11:30 AM MST Closing remarks Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Sara Elizabeth Salgado Astudillo – University of Florida
9:30 AM – 11:30 AM MST Public Health Entomology for All: Interview Skills Development Location: Phoenix Convention Center, 225 A Organizer: Stacie East, Esq., CAE (she/her/hers) – Entomological Society of America Organizer: Cassandra Durden, M.S. (she/her/hers) – Centers for Disease Control and Prevention Organizer: Jacoby Clark – PHEFA Workshop Diversity, Equity, and Inclusion Early Career Student

9:30 AM – 11:30 AM MST Overcoming Imposter Syndrome Location: Phoenix Convention Center, 129 A, PCC Organizer: Erin Cadwalader (she/her/hers) – Entomological Society of America Organizer: Ana M. Velez (she/her/hers) – University of Nebraska Workshop	
9:30 AM – 12:30 PM MST Into the Wild: Investigating Wildlife-Arthropod Vector Interactions and Implications for One Health Organizer: Karen C. Poh (she/her/hers) – USDA-ARS Organizer: Erika T. Machtinger (she/her/hers) – The Pennsylvania State University Organizer: Risa Pesapane, Ph.D. – The Ohio State University Organizer: Danielle Tufts (she/her/hers) – University of Pittsburgh Section Symposium Medical, Urban, and Veterinary Entomology	^
9:30 AM – 9:32 AM MST Introductory remarks Location: Phoenix Convention Center, 130, PCC Presenting Author: Karen C. Poh (she/her/hers) – USDA-ARS	
9:32 AM – 9:37 AM MST An integrative framework for tick management: The need to connect wildlife science, One Health, and interdisciplinary perspectives Location: Phoenix Convention Center, 130, PCC Presenting Author: Karen C. Poh (she/her/hers) – USDA-ARS Co-Author: Erika T. Machtinger (she/her/hers) – The Pennsylvania State University Co-Author: Risa Pesapane, Ph.D. – The Ohio State University Co-Author: Danielle Tufts (she/her/hers) – University of Pittsburgh Section Symposium Medical, Urban, and Veterinary Entomology	
9:37 AM – 9:42 AM MST Ecological epidemiology of bovine babesiosis in south Texas Location: Phoenix Convention Center, 130 Presenting Author: Tammi Johnson – Texas A&M University Section Symposium Medical, Urban, and Veterinary Entomology	
9:42 AM – 9:47 AM MST Effectiveness of wildlife fences as a tool for controlling cattle fever ticks by mitigating movement of free ranging nilgai	

Location: Phoenix Convention Center, 130 Presenting Author: Lauren Maestas – USDA-ARS Co-Author: Manuel Zavala – USDA-ARS Co-Author: John Goolsby – USDA-ARS Co-Author: Reyes Garcia – USDA-ARS Co-Author: John Picanso – USDA-APHIS Co-Author: Douglas Anderson – USDA-APHIS Co-Author: Denise Bonilla – USDA-APHIS Section Symposium Medical, Urban, and Veterinary Entomology	
9:47 AM – 9:52 AM MST The effects of latitudinal environmental variables on the seasonality of host-attached juvenile ticks in California Location: Phoenix Convention Center, 130 Presenting Author: Samantha Sambado – University of California Co-Author: Andrew MacDonald – University of California Co-Author: Cheryl Briggs – University of California Section Symposium Medical, Urban, and Veterinary Entomology	
9:52 AM – 9:57 AM MST Systemic acaricidal treatment of white-footed mice (<i>Peromyscus leucopus</i>) against juvenile blacklegged ticks (<i>Ixodes scapularis</i>) in Connecticut Location: Phoenix Convention Center, 130, PCC Presenting Author: Megan Linske – Connecticut Agricultural Experiment Station Co-Author: Scott C. Williams – The Connecticut Agricultural Experiment Station Section Symposium Medical, Urban, and Veterinary Entomology	
9:57 AM – 10:02 AM MST Host abundance, distribution, and infection with two tickborne pathogens, <i>Babesia microti</i> and <i>Borrelia burgdorferi</i> in small mammals in western Pennsylvania Location: Phoenix Convention Center, 130, PCC Presenting Author: Emily G. Bache (she/her/hers) – University of Pittsburgh Co-Author: Josee Kahambwe – University of Pittsburgh Co-Author: Katerina Bryan – University of Pittsburgh Co-Author: Danielle Tufts (she/her/hers) – University of Pittsburgh Section Symposium Medical, Urban, and Veterinary Entomology	
10:02 AM – 10:07 AM MST	

Identifying host intrinsic and extrinsic variables affecting tick infestation on passerine birds (Order:

Passeriformes) 

Location: Phoenix Convention Center, 130

Presenting Author: Ningzhu Bai – The Ohio State University

Co-Author: Christopher Tonra – The Ohio State University

Co-Author: Thomas Bartlett – Cleveland Museum of Natural History

Co-Author: Risa Pesapane, Ph.D. – The Ohio State University

Section Symposium Medical, Urban, and Veterinary Entomology

10:07 AM – 10:12 AM MST

An ounce of prevention: Understanding ticks and tick-borne pathogens in agroforestry systems in Belize



Location: Phoenix Convention Center, 130

Presenting Author: Erika T. Machtinger (she/her/hers) – The Pennsylvania State University

Co-Author: Hannah Tiffin – The Pennsylvania State University

Co-Author: Jessica Brown – The Pennsylvania State University

Co-Author: Kylie Green – The Pennsylvania State University

Section Symposium Medical, Urban, and Veterinary Entomology

10:12 AM – 10:17 AM MST

Using insect-derived DNA and RNA to describe vector, host, and pathogen communities across a gradient of anthropogenic impact and deforestation in the Brazilian Amazon 

Location: Phoenix Convention Center, 130

Presenting Author: Aimee Massey – Oregon State University

Co-author: David Jose Ferreira da Silva – Ministry of Health of Brasilia

Co-author: Joao Campos-Silva – Instituto Jurua

Co-author: Carlos Peres – Instituto Jurua

Co-author: Taal Levi – Oregon State University

Section Symposium Medical, Urban, and Veterinary Entomology

10:17 AM – 10:22 AM MST

Impacts of the Burmese python on the transmission ecology of a mosquito borne pathogen in southern Florida 

Location: Phoenix Convention Center, 130

Presenting Author: Lindsay Campbell – University of Florida

Co-Author: Nathan Burkett-Cadena – University of Florida

Co-Author: Maureen Long – University of Florida

Co-Author: Robert McCleery – University of Florida

Section Symposium Medical, Urban, and Veterinary Entomology

10:22 AM – 10:27 AM MST

The ecology and control of sarcoptic mange in wombats 

Location: Phoenix Convention Center, 130

Presenting Author: Scott Carver – University of Georgia

Section Symposium Medical, Urban, and Veterinary Entomology

10:27 AM – 10:32 AM MST

Recent research on deer keds, understudied ectoparasites of deer 

Location: Phoenix Convention Center, 130, PCC

Presenting Author: Michael J. Skvarla – The Pennsylvania State University

Section Symposium Medical, Urban, and Veterinary Entomology

10:32 AM – 10:42 AM MST

Break

Location: Phoenix Convention Center, 130

10:42 AM – 12:27 PM MST

Poster session

Location: Phoenix Convention Center, 130

12:27 PM – 12:30 PM MST

Closing remarks

Location: Phoenix Convention Center, 130, PCC

Presenting Author: Karen C. Poh (she/her/hers) – USDA-ARS

9:30 AM – 12:30 PM MST

Current Research of Insect Repellents

Organizer: Mustapha Debboun, BCE – Baylor College of Medicine

Member Symposium Medical, Urban, and Veterinary Entomology



9:30 AM – 9:32 AM MST Introductory remarks Location: Phoenix Convention Center, 222 B Presenting Author: Mustapha Debboun, BCE – Baylor College of Medicine
9:32 AM – 9:47 AM MST Repelling mosquitoes with electric fields using standard house electrical wires  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Krijn Paaijmans – Arizona State University Co-Author: Ndey Jobe – Arizona State University Co-Author: Michael Erickson – Arizona State University Co-Author: Autumn Roberts (she/her/hers) – Arizona State University Member Symposium Medical, Urban, and Veterinary Entomology
9:47 AM – 10:02 AM MST Updates on repellent testing for US Environmental Protection Agency registration  Location: Phoenix Convention Center, 222 B Presenting Author: Scott Carroll – Carroll-Loye Biological Research Co-author: Shawn King – Carroll-Loye Biological Research Co-author: David Nielsen – Carroll-Loye Biological Research Co-author: Cassandre Kaplinsky – Carroll-Loye Biological Research Member Symposium Medical, Urban, and Veterinary Entomology
10:02 AM – 10:17 AM MST The search continues for effective stable fly and mosquito repellents  Location: Phoenix Convention Center, 222 B Presenting Author: Jerry Hogsette – USDA-ARS Co-Author: Daniel L. Kline – USDA-ARS Member Symposium Medical, Urban, and Veterinary Entomology
10:17 AM – 10:32 AM MST The effects of insect repellent on initial dipteran colonization of decomposing pig remains  Location: Phoenix Convention Center, 222 B Presenting Author: Cecilia Torres – Albuquerque Forensic Science Center Member Symposium Medical, Urban, and Veterinary Entomology
10:32 AM – 10:47 AM MST Digging deeper on natural product repellent mechanism understanding and practical applications 

Location: Phoenix Convention Center, 222 B Presenting Author: Jerry Jerry Zhu – USDA-ARS Member Symposium Medical, Urban, and Veterinary Entomology
10:47 AM – 11:02 AM MST Testing modalities for spatial repellents  Location: Phoenix Convention Center, 222 B, PCC Presenting Author: Kyeba Swai – Ifakara Health Institute Member Symposium Medical, Urban, and Veterinary Entomology
11:02 AM – 11:12 AM MST Break Location: Phoenix Convention Center, 222 B
11:12 AM – 11:27 AM MST Spatial repellents: The roadmap to global policy recommendation  Location: Phoenix Convention Center, 222 B Presenting Author: Nicole Achee – University of Notre Dame Member Symposium Medical, Urban, and Veterinary Entomology
11:27 AM – 11:42 AM MST Keeping pests away with semiochemicals  Location: Phoenix Convention Center, 222 B Presenting Author: Agenor Mafra-Neto – ISCA Technologies, Inc. Member Symposium Medical, Urban, and Veterinary Entomology
11:42 AM – 11:57 AM MST Plant-based repellents to common urban pests in the Southwest United States  Location: Phoenix Convention Center, 222 B Presenting Author: Alvaro Romero – New Mexico State University Member Symposium Medical, Urban, and Veterinary Entomology
11:57 AM – 12:12 PM MST Potential of natural products as repellents against imported fire ants  Location: Phoenix Convention Center, 222 B Presenting Author: Abbas Ali – University of Mississippi Co-Author: Farhan Mahmood Shah – Bahauddin Zakariya Co-Author: Ikhlas A. Khan – University of Mississippi

Member Symposium	Medical, Urban, and Veterinary Entomology
12:12 PM – 12:27 PM MST	
Prospecting for natural repellents against ticks	
Location: Phoenix Convention Center, 222 B	
Presenting Author: Daniel Lingeman (he/him/his) – University of Kentucky	
Co-Author: Zainulabeuddin Syed – University of Kentucky	
Member Symposium	Medical, Urban, and Veterinary Entomology
12:27 PM – 12:30 PM MST	
Closing remarks	
Location: Phoenix Convention Center, 222 B	
Presenting Author: Mustapha Debboun, BCE – Baylor College of Medicine	
9:30 AM – 12:30 PM MST	
Symposium to Honor the Scientific Legacy of Jan O. Washburn (1952-2024)	
Organizer: L. Philip Lounibos (he/him/his) – University of Florida	
Organizer: Eric Haas-Stapleton – Alameda County Mosquito Abatement District	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
9:30 AM – 9:40 AM MST	
Introductory remarks	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: L. Philip Lounibos (he/him/his) – University of Florida	
9:40 AM – 10:00 AM MST	
Recollections from childhood with Jan in West Virginia and later collaboration leading to co-authorship in Science	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Libe Washburn – University of California, Santa Barbara	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:00 AM – 10:20 AM MST	
Jan Washburn: Biologist, artist, environmental educator, and friend to all who knew him	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Gordon Frankie – University of California	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:20 AM – 10:40 AM MST	

Interactions with predators and parasites in tree hole mosquito communities	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Dave Egerter – MedComm Strategic Consulting	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
10:40 AM – 11:00 AM MST	
Contributions of Jan Washburn to biological control and mosquito ecology	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: L. Philip Lounibos (he/him/his) – University of Florida	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
11:00 AM – 11:10 AM MST	
Break & slideshow of Jan Washburn's insect art	
Location: Phoenix Convention Center, 222 A, PCC	
11:10 AM – 11:30 AM MST	
Molecular mechanisms in caterpillar baculovirus infections	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Taro Ohkawa (he/him/his) – University of California	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
11:30 AM – 11:50 AM MST	
Contributions of Jan Washburn to mosquito control in California	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Eric Haas-Stapleton – Alameda County Mosquito Abatement District	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
11:50 AM – 12:10 PM MST	
Jan Washburn as insect naturalist, educator, and conservator	
Location: Phoenix Convention Center, 222 A, PCC	
Presenting Author: Eric Lyons – University of Arizona	
Member Symposium	Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
9:30 AM – 12:30 PM MST	
Relationship Status It's Complicated: How Interactions Between Non-natives Affects Invasion Biology	
Organizer: Ellie McCabe – University of Kentucky	
Section Symposium	Plant-Insect Ecosystems

9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 122 A Presenting Author: Ellie McCabe – University of Kentucky
9:35 AM – 9:55 AM MST Can facilitation become competition? What happens when two invasive Drosophilid share a resource  Location: Phoenix Convention Center, 122 A Presenting Author: Ellie McCabe – University of Kentucky Section Symposium Plant-Insect Ecosystems
9:55 AM – 10:15 AM MST Non-native predators, pests, and plants: Can novel interactions protect tree health?  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Samuel F. Ward (he/him/his) – The Ohio State University Co-Author: Amber Stiller (she/her/hers) – The Ohio State University Co-Author: Jeremy Slone – Bartlett Tree Experts Co-Author: Kevin Daniel Chase – Bartlett Tree Experts Section Symposium Plant-Insect Ecosystems
10:15 AM – 10:35 AM MST The role of plant invasions as drivers of the global macroecology of insect invasions  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Therese M. Poland (she/her/hers) – USDA-Forest Service Co-Author: Andrew Liebhold – USDA-Forest Service Co-Author: Richard Mally – Czech University of Life Sciences Co-Author: Rebecca M. Turner – Scion (New Zealand Forest Research Institute) Co-Author: Takehiko Yamanaka – National Agriculture and Food Research Organization Co-Author: Aymeric Bonnamour – University of Lausanne Co-Author: Cleo Bertelsmeier – University of Lausanne Section Symposium Plant-Insect Ecosystems
10:35 AM – 10:55 AM MST A plant, a pest, and predators: Toxin sequestration in spotted lanternfly and its effects on predator-prey interactions in North America  Location: Phoenix Convention Center, 122 A Presenting Author: Anne Johnson – The Pennsylvania State University Co-Author: Allison E. Cornell – The Pennsylvania State University

Co-Author: Sara Hermann – The Pennsylvania State University Co-Author: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University Co-Author: Kelli Hoover – The Pennsylvania State University Section Symposium Plant-Insect Ecosystems
10:55 AM – 11:10 AM MST Break Location: Phoenix Convention Center, 122 A
11:10 AM – 11:30 AM MST An integrative assessment of invasive plant impacts: Gauging combined impacts of deer, invasive earthworms and invasive plants  Location: Phoenix Convention Center, 122 A Presenting Author: Andrea Dávalos – State University of New York Section Symposium Plant-Insect Ecosystems
11:30 AM – 11:50 AM MST When invasive herbivores compete, who wins? Lessons from a forest invasion  Location: Phoenix Convention Center, 122 A, PCC Presenting Author: Evan Preisser (he/him/his) – University of Rhode Island Section Symposium Plant-Insect Ecosystems
11:50 AM – 12:10 PM MST Ant community changes and the persistence of multiple introduced ant species  Location: Phoenix Convention Center, 122 A Presenting Author: Andrew Suarez – University of Illinois Section Symposium Plant-Insect Ecosystems

12:10 PM – 12:30 PM MST Disentangling effects of invasive plants on vector traits  Location: Phoenix Convention Center, 122 A Presenting Author: Chris Stone – Illinois Natural History Survey Co-Author: Holly Tuten – University of Illinois Co-Author: Teresa Steckler – University of Illinois Co-Author: Chris Evans – South Carolina Department of Public Health Co-Author: Yvette Johnson-Walker – University of Illinois Co-Author: San Myint – University of Illinois Co-Author: Erica Jackson – University of Illinois Section Symposium Plant-Insect Ecosystems
9:30 AM – 12:30 PM MST Science, Story, and Pictures: A Beginners Guide to Communicating Your Science with Comics Location: Phoenix Convention Center, 128 AB, PCC Organizer: Carly M. Tribull – Farmingdale State College Organizer: Ainsley Seago (she/her/hers) – Carnegie Museum of Natural History Organizer: Escher Alexander Cattle (he/him/his) – North Carolina State University Organizer: Jay S. Hosler (he/him/his) – Juniata College Panelist: Carly M. Tribull – Farmingdale State College Panelist: Ainsley Seago (she/her/hers) – Carnegie Museum of Natural History Panelist: Escher Alexander Cattle (he/him/his) – North Carolina State University Panelist: Jay S. Hosler (he/him/his) – Juniata College Workshop Formal and Informal Teaching
9:30 AM – 12:30 PM MST Advances in Adephaga Genomics, Systematics, and Evolution Organizer: Wendy Moore (she/her/hers) – University of Arizona Organizer: Grey Gustafson (he/him/his) – Northern Arizona University Section Symposium Systematics, Evolution, and Biodiversity
9:30 AM – 9:32 AM MST Introductory remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Grey Gustafson (he/him/his) – Northern Arizona University
9:32 AM – 9:47 AM MST Global integration of phylogenomic data and fine-scale partitioning strategies refine the evolutionary tree of Adephaga beetles (Insecta: Coleoptera)  Location: Phoenix Convention Center, 127 A, PCC

Presenting Author: Cody Cardenas (he/him/his) – Université de Genève Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University Co-Author: Emmanuel Toussaint – Natural History Musuem of Geneva Section Symposium Systematics, Evolution, and Biodiversity
9:47 AM – 10:02 AM MST Repetitive element evolution in Adephaga genome assemblies  Location: Phoenix Convention Center, 127 A Presenting Author: John Sproul (he/him/his) – Brigham Young University Co-Author: David R. Maddison (he/him/his) – Oregon State University Co-Author: Patrick Steven Wynn – Brigham Young University Section Symposium Systematics, Evolution, and Biodiversity
10:02 AM – 10:17 AM MST Comparative transcriptomics provides insights into the genetic basis of Carabidae chemical defense  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Tanya Renner – The Pennsylvania State University Co-Author: Adam Maxwell Rork – Purdue University Co-Author: Athula Attygalle – Stevens Institute of Technology Co-Author: Sihang Xu – The New York Institute of Technology Co-Author: Kipling W. Will – University of California Co-Author: Jong Kyun Park – Kyungpook National University Co-Author: Andrea Di Giulio – University of Roma Tre Co-Author: Wendy Moore (she/her/hers) – University of Arizona Section Symposium Systematics, Evolution, and Biodiversity
10:17 AM – 10:32 AM MST Phylogenomics of ground beetles of the subfamily Trechinae (Coleoptera: Carabidae)  Location: Phoenix Convention Center, 127 A Presenting Author: David R. Maddison (he/him/his) – Oregon State University Co-Author: James Pflug – Oregon State University Co-Author: Curt Harden – Clemson University Co-Author: Olivia Boyd – Southern Oregon University Section Symposium Systematics, Evolution, and Biodiversity
10:32 AM – 10:47 AM MST Phylogenomics of the brachinine bombardier beetles (Carabidae: Brachininae) using ultraconserved elements 

Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Raine Ikagawa – University of Arizona Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University Co-Author: Wendy Moore (she/her/hers) – University of Arizona Section Symposium Systematics, Evolution, and Biodiversity
10:47 AM – 11:02 AM MST Phylogenomics of the flanged bombardier beetles (Carabidae: Paussinae)  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Wendy Moore (she/her/hers) – University of Arizona Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University Co-Author: David R. Maddison (he/him/his) – Oregon State University Section Symposium Systematics, Evolution, and Biodiversity
11:02 AM – 11:12 AM MST Break Location: Phoenix Convention Center, 127 A
11:12 AM – 11:27 AM MST Preliminary phylogenomic analysis of Cicindelidae: Testing the monophyly of Manticorini  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Grey Gustafson (he/him/his) – Northern Arizona University Co-Author: Seth M. Bybee – Brigham Young University Co-Author: Emmanuel Toussaint – Natural History Musuem of Geneva Section Symposium Systematics, Evolution, and Biodiversity
11:27 AM – 11:42 AM MST Diving beetle (Coleoptera: Dytiscidae) phylogenetics: Everything old is new again  Location: Phoenix Convention Center, 127 A Presenting Author: Kelly Miller (he/him/his) – University of New Mexico Co-Author: Johannes Bergsten – Swedish Museum of Natural History Co-Author: Johan A. A. Nylander – Swedish Museum of Natural History Co-Author: Alan R. Lemmon – Florida State University Section Symposium Systematics, Evolution, and Biodiversity
11:42 AM – 11:57 AM MST Noterid phylogeography provides insights into the geographic drivers of neotropical diversity and supports integrative taxonomy (Coleoptera: Noteridae)  Location: Phoenix Convention Center, 127 A

Presenting Author: Stephen Baca – University of Kansas Co-Author: Liam Alexander Wrixon – University of Kansas Co-Author: Devon DeRaad – University of Kansas Co-Author: Rob Moyle – University of Kansas Co-Author: Andrew E. Short – University of Florida Section Symposium Systematics, Evolution, and Biodiversity
11:57 AM – 12:12 PM MST Phylogeography of <i>Omus</i> (Coleoptera: Cicindelidae): Testing the ring species hypothesis  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Ming-Hsun Chou (he/him/his) – Northern Arizona University Co-Author: Mike G. Kippenhan – C. P. Gillette Museum of Arthropod Diversity Co-Author: R. Dennis Haines – Tulare Agricultural Commissioner's Office Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University Section Symposium Systematics, Evolution, and Biodiversity
12:12 PM – 12:27 PM MST Sky's the limit: Phylogeography of <i>Amblycheila baroni</i> Rivers in the Madrean Archipelago (Coleoptera: Cicindelidae)  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Jamie Ramirez – Northern Arizona University Co-Author: Aaron Chambers – Deserticolus Bioconsulting Co-Author: Wendy Moore (she/her/hers) – University of Arizona Co-Author: Grey Gustafson (he/him/his) – Northern Arizona University Section Symposium Systematics, Evolution, and Biodiversity
12:27 PM – 12:30 PM MST Closing remarks Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Grey Gustafson (he/him/his) – Northern Arizona University
9:30 AM – 12:30 PM MST EntoTech: Navigating Careers and Cutting-Edge Technology in Entomology Organizer: Gurjit Singh – University of Georgia Organizer: Harit K. Bal – Bayer Crop Science Organizer: Swapna Priya Rajarapu – North Carolina State University Organizer: Mandeep Tayal – Clemson University Organizer: Gagandeep Brar – Bayer Crop Science Organizer: Kashish Verma (she/her/hers) – University of Nebraska Member Symposium Early Career Student

9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 222 C Presenting Author: Gurjit Singh – University of Georgia
9:35 AM – 9:55 AM MST How do you decide to launch an agbiotech start-up?  Location: Phoenix Convention Center, 222 C Presenting Author: Fatma Kaplan – Pheronym Inc. Member Symposium Early Career Student
9:55 AM – 10:15 AM MST Hear the future: The Insect Eavesdropper™ revolution in pest management  Location: Phoenix Convention Center, 222 C Presenting Author: Alexander Arovas – University of Wisconsin - Madison Co-Author: Laura E. Flandermeyer – University of Wisconsin Co-Author: Dev Mehrotra – University of Wisconsin Member Symposium Early Career Student
10:15 AM – 10:35 AM MST Novel application of an image and deep learning model for automated sugarbeet root maggot monitoring  Location: Phoenix Convention Center, 222 C, PCC Presenting Author: Shantanu Awasthi (he/him/his) – Concordia College Co-Author: Gagandeep Brar – Bayer Crop Science Co-Author: Jagjot Bhardwaj – UnitedHealth Group Member Symposium Early Career Student
10:35 AM – 10:40 AM MST Break Location: Phoenix Convention Center, 222 C
10:40 AM – 11:00 AM MST How modern tools help us to resolve 'older' riddles in chemical ecology  Location: Phoenix Convention Center, 222 C Presenting Author: Zainulabeuddin Syed – University of Kentucky Member Symposium Early Career Student
11:00 AM – 11:20 AM MST

The impetus for innovation entomology startup careers  Location: Phoenix Convention Center, 222 C Presenting Author: Heena Puri – Impetus Agriculture Inc. Member Symposium Early Career Student
11:20 AM – 11:40 AM MST Innovation in entomological research through modern technologies  Location: Phoenix Convention Center, 222 C Presenting Author: Krishna Bayyareddy – Bayer Crop Science Member Symposium Early Career Student
11:40 AM – 11:45 AM MST Closing remarks Location: Phoenix Convention Center, 222 C Presenting Author: Gurjit Singh – University of Georgia
9:30 AM – 12:30 PM MST Bee-lieving in Tomorrow: The Future of Native Bee Science Organizer: Courtney May Walls (she/her/hers) – Virginia Tech Organizer: Adam J. Foster (he/him/his) – The Ohio State University Member Symposium
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Courtney May Walls (she/her/hers) – Virginia Tech
9:35 AM – 9:55 AM MST The understudied majority: Looming research questions about solitary bees  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Diana Cox-Foster – USDA-ARS Member Symposium
9:55 AM – 10:15 AM MST From agroecosystems to natural ecosystems: Assessing wild bee population status and health in a changing world  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Laura Jones – University of Texas Co-Author: Margarita Margarita – The Pennsylvania State University

Co-Author: Lauren Ponisio – University of Oregon Co-Author: Rudolf Schilder – The Pennsylvania State University Co-Author: Shalene Jha (she/her/hers) – University of Texas
Member Symposium
10:15 AM – 10:35 AM MST Investigating the macronutrient landscape and niches of a wild bumble bee community  Location: Phoenix Convention Center, 127 B Presenting Author: Justin Bain – Northwestern University Co-Author: Jane Ogilvie – Rocky Mountain Biological Research Station Co-Author: Paul CaraDonna – Northwestern University
Member Symposium
10:35 AM – 10:55 AM MST Plant-pollinator interactions and ecosystem services in the face of global change  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Shalene Jha (she/her/hers) – University of Texas
Member Symposium
10:55 AM – 11:05 AM MST Break Location: Phoenix Convention Center, 127 B
11:05 AM – 11:25 AM MST Innovation in pollinator science designed to strengthen pesticide risk assessments for bee pollinators  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Daniel R. Schmehl (he/him/his) – Bayer Crop Science Co-Author: Ana R. Cabrera (she/her/hers) – Bayer Crop Science Co-Author: Nina Exeler – Bayer Crop Science Co-Author: Ralf Nauen – Bayer Crop Science Co-Author: Tobias Pamminger – Bayer Crop Science Co-Author: Vanessa Roeben – Bayer Crop Science
Member Symposium
11:25 AM – 11:45 AM MST Enhancing blueberry pollination with integrated bee management strategies  Location: Phoenix Convention Center, 127 B Presenting Author: John Terrest – University of Florida

Co-Author: Rachel E. Mallinger – University of Florida
Member Symposium
11:45 AM – 12:05 PM MST Putting IPPM to the test: Integrating multiple tactics to enhance watermelon pollination by wild bees  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Zeus Mateos – Purdue University Co-Author: Ashley B. Leach – The Ohio State University Co-Author: Ian Kaplan – Purdue University
Member Symposium
12:05 PM – 12:25 PM MST Methods for increasing squash bee longevity in the laboratory  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Adam J. Foster (he/him/his) – The Ohio State University Co-Author: Reed M. Johnson – The Ohio State University
Member Symposium
12:25 PM – 12:30 PM MST Closing remarks Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Courtney May Walls (she/her/hers) – Virginia Tech
9:30 AM – 12:30 PM MST A Better Tomorrow: Understanding Human Impacts on Insect Biology Organizer: Chloe Hawkings (she/her/hers) – Rutgers University Organizer: Grayson Tung – Rutgers University
Member Symposium
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 224 A Presenting Author: Chloe Hawkings (she/her/hers) – Rutgers University
9:35 AM – 9:55 AM MST Aliens in the Anthropocene: Invasive plants as a driver of global insect decline  Location: Phoenix Convention Center, 224 A Presenting Author: Adam Mitchell – Tarleton State University Co-Author: Andrea Litt – Montana State University

Co-Author: Douglas Tallamy – University of Delaware Member Symposium	
9:55 AM – 10:15 AM MST Insecticides, more than herbicides, land use, and climate, are associated with declines in butterfly species richness and abundance in the American Midwest  Location: Phoenix Convention Center, 224 A, PCC Presenting Author: Jeffrey Pippen – Georgetown University Co-Author: Leslie Ries – Georgetown University Member Symposium	
10:15 AM – 10:35 AM MST Ecological and genetic impacts of climate change during winter: Inferences from <i>Ae. albopictus</i> diapause  Location: Phoenix Convention Center, 224 A Presenting Author: Peter Armbruster – Georgetown University Co-Author: Mara Heilig – Georgetown University Co-Author: Samantha Sturiale – Georgetown University Co-Author: Adalgisa Caccone – Yale University Co-Author: Luciano Cosme – Yale University Co-Author: Alexandra Mushegian – Georgetown University Co-Author: Sarah Marzec – Georgetown University Co-Author: Jiangnan Shen – Yale University Co-Author: Hongyu Zhao – Yale University Member Symposium	
10:35 AM – 10:55 AM MST All the world’s an oven: How rapidly warming temperatures are impacting bumble bee communities and the pollination services they provide  Location: Phoenix Convention Center, 224 A Presenting Author: Jeremy Hemberger – University of California Member Symposium	
10:55 AM – 11:15 AM MST Break Location: Phoenix Convention Center, 224 A	
11:15 AM – 11:35 AM MST The impact of urbanization on seasonal responses in mosquito abundance and disease transmission dynamics 	

Location: Phoenix Convention Center, 224 A Presenting Author: Megan Meuti – The Ohio State University Co-Author: Lydia Fyie (she/her/hers) – The Ohio State University Co-Author: Mary Margaret Gardiner (she/her/hers) – The Ohio State University Member Symposium	
11:35 AM – 11:55 AM MST Physiology evolves convergently but lags behind warming in cities  Location: Phoenix Convention Center, 224 A Presenting Author: Ryan Martin – Case Western University Member Symposium	
11:55 AM – 12:15 PM MST Phenology, weather, and the intercontinental movement of non-native tree pests via international trade  Location: Phoenix Convention Center, 224 A Presenting Author: Thomas Paul – The Ohio State University Member Symposium	
12:15 PM – 12:20 PM MST Closing remarks Location: Phoenix Convention Center, 224 A Presenting Author: Chloe Hawkings (she/her/hers) – Rutgers University	
9:30 AM – 12:30 PM MST Stored Product Pests vs. Technology Organizer: Emily Kaul (she/her/hers) – Canadian Grain Commission Organizer: Rachel R. Harman (she/her/hers) – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 223 Presenting Author: Rachel R. Harman (she/her/hers) – USDA-ARS	
9:35 AM – 9:50 AM MST Using a biofuel by-product as a novel insect growth regulator against stored product insects as a climate-friendly adaptation 	

Location: Phoenix Convention Center, 223, PCC Presenting Author: William R. Morrison, III (he/him/his) – USDA-ARS Co-Author: Sabita Ranabhat (she/her/hers) – Kansas State University Co-Author: Kun Yan Zhu – Kansas State University Co-Author: Alexander Bruce – University of Tennessee Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
9:50 AM – 10:05 AM MST Flying under the radar no more: Using flight mills to enhance stored product pest control  Location: Phoenix Convention Center, 223, PCC Presenting Author: Jacqueline M. Maille (she/her/hers) – Kansas State University Co-Author: William Rust – USDA-ARS Co-Author: Melanie Kessler-Mathieu – USDA-ARS Co-Author: Daniel Brabec – USDA-ARS Co-Author: Kun Yan Zhu – Kansas State University Co-Author: Erin D. Scully – USDA-ARS Co-Author: Jaden Reed – USDA-ARS Co-Author: William R. Morrison, III (he/him/his) – USDA-ARS Co-Author: Nicholas Sixbury – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:05 AM – 10:20 AM MST Advances in remote monitoring  Location: Phoenix Convention Center, 223, PCC Presenting Author: James Feston, BCE – Insects Limited, Inc. Co-Author: Patrick J. Kelley, BCE (he/him/his) – Insects Limited, Inc. Co-Author: Samantha Kiever – Insects Limited, Inc. Co-Author: Ethan Estabrook – Insects Limited, Inc. Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:20 AM – 10:35 AM MST Use of automated next-generation trapping to reliably sample stored product insects in real-time in a commercial food facility  Location: Phoenix Convention Center, 223, PCC Presenting Author: Jennifer Abshire – USDA-ARS Co-author: Ronnie Opone Serfa Juan, Ph.D. (he/him/his) – USDA-ARS	

Co-author: Erin D. Scully – USDA-ARS Co-author: Kun Yan Zhu – Kansas State University Co-author: Alison R. Gerken – USDA-ARS Co-author: William R. Morrison, III (he/him/his) – USDA-ARS Co-author: Dante A. Castaldi – Kansas State University Co-author: Jacqueline M. Maille (she/her/hers) – Kansas State University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:35 AM – 10:50 AM MST Development of a suite of molecular tools for identification of khapra beetles  Location: Phoenix Convention Center, 223 Presenting Author: Yunke Wu – USDA-APHIS Co-Author: Michael Domingue – USDA-APHIS Co-Author: Scott Myers – USDA-APHIS Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
10:50 AM – 11:05 AM MST Break Location: Phoenix Convention Center, 223	
11:05 AM – 11:20 AM MST Acoustic technology innovations relevant to stored-product insect pest research  Location: Phoenix Convention Center, 223 Presenting Author: Richard Mankin – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
11:20 AM – 11:35 AM MST Innovative application of atmospheric cold plasma for mitigating stored product infestations and implementing sustainable fumigation solutions  Location: Phoenix Convention Center, 223 Presenting Author: Nahndi Tirrell Kirk-Bradley – Texas A&M University Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
11:35 AM – 11:50 AM MST	

Application of nanoparticle-mediated RNAi for efficient gene silencing and pest control  Location: Phoenix Convention Center, 223, PCC Presenting Author: Anil Moola – University of Kentucky Co-Author: Subba Reddy Palli (he/him/his) – University of Kentucky Section Symposium Medical, Urban, and Veterinary Entomology Physiology, Biochemistry, and Toxicology	
11:50 AM – 12:30 PM MST Panel discussion Location: Phoenix Convention Center, 223	
9:30 AM – 12:30 PM MST Managing Thrips as Direct Crop Pests and Vectors of Phytopathogens Organizer: De-fen Mou (she/her/hers) – University of Florida Organizer: Pin-Chu Lai (she/her/hers) – University of Nebraska Member Symposium Plant-Insect Ecosystems	^
9:30 AM – 9:33 AM MST Introductory remarks Location: Phoenix Convention Center, 122 C Presenting Author: Pin-Chu Lai (she/her/hers) – University of Nebraska	
9:33 AM – 9:45 AM MST Using independent-mobile RNA to manage thrips and thrips-transmitted tomato spotted wilt virus  Location: Phoenix Convention Center, 122 C Presenting Author: Kiran Gadhave – Texas A&M University Co-author: Surender Kumar – Texas A&M University Co-author: Arinder Arora – Texas A&M University Member Symposium Plant-Insect Ecosystems	
9:45 AM – 9:57 AM MST Reducing incidence of iris yellow spot virus in onion fields by targeting its thrips vector early in the season  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Brian Nault – Cornell University Co-Author: Lidia Komondy – Cornell University Member Symposium Plant-Insect Ecosystems	
9:57 AM – 10:09 AM MST	

Unravelling landscape factors associated with outbreaks of thrips and thrips-transmitted viruses in lettuce in California  Location: Phoenix Convention Center, 122 C Presenting Author: Daniel Hasegawa – USDA-ARS Co-author: Laura Hladky – USDA-ARS Co-author: Shulu Zhang – USDA-ARS Co-author: Deena Wael Husein, Ph.D. – USDA-ARS Member Symposium Plant-Insect Ecosystems	
10:09 AM – 10:21 AM MST Early research and extension efforts following the first detection of <i>Thrips parvispinus</i> in Florida pepper fields  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Anna Mészáros – Palm Beach County Cooperative Extension Service Co-Author: Julien Beuzelin – University of Florida Co-Author: De-fen Mou (she/her/hers) – University of Florida Member Symposium Plant-Insect Ecosystems	
10:21 AM – 10:33 AM MST Unravelling important aspects of the <i>Thrips parvispinus</i> (Thysanoptera: Thripidae) biology  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Co-author: Yisell Velazquez-Hernandez – University of Florida Co-author: Isamar Sofia Reyes-Arauz (she/her/hers) – University of Florida Co-author: Maria Canon – University of Florida Co-author: Livia Ataide – University of Florida Member Symposium Plant-Insect Ecosystems	
10:33 AM – 10:45 AM MST Efficacy of conventional insecticides and biorational insecticides against the invasive pest <i>Thrips parvispinus</i> (Thysanoptera: Thripidae) under containment conditions  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Livia Ataide – University of Florida Co-Author: German Vargas – University of Florida Co-Author: Yisell Velazquez-Hernandez – University of Florida Co-Author: Isamar Reyes Arauz – University of Florida Co-Author: Paola Villamarin – University of Florida Co-Author: Maria Canon – University of Florida Co-Author: Xiangbing Yang – USDA-ARS Co-Author: Simon S. Riley – University of Florida	

Co-Author: Alexandra Margarita Revynthi (she/her/hers) – University of Florida Member Symposium Plant-Insect Ecosystems
10:45 AM – 10:55 AM MST Break Location: Phoenix Convention Center, 122 C
10:55 AM – 11:07 AM MST Improving thrips monitoring methods in lettuce and pepper  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: De-fen Mou (she/her/hers) – University of Florida Co-Author: Tennyson Bilinkhinyu Nkhoma – University of Florida Co-Author: Yavonne Williams – University of Florida Co-Author: Laura Bautista Romero – University of Florida Co-Author: Anna Mészáros – Palm Beach County Cooperative Extension Service Member Symposium Plant-Insect Ecosystems
11:07 AM – 11:19 AM MST Unravelling pest status of thrips in dry beans  Location: Phoenix Convention Center, 122 C Presenting Author: Pin-Chu Lai (she/her/hers) – University of Nebraska Member Symposium Plant-Insect Ecosystems
11:19 AM – 11:31 AM MST <i>Megalurothrips usitatus</i>, a threat to legume production in south Florida, Central America and the Caribbean  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Hugh Smith – University of Florida Co-Author: Cleveland B. Ivey – University of Florida Co-Author: Mariana Monteiro – University of Florida Co-Author: Felipe Barreto Da Silva – University of Florida Co-Author: Astrid Racancoj – Instituto de Ciencia y Tecnología Agrícola Co-Author: Paul F. Rugman-Jones – University of California Member Symposium Plant-Insect Ecosystems
11:31 AM – 11:43 AM MST Color us surprised: Plastic mulches for season long onion thrips control  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Natalie Constancio (she/her/hers) – The Ohio State University

Co-Author: Zsafia Szendrei – Michigan State University Member Symposium Plant-Insect Ecosystems
11:43 AM – 11:55 AM MST Closer allies: Impacts of non-chemical management on thrips and natural enemies in OH pepper production  Location: Phoenix Convention Center, 122 C Presenting Author: Arnold Ariel Gomez (he/him/his) – The Ohio State University Co-Author: Ashley B. Leach – The Ohio State University Member Symposium Plant-Insect Ecosystems
11:55 AM – 12:07 PM MST Assessment of <i>Orius insidiosus</i> as a biological control agent for chili thrips in commercial strawberry production  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Lovely Adhikary – University of Florida Co-Author: Sriyanka Lahiri (she/her/hers) – University of Florida Member Symposium Plant-Insect Ecosystems
12:07 PM – 12:27 PM MST Discussion Location: Phoenix Convention Center, 122 C
12:27 PM – 12:30 PM MST Closing remarks Location: Phoenix Convention Center, 122 C Presenting Author: Pin-Chu Lai (she/her/hers) – University of Nebraska
9:30 AM – 12:30 PM MST Outcome of Educational Research in Entomology: Best Practices in Education and Outreach Organizer: Muhammad Haseeb – Florida A&M University Organizer: Hongmei Li-Byarlay – Central State University Organizer: Lambert Kanga – Florida A&M University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Muhammad Haseeb – Florida A&M University
9:35 AM – 9:50 AM MST

Entomology at Fort Valley State University  Location: Phoenix Convention Center, 129 B Presenting Author: George N. Mbata – Fort Valley State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
9:50 AM – 10:05 AM MST Citrus in the home landscape  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Emilie Pauline Demard (she/her/hers) – University of Florida Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida Co-Author: Angela Chuang – University of Florida Co-Author: Megan Dewdney – University of Florida Co-Author: Ruth Borger – University of Florida Co-Author: Jamie Burrow – University of Florida Co-Author: Christopher Vincent – University of Florida Co-Author: Davie Kadyampakeni – University of Florida Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
10:05 AM – 10:20 AM MST Insecticide resistance in the small hive beetle (Coleoptera: Nitidulidae): Student experiential learning opportunities  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Lambert Kanga – Florida A&M University Co-Author: Walker Marechal – Florida A&M University Co-Author: Muhammad Haseeb – Florida A&M University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
10:20 AM – 10:35 AM MST Connecting insect science with food safety and public health: An integrated approach to teaching and expanding what we mean by "IPM"  Location: Phoenix Convention Center, 129 B Presenting Author: Shujuan Li – University of Arizona Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
10:35 AM – 10:50 AM MST USDA-NIFA's education and extension/outreach grant programs  Location: Phoenix Convention Center, 129 B Presenting Author: Rizana Mahroof – USDA-NIFA

Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
10:50 AM – 11:05 AM MST Extension and outreach approaches to include homeowners in the fight against citrus greening in Florida  Location: Phoenix Convention Center, 129 B Presenting Author: Romain Exilien – University of Florida Co-Author: Xavier Martini – University of Florida Co-Author: Lauren M. Diepenbrock (she/her/hers) – University of Florida Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
11:05 AM – 11:15 AM MST Break Location: Phoenix Convention Center, 129 B
11:15 AM – 11:30 AM MST Experiential learning: Students at a research and education center  Location: Phoenix Convention Center, 129 B Presenting Author: Jawwad Qureshi – University of Florida Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
11:30 AM – 11:45 AM MST Meaning and scope of educational research in teaching entomology  Location: Phoenix Convention Center, 129 B Presenting Author: Kaushalya G. Amarasekare (she/her/hers) – Tennessee State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
11:45 AM – 12:00 PM MST New tools for apiculture and education on bee parasites and pathogens  Location: Phoenix Convention Center, 129 B, PCC Presenting Author: Hongmei Li-Byarlay – Central State University Co-Author: Joel Barhorst – Central State University Co-Author: Deng Cao – Central State University Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems
12:00 PM – 12:15 PM MST Developing new leaders in insect science: Opportunities and challenges  Location: Phoenix Convention Center, 129 B, PCC

Presenting Author: Muhammad Haseeb – Florida A&M University	
Section Symposium Formal and Informal Teaching Plant-Insect Ecosystems	
12:15 PM – 12:30 PM MST Discussion Location: Phoenix Convention Center, 129 B	
9:30 AM – 12:30 PM MST Expanding the Future of Cecidology: The Ecology and Evolution of Shrub- and Herb-galling Insects Organizer: Louis F. Nastasi – The Pennsylvania State University Organizer: Quinlyn Baine (she/her/hers) – University of New Mexico Organizer: Chris Looney – Washington State Department of Agriculture Section Symposium Systematics, Evolution, and Biodiversity	^
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Chris Looney – Washington State Department of Agriculture	
9:35 AM – 9:47 AM MST Host gene expression manipulation by the blueberry stem gall wasp, <i>Hemadas nubilipennis</i> Location: Phoenix Convention Center, 127 C Presenting Author: Ellen O. Martinson – University of New Mexico Co-Author: Wayne Sergeant – Wayne State University Co-Author: Glen R. Hood – Wayne State University Section Symposium Systematics, Evolution, and Biodiversity	
9:47 AM – 9:59 AM MST Lost in the weeds no more! Revising the herb gall wasps (Hymenoptera: Cynipoidea: Aulacideini) Location: Phoenix Convention Center, 127 C Presenting Author: Louis F. Nastasi – The Pennsylvania State University Co-Author: Charles K. Davis – The Pennsylvania State University Co-Author: Cecil Smith – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University Co-Author: Heather M. Hines – The Pennsylvania State University Co-Author: Andrew R. Deans – The Pennsylvania State University Section Symposium Systematics, Evolution, and Biodiversity	
9:59 AM – 10:11 AM MST Phylogenetics of the rose gall wasp, <i>Diplolepis</i> , and its associated inquiline, <i>Periclistus</i>	

Location: Phoenix Convention Center, 127 C Presenting Author: Stephanie Eskew (she/her/hers) – Colorado State University Co-Author: Vilas Brown (they/them/theirs) – Colorado State University Co-Author: Zachary H. Griebenow – Colorado State University Co-Author: Marek L. Borowiec (he/him/his) – Colorado State University Section Symposium Systematics, Evolution, and Biodiversity	
10:11 AM – 10:23 AM MST Co-diversification of a desert-adapted gall inducer clade with its host plant in the west Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Quinlyn Baine (she/her/hers) – University of New Mexico Co-Author: Manuela Londoño Gaviria (she/her/hers) – University of New Mexico Co-Author: Vincent Martinson – University of New Mexico Co-Author: Ellen O. Martinson – University of New Mexico Section Symposium Systematics, Evolution, and Biodiversity	
10:23 AM – 10:43 AM MST Break Location: Phoenix Convention Center, 127 C	
10:43 AM – 10:55 AM MST Thieves of thorns and thickets: Investigating the diversity of agastoparasite genus, <i>Synophromorpha</i> , Ashmead, 1905 Location: Phoenix Convention Center, 127 C Presenting Author: Charles K. Davis – The Pennsylvania State University Co-Author: Louis F. Nastasi – The Pennsylvania State University Co-Author: Andrew R. Deans – The Pennsylvania State University Co-Author: Heather M. Hines – The Pennsylvania State University Co-Author: John F. Tooker – The Pennsylvania State University Section Symposium Systematics, Evolution, and Biodiversity	
10:55 AM – 11:07 AM MST <i>Tamalia</i> gall aphid parasites are more social than their gall-inducing host aphids Location: Phoenix Convention Center, 127 C Presenting Author: Donald G. Miller, III – California State University Section Symposium Systematics, Evolution, and Biodiversity	
11:07 AM – 11:19 AM MST Untangling host specialization in a “double dark taxa” system	

Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Jessica Awad (she/her/hers) – Florida Museum of Natural History Co-author: Ronja Reinisch – University of Hohenheim Co-author: Marina Moser – State Museum of Natural History Co-author: Cristina Vasilita – State Museum of Natural History Co-author: Lars Krogman – State Museum of Natural History Section Symposium Systematics, Evolution, and Biodiversity
11:19 AM – 11:31 AM MST Do host plants and gall tissue influence the composition of <i>Diplolepis</i> component communities?  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Chris Looney – Washington State Department of Agriculture Co-Author: Zoltán László – Babeş-Bolyai University Section Symposium Systematics, Evolution, and Biodiversity
11:31 AM – 11:51 AM MST Break Location: Phoenix Convention Center, 127 C
11:51 AM – 12:03 PM MST Discovery of the first gall-inducing mordellid in North America  Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Carol C. Mapes – Kutztown University of Pennsylvania Co-Author: Gregory P. Setliff – Kutztown University of Pennsylvania Co-Author: Chris Looney – Washington State Department of Agriculture Co-Author: Telissa M. Wilson – Washington State Department of Agriculture Co-Author: Ayman K. Elsayed – Saga University Co-Author: Joshua Lawrence – Kutztown University of Pennsylvania Co-Author: Ashton Datko – Kutztown University of Pennsylvania Co-Author: Zach Wink – Kutztown University of Pennsylvania Section Symposium Systematics, Evolution, and Biodiversity
12:03 PM – 12:15 PM MST Evaluating success (and failure) of gall forming insects in weed biocontrol  Location: Phoenix Convention Center, 127 C Presenting Author: Chandra E. Moffat – Agriculture and Agri-Food Canada Section Symposium Systematics, Evolution, and Biodiversity
12:15 PM – 12:20 PM MST Closing remarks

Location: Phoenix Convention Center, 127 C, PCC Presenting Author: Chris Looney – Washington State Department of Agriculture
9:30 AM – 12:30 PM MST Toward a More Holistic Management of the Western Bean Cutworm, <i>Striacosta albicosta</i> Organizer: Jeffrey D. Bradshaw – University of Nebraska Organizer: Jeffrey Daniel Cluever – USDA-ARS Organizer: Julien Saguez – CÉROM Member Symposium Plant-Insect Ecosystems
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 131 B Presenting Author: Jeffrey D. Bradshaw – University of Nebraska
9:35 AM – 9:55 AM MST <i>Trichogramma ostriniae</i> (Hymenoptera: Trichogrammatidae) as a potential inundative biological control agent in western Nebraska  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Jeffrey D. Bradshaw – University of Nebraska Co-Author: Jeffrey Daniel Cluever – USDA-ARS Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Robert Wright – University of Nebraska Co-Author: Sara Elizabeth Salgado Astudillo – University of Florida Co-Author: Katharine Swoboda-Bhattarai – USDA-APHIS Co-Author: Priscila Colombo Da Luz – University of Nebraska Co-Author: Samantha Daniel – University of Nebraska Member Symposium Plant-Insect Ecosystems
9:55 AM – 10:15 AM MST Best practices for insecticide applications for western bean cutworm management  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Andrea Rilakovic – University of Nebraska - Lincoln Co-Author: Milos Zaric – University of Nebraska Co-Author: Jeffrey A. Golus – University of Nebraska Co-Author: Bruno Vieira – Syngenta Co-Author: Alisson Da Silva – University of Nebraska Co-Author: Bradley Fritz – USDA-ARS Co-Author: Greg Kruger – Rosen's Co-Author: Turner Dorr – University of Nebraska Co-Author: Daran Rudnick – Kansas State University

Co-Author: Ana M. Velez (she/her/hers) – University of Nebraska Co-Author: Julie Ann Peterson – University of Nebraska Member Symposium Plant-Insect Ecosystems	
10:15 AM – 10:35 AM MST Population genetics of western bean cutworm in putative ancestral and derived ranges  Location: Phoenix Convention Center, 131 B Presenting Author: Sergio R. Sanchez-Pena – Universidad Autonoma Agraria Antonio Narro Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Brad S. Coates – USDA-ARS Member Symposium Plant-Insect Ecosystems	
10:35 AM – 10:45 AM MST Break Location: Phoenix Convention Center, 131 B	
10:45 AM – 11:05 AM MST Importance of WBC management to reduce the risk of disease and mycotoxin in corn  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Julien Saguez – CÉROM Member Symposium Plant-Insect Ecosystems	
11:05 AM – 11:25 AM MST Assessing the implications of using integrated refuges with Vip3A technology for long-term western bean cutworm management  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Alisson Da Silva – University of Nebraska Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Brad S. Coates – USDA-ARS Co-Author: Yasmine Farhan – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Co-Author: Natasha May Weppler (she/her/hers) – University of Guelph Member Symposium Plant-Insect Ecosystems	
11:25 AM – 11:45 AM MST On-plant movement of western bean cutworm, <i>Striacosta albicosta</i>, in structured and integrated refuges in Ontario, Canada  Location: Phoenix Convention Center, 131 B, PCC Presenting Author: Natasha May Weppler (she/her/hers) – University of Guelph Co-Author: Alisson Da Silva – University of Nebraska	

Co-Author: Julie Ann Peterson – University of Nebraska Co-Author: Yasmine Farhan – University of Guelph Co-Author: David Hooker – University of Guelph Co-Author: Jocelyn L. Smith – University of Guelph Member Symposium Plant-Insect Ecosystems	
11:45 AM – 12:10 PM MST Closing remarks and panel discussion Location: Phoenix Convention Center, 131 B Presenting Author: Jeffrey Daniel Cluever – USDA-ARS	
9:30 AM – 12:30 PM MST Artificial Intelligence (AI) in Entomology: An Aid to Publishing, Research, and Teaching Organizer: Eric W. Riddick, Ph.D. – USDA-ARS Organizer: Melissa Siebert, Ph.D. – Corteva Agriscience Organizer: Rayda K. Krell, Ph.D. – Corteva Agriscience Organizer: Margarita M. López-Urbe, Ph.D. – The Pennsylvania State University Organizer: Christelle Guedot – University of Wisconsin Organizer: Jessica McEwan – Entomological Society of America Program Symposium Publications	
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Eric W. Riddick, Ph.D. – USDA-ARS	
9:35 AM – 9:55 AM MST Artificial intelligence: Opportunities, challenges, and current policies  Location: Phoenix Convention Center, 121 C Presenting Author: Jinnie Kim – Oxford University Press Program Symposium Publications	
9:55 AM – 10:15 AM MST Do you need machine learning or was first semester graduate statistics good enough?  Location: Phoenix Convention Center, 121 C Presenting Author: Gabriel Zilnik, Ph.D. – USDA-ARS Program Symposium Publications	
10:15 AM – 10:35 AM MST	

Lessons learned using AI to translate educational manuals  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Ric Bessin, Ph.D. – University of Kentucky Program Symposium Publications
10:35 AM – 10:55 AM MST Advancing image-based automated trap use for monitoring insects in stored product environments  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Alison R. Gerken – USDA-ARS Co-Author: Chetan Badgujar, Ph.D. – University of Tennessee Co-Author: Ronnie Opone Serfa Juan, Ph.D. (he/him/his) – USDA-ARS Co-Author: Lester Pordesimo, Ph.D. – USDA-ARS Co-Author: James F. Campbell – USDA-ARS Co-Author: Paul Armstrong, Ph.D. – USDA-ARS Program Symposium Publications
10:55 AM – 11:05 AM MST Break Location: Phoenix Convention Center, 121 C
11:05 AM – 11:25 AM MST High-throughput specimen digitization using whole-drawer images and computer vision AI  Location: Phoenix Convention Center, 121 C Presenting Author: Elizabeth Postema, Ph.D. – Field Museum Co-Author: Leah Briscoe – Lake Forest College Co-Author: Chloe Harder Co-Author: Bruno A S de Medeiros, Ph.D. – Field Museum Program Symposium Publications
11:25 AM – 11:45 AM MST AI and modern CV in the insect laboratory: Discovering important behaviors in ants and deep faking wasps  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Theodore P. Pavlic, Ph.D. (he/him/his) – Arizona State University Co-Author: Akuadasuo Ezenyilimba, Ph.D. – Arizona State University Co-Author: So Eun Moon – University of Michigan Co-Author: Elizabeth Tibbetts, Ph.D. – University of Michigan Co-Author: Taeyeong Choi, Ph.D. – Kennesaw State University Co-Author: Benjamin Pyenson, Ph.D. (he/him/his) – University of Toronto

Co-Author: Juergen Liebig (he/him/his) – Arizona State University Co-Author: Pavan Turaga, Ph.D. – Arizona State University Co-Author: Kacy Hatfield – Arizona State University Co-Author: Juan Jose Garcia Mesa, Ph.D. – Arizona State University Co-Author: Nitin Verma, Ph.D. – Arizona State University Program Symposium Publications
11:45 AM – 12:05 PM MST High-tech automated insect detection flight sensors by FarmSense: How to transform your research and insect management decisions  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Tracy Ellis, Ph.D. – FarmSense, Inc. Co-Author: Eamonn Keogh, Ph.D. – University of California Co-Author: Shailendra Singh – FarmSense, Inc. Co-Author: Leslie Hickie – FarmSense, Inc. Co-Author: Cliff Kitayama, Ph.D. – FarmSense, Inc. Co-Author: John Randazzo – FarmSense, Inc. Co-Author: Shahab Nikkhoo – FarmSense, Inc. Co-Author: Stefano Tata – FarmSense, Inc. Program Symposium Publications
12:05 PM – 12:20 PM MST Panel discussion Location: Phoenix Convention Center, 121 C
12:20 PM – 12:25 PM MST Discussion Location: Phoenix Convention Center, 121 C
12:25 PM – 12:30 PM MST Closing remarks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Eric W. Riddick, Ph.D. – USDA-ARS
9:30 AM – 12:30 PM MST 10-min: P-IE, Biological Control 1 Moderator: Andrew Corbett – University of California Moderator: Heather Andrews – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems
9:30 AM – 9:42 AM MST Aphid phenology and control trials in Pacific Northwest hazelnuts 

Location: Phoenix Convention Center, 126 C Presenting Author: Heather Andrews – Oregon State University Co-Author: Matthew Scott Pedersen – Oregon State University Co-Author: Nik Wiman – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems
9:42 AM – 9:54 AM MST Aspects of the biology of <i>Dryinus sinicus</i>, a nymphal parasitoid of spotted lanternfly <i>Lycorma delicatula</i>  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Xingeng Wang – USDA-ARS Co-Author: Spiro Schramm – USDA-ARS Co-Author: Hannah J. Broadley (she/her/hers) – USDA-APHIS Co-Author: Steven Sipolski – USDA-APHIS Co-Author: Gould R. Juli – USDA-APHIS Co-Author: Kim Alan Hoelmer (he/him/his) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
9:54 AM – 10:06 AM MST Compatibility of insecticides with conservation biological control in cotton  Location: Phoenix Convention Center, 126 C Presenting Author: Isadora Bordini – University of Arizona Co-Author: Steven Naranjo – USDA-ARS Co-Author: Peter Ellsworth – University of Arizona 10-Minute Presentation Plant-Insect Ecosystems
10:06 AM – 10:18 AM MST Cottony cushion scale in California's mandarins  Location: Phoenix Convention Center, 126 C Presenting Author: Bodil N. Cass – University of California Co-Author: Timo Rohula – University of California 10-Minute Presentation Plant-Insect Ecosystems
10:18 AM – 10:30 AM MST Droning on about lacewings: Can we make releases work in apple orchards?  Location: Phoenix Convention Center, 126 C Presenting Author: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS Co-Author: Daniel Hausler – USDA-ARS Co-Author: Erica Moretti (she/her/hers) – USDA-ARS

Co-Author: Rodney Cooper – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
10:30 AM – 10:42 AM MST Effect of different crape myrtle cultivars on the survival of green lacewing, <i>Chrysoperla rufilabris</i> in laboratory conditions  Location: Phoenix Convention Center, 126 C Presenting Author: Kripa Dhakal – Tennessee State University Co-Author: Karla Michele Addesso – Tennessee State University 10-Minute Presentation Plant-Insect Ecosystems
10:42 AM – 10:54 AM MST Foraging and nontarget use by <i>Trissolcus japonicus</i>  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Ryan Lee Paul – Oregon State University Co-Author: Jana C. Lee – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
10:54 AM – 11:06 AM MST Break Location: Phoenix Convention Center, 126 C
11:06 AM – 11:18 AM MST Identifying predators of pear psylla and twospotted spider mite in Pacific Northwest pear orchards with molecular gut content analysis  Location: Phoenix Convention Center, 126 C Presenting Author: Erica Moretti (she/her/hers) – USDA-ARS Co-Author: Robert Orpet – Washington State University Co-Author: Louis Nottingham – Washington State University Co-Author: Chris Adams – Oregon State University Co-Author: Rebecca Schmidt-Jeffris (she/her/hers) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems

11:18 AM – 11:30 AM MST

In silico experiments with natural enemy response to landscape heterogeneity and resulting crop pest loads 

Location: Phoenix Convention Center, 126 C, PCC

Presenting Author: Andrew Corbett – University of California

10-Minute Presentation Plant-Insect Ecosystems

11:30 AM – 11:42 AM MST

Influence of biological control and ant tending on citrus mealybug (*Planococcus citri*) in California's Central Valley 

Location: Phoenix Convention Center, 126 C

Presenting Author: Jacob A. Wenger – California State University

Co-Author: Kelby Keeling – California State University

Co-Author: Sandipa G. Gautam – University of California

10-Minute Presentation Plant-Insect Ecosystems

11:42 AM – 11:54 AM MST

Intraspecific variability in biocontrol agents: Comparative studies of two strains of *Trissolcus japonicus* 

Location: Phoenix Convention Center, 126 C

Presenting Author: Tim Haye – CABI

Co-Author: Paul K. Abram – AAFC

Co-Author: Nina Häner – CABI

10-Minute Presentation Plant-Insect Ecosystems

11:54 AM – 12:06 PM MST

Intrinsic competition between parasitoid wasps of the roseau cane scale (*Nipponaclerda biwakoensis*) during multiparasitism events 

Location: Phoenix Convention Center, 126 C

Presenting Author: Tanner C. Sparks – Louisiana State University

Co-Author: Rodrigo Diaz – Louisiana State University

10-Minute Presentation Plant-Insect Ecosystems

12:06 PM – 12:18 PM MST

Monitoring predation of bagrada bug eggs using field cameras 

Location: Phoenix Convention Center, 126 C

Presenting Author: Brian N. Hogg – USDA-ARS

Co-Author: Ian Grettenberger – University of California

Co-Author: Charles Pickett – California Department of Food and Agriculture

10-Minute Presentation Plant-Insect Ecosystems

12:18 PM – 12:30 PM MST

A new wave: Using electropenetrography to assess the effects of potential neonicotinoid alternatives on vector behavior and virus transmission 

Location: Phoenix Convention Center, 126 C

Presenting Author: Jillian J. Foutz (she/her/hers) – USDA-ARS

Co-Author: Joanna Galdino-Schuller – USDA-ARS

Co-Author: Gina M. Angelella – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

9:30 AM – 12:30 PM MST

10-min: P-IE, IPM - Horticulture 1

Moderator: Laura Jade Nixon – USDA-ARS

Moderator: Angelita L. Acebes-Doria (she/her/hers) – USDA-ARS

10-Minute Presentation Plant-Insect Ecosystems

9:30 AM – 9:42 AM MST

A boring presentation: Ambrosia beetles in Michigan apple orchards 

Location: Phoenix Convention Center, 126 B

Presenting Author: Heather Leach – Michigan State University

Co-Author: Julianna Wilson – Michigan State University

10-Minute Presentation Plant-Insect Ecosystems

9:42 AM – 9:54 AM MST

Effect of Colorado potato beetle defoliation on potato yields as detected by remote sensing 

Location: Phoenix Convention Center, 126 B

Presenting Author: Andrei Alyokhin – University of Maine

Co-Author: Aaron Buzza – Aroostook Farm

10-Minute Presentation Plant-Insect Ecosystems

9:54 AM – 10:06 AM MST

Evaluating non-neonicotinoid insecticide rotations for sustainable potato pest management programs in

New York 

Location: Phoenix Convention Center, 126 B, PCC

Presenting Author: Marcelo Dimase – Cornell University

Co-Author: Brian Nault – Cornell University

10-Minute Presentation	Plant-Insect Ecosystems
10:06 AM – 10:18 AM MST Evaluating the impact of insecticide timing and varietal resistance on melonworm (<i>Diaphania hyalinata</i>) in Arkansas pumpkins  Location: Phoenix Convention Center, 126 B Presenting Author: Aaron Joseph Cato – University of Arkansas	
10-Minute Presentation	Plant-Insect Ecosystems
10:18 AM – 10:30 AM MST Exploring non-chemical management options for <i>Allium</i> pest insects.  Location: Phoenix Convention Center, 126 B Presenting Author: Vic Izzo – University of Vermont Co-Author: Maryam Nouri-Aiin, Ph.D. – University of Vermont	
10-Minute Presentation	Plant-Insect Ecosystems
10:30 AM – 10:42 AM MST Integrated pest management of red palm weevil: <i>Rhynchophorus ferrugineus</i> Oliv., a major pest of date palm in Saudi Arabia  Location: Phoenix Convention Center, 126 B Presenting Author: Abdulrahman S S. Aldawood (he/him/his) – King Saud University Co-Author: Mureed Husain (he/him/his) – King Saud University Co-Author: Khawaja Ghulam Rasool – King Saud University	
10-Minute Presentation	Plant-Insect Ecosystems
10:42 AM – 10:54 AM MST Integrating mating disruption and threshold sprays for managing key lepidopteran pests in non-compliant apple orchards  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Laura Jade Nixon – USDA-ARS Co-Author: Tracy C. Leskey – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems
10:54 AM – 11:06 AM MST Break Location: Phoenix Convention Center, 126 B	
11:06 AM – 11:18 AM MST	

Inventory and study of an entomopathogenic fungus of <i>Phytonemus pallidus</i> (Acari: Tarsonemidae), <i>Hirsutella</i> sp., in strawberries  Location: Phoenix Convention Center, 126 B Presenting Author: Valérie Fournier – Université Laval Co-Author: Andréa Duclos – Université Laval Co-Author: Frédéric McCune – Université Laval Co-Author: Joseph Moisan Deserres – Laboratoire d'Expertise et de Diagnostic en Phytoprotection du MAPAQ Co-Author: Stéphanie Tellier – Direction régionale de la Capitale-Nationale et de la Chaudière-Appalaches du MAPAQ Co-Author: Maxime Delisle-Houde – Université Laval Co-Author: Russell Tweddell – Université Laval	
10-Minute Presentation	Plant-Insect Ecosystems
11:18 AM – 11:30 AM MST It cannot be perfect, but can we do better? Insecticide spray coverage in lettuce  Location: Phoenix Convention Center, 126 B Presenting Author: Ian Grettenberger – University of California Co-Author: Daniel Hasegawa – USDA-ARS Co-Author: Sophie Allen – University of California	
10-Minute Presentation	Plant-Insect Ecosystems
11:30 AM – 11:42 AM MST Location, agricultural landscape and time affect the occurrence, pest status and control of <i>Phthorimaea</i> spp. on potato and tomato in South Africa  Location: Phoenix Convention Center, 126 B Presenting Author: Hannalene Du Plessis – North-West University Co-Author: Tayla Swanepoel – North-West University Co-Author: Ronan Diedericks – North-West University Co-Author: Johnnie van den Berg (he/him/his) – North-West University	
10-Minute Presentation	Plant-Insect Ecosystems
11:42 AM – 11:54 AM MST Monitoring and mating disruption of <i>Cryptophlebia</i> moths (Lepidoptera: Tortricidae) in Hawaii  Location: Phoenix Convention Center, 126 B Presenting Author: Angelita L. Acebes-Doria (she/her/hers) – USDA-ARS Co-Author: Dan Mikros – USDA-ARS Co-Author: Pascal Atalor-Aigbedion – USDA-ARS Co-Author: Michael Bosch – USDA-ARS	
10-Minute Presentation	Plant-Insect Ecosystems

11:54 AM – 12:06 PM MST Native pest problems increase as invasive pest problems level out: Retooling IPM programs in Eastern apple orchards for both  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Tracy C. Leskey – USDA-ARS Co-Author: Laura Jade Nixon – USDA-ARS Co-Author: John Cullum – USDA-ARS Co-Author: Torri Hancock – USDA-ARS Co-Author: Lee Carper – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
12:06 PM – 12:18 PM MST Regional evaluation of optimal trap and lure combinations for capturing corn earworm moths in sweet corn  Location: Phoenix Convention Center, 126 B Presenting Author: John W. Mahas – Cornell University Co-Author: Christophe Duplais – Cornell University Co-Author: David Owens – University of Delaware Co-Author: Kelly A. Hamby – University of Maryland Co-Author: Galen Dively – University of Maryland Co-Author: Anders Huseeth – North Carolina State University Co-Author: Thomas P. Kuhar – Virginia Tech Co-Author: Helene Doughty – Virginia Cooperative Extension Co-Author: Brian Currin – Virginia Tech Co-Author: Brian Nault – Cornell University 10-Minute Presentation Plant-Insect Ecosystems	
9:30 AM – 12:30 PM MST 10-min: P-IE, Biodiversity Moderator: Elizabeth Kells Rowen (she/her/hers) – West Virginia University Moderator: Magda Paola Argueta Guzman (she/her/hers) – University of California 10-Minute Presentation Plant-Insect Ecosystems	^
9:30 AM – 9:42 AM MST Comparing Hymenoptera biomass using malaise traps in suburban and rural Maryland  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Beakon Forest-Russell (they/them/he/him) – McDaniel College Co-Author: Madison Wojcik – McDaniel College Co-Author: Holly Martinson – McDaniel College	

10-Minute Presentation Plant-Insect Ecosystems	
9:42 AM – 9:54 AM MST Effects of logging on pollinator communities, habitat, and plant-pollinator interactions in coniferous forests  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Kimberly Ballare – USDA-ARS Co-Author: Laura Burkle – Montana State University Co-Author: Justin Runyon – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
9:54 AM – 10:06 AM MST Examining conservation reserve program (CRP) impacts on biocontrol and parasitoid diversity  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Judith S. Herreid, Ph.D. – USDA-ARS Co-Author: Tatyana A. Rand – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
10:06 AM – 10:18 AM MST Harnessing the power of pollinators: Optimizing habitat management for bee health  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Akeem Abolade Oyerinde – University of Abuja Co-Author: Ismaila A. Aderolu, Ph.D. (he/him/his) – University of Abuja 10-Minute Presentation Plant-Insect Ecosystems	
10:18 AM – 10:30 AM MST Hymenopteran parasitoid communities in agricultural drainage ditches: Community composition and comparison between crop and non-crop vegetation  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Shane D. Windsor (he/him/his) – University of Maryland Co-Author: Jenna Kraemer – University of Maryland Co-Author: Bill O. Lamp – University of Maryland Co-Author: Alireza Shokoohi (he/him/his) – UMass Extension Co-Author: Robert Joseph Salerno – University of Maryland 10-Minute Presentation Plant-Insect Ecosystems	
10:30 AM – 10:42 AM MST	

Identification of <i>Isotomidae</i> sp. and its skin pattern from Punjab, India by molecular and scanning electron microscopy analysis  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Ruby Angurana, Ph.D. (she/her/hers) – Lovely Professional University Co-Author: Joydeep Dutta – Lovely Professional University Co-Author: A. Najitha Banu – Lovely Professional University 10-Minute Presentation Plant-Insect Ecosystems
10:42 AM – 10:54 AM MST Break Location: Phoenix Convention Center, 221 B, PCC
10:54 AM – 11:06 AM MST Microbiome mediated climate change resilience in organic farming systems  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Elias Harrison Bloom – Cornell University Co-Author: Ethan McAnally – Cornell University Co-Author: Clare L. Casteel – Cornell University 10-Minute Presentation Plant-Insect Ecosystems
11:06 AM – 11:18 AM MST Rising carbon dioxide and plant nutrient dilution may be restructuring insect communities  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Ellen A. R. Welti – Smithsonian Institution Co-Author: Michael Kaspari – University of Oklahoma 10-Minute Presentation Plant-Insect Ecosystems
11:18 AM – 11:30 AM MST Using repeated measures for entomology: An example with dung beetle trap capture  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Elizabeth Kells Rowen (she/her/hers) – West Virginia University 10-Minute Presentation Plant-Insect Ecosystems
11:30 AM – 11:42 AM MST Environmental transmission of bacteria and its implications for wild bees  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Magda Paola Argueta Guzman (she/her/hers) – University of California Co-Author: Quinn McFrederick – University of California

10-Minute Presentation Plant-Insect Ecosystems
9:30 AM – 12:30 PM MST 10-min: SysEB, Genomics and Evolution Moderator: Jeremy M. Bono – University of Colorado Moderator: Rich H. Adams – University of Arkansas 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:30 AM – 9:42 AM MST Can cross-species temporal transcriptomic profiling pinpoint the molecular drivers of locust swarming?  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Maeva Angelique Techer, Ph.D. (she/her/hers) – Texas A&M University Co-Author: Vivian A. Peralta Santana (she/her/hers) – Texas A&M University Co-Author: Jackson Linde, MSc – Texas A&M University Co-Author: Alyssa Canova – Texas A&M University Co-Author: Katie Puperi – Texas A&M University Co-Author: Tessa Huddleston – Texas A&M University Co-Author: Kate Wilson – Texas A&M University Co-Author: Richelle Marquess – Texas A&M University Co-Author: Helen Vasquez – Texas A&M University Co-Author: Hojun Song – Texas A&M University 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:42 AM – 9:54 AM MST Evolution of mitochondrial genome fragmentation in Amblycera (Insecta: Psocodea)  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Tomáš Najer – Czech University of Life Sciences Co-Author: Jorge Doña – Universidad de Granada Co-Author: Aleš Buček – Czech Academy of Sciences Co-Author: Andrew D. Sweet – Arkansas State University Co-Author: Oldřich Sychra – University of Veterinary Sciences Co-Author: Kevin P. Johnson – Illinois Natural History Survey 10-Minute Presentation Systematics, Evolution, and Biodiversity
9:54 AM – 10:06 AM MST Beenome100: Insight into the evolutionary dynamics of genome size and content of bees  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Rena Schweizer – USDA-ARS Co-Author: Michael G. Branstetter – USDA-ARS

10-Minute Presentation Systematics, Evolution, and Biodiversity
10:06 AM – 10:18 AM MST A comprehensive phylogeny of Zygoptera (Odonata) using a Nextflow pipeline to simplify analysis of anchored hybrid enrichment data  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Payton Carter – Brigham Young University Co-Author: Seth M. Bybee – Brigham Young University Co-Author: Paul Bryan Frandsen – Brigham Young University
10-Minute Presentation Systematics, Evolution, and Biodiversity
10:18 AM – 10:30 AM MST The genomic basis of herbivory in beetles: Gene duplications and pseudogenes related to host specialization  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Na Ra Shin – University of Memphis Co-Author: Duane D. McKenna – University of Memphis
10-Minute Presentation Systematics, Evolution, and Biodiversity
10:30 AM – 10:42 AM MST Break Location: Phoenix Convention Center, 131 A, PCC
10:42 AM – 10:54 AM MST Learning dimensions of molecular evolution from the genome of an extraordinary invasive and broadly polyphagous insect: The diaprepes root weevil (<i>Diaprepes abbreviatus</i>)  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Rich H. Adams – University of Arkansas Co-Author: Terrence P. Sylvester – University of Memphis Co-Author: Na Ra Shin – University of Memphis Co-Author: Mataya Duncan – University of Arkansas Co-Author: Jenniffer Roa Lozano – University of Arkansas Co-Author: Duane D. McKenna – University of Memphis
10-Minute Presentation Systematics, Evolution, and Biodiversity
10:54 AM – 11:06 AM MST Compositional and quantitative divergence in seminal fluid proteomes of two species exhibiting postmating-prezygotic reproductive isolation  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Jeremy M. Bono – University of Colorado

Co-Author: Luciano M. Matzkin (he/him/his) – University of Arizona Co-Author: Helen Pigage – University of Colorado Co-Author: Santana Navarrette – University of Colorado
10-Minute Presentation Systematics, Evolution, and Biodiversity
11:06 AM – 11:18 AM MST Evolutionary genomics of speciation: Uncovering a novel mechanism of postmating molecular interactions  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Luciano M. Matzkin (he/him/his) – University of Arizona Co-Author: Jeremy M. Bono – University of Colorado Co-Author: Helen Pigage – University of Colorado Co-Author: Carson W. Allan – University of Arizona Co-Author: Fernando Diaz – Texas A&M University Co-Author: John McCoy – University of Colorado Co-Author: Clinton Green – University of Colorado Co-Author: Jeffrey Callan – University of Colorado Co-Author: Stephen Delahunt II – University of Colorado
10-Minute Presentation Systematics, Evolution, and Biodiversity
11:18 AM – 11:30 AM MST How do some caterpillars become carnivores?  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Daniel Rubinoff – University of Hawaii Co-Author: michael San Jose – University of Hawaii Co-Author: Camiel Doorenweerd – University of Hawaii Co-Author: Scott M. Geib (he/him/his) – USDA-ARS
10-Minute Presentation Systematics, Evolution, and Biodiversity
11:30 AM – 11:42 AM MST Insights from comparative transcriptomics into the evolution of silk  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Bert Foquet – University of Florida Co-Author: Lauren Eccles – University of Florida Co-Author: Paul Bryan Frandsen – Brigham Young University Co-Author: Whitney Stoppel – University of Florida Co-Author: Akito Y. Kawahara, Ph.D. – Florida Museum of Natural History
10-Minute Presentation Systematics, Evolution, and Biodiversity
11:42 AM – 11:54 AM MST

The insect eye ground plan: Deep conservation complemented by novelty and innovation  Location: Phoenix Convention Center, 131 A, PCC Presenting Author: Ke Gao – University of California Co-Author: Michael Perry – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:30 AM – 12:30 PM MST 10-min: SysEB, Biodiversity Assessment and Collections Moderator: Clint Penick – Auburn University Moderator: Pedro Cardoso (he/him/his) – University of Lisbon 10-Minute Presentation Systematics, Evolution, and Biodiversity	^
9:30 AM – 9:42 AM MST A lepidopteran assessment of Boston urban habitat quality: The importance of the small taxa  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Sarah Dendy – Harvard University Co-Author: Lauren Merrill – Belmont University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:42 AM – 9:54 AM MST DNA-barcoding California’s insect biodiversity to discover new species and create a library for fast and affordable biodiversity monitoring  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Austin Baker (he/him/his) – Natural History Museum of Los Angeles County Co-Author: Brian Brown – Natural History Museum of Los Angeles County Co-Author: Melissa Guzman – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity	
9:54 AM – 10:06 AM MST Rapid biodiversity studies using BugBox, an AI-powered platform for arthropod identification  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Kelton Douglas Welch – Ecdysis Foundation Co-Author: Jonathan G. Lundgren – Ecdysis Foundation 10-Minute Presentation Systematics, Evolution, and Biodiversity	
10:06 AM – 10:18 AM MST Temporary pond crustaceans: An introduction for entomologists  Location: Phoenix Convention Center, 132 A, PCC	

Presenting Author: Ann Rose Dunn (she/her/hers) – Florida Museum of Natural History 10-Minute Presentation Systematics, Evolution, and Biodiversity	
10:18 AM – 10:30 AM MST Intersecting urban and latitudinal gradients: Impacts on ant diversity  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Clint Penick – Auburn University Co-Author: Rob R. Dunn – North Carolina State University Co-Author: Steven Frank – North Carolina State University Co-Author: Elsa Youngsteadt (she/her/hers) – North Carolina State University 10-Minute Presentation Systematics, Evolution, and Biodiversity	
10:30 AM – 10:42 AM MST Species, phylogenetic, and functional diversity of ant (Hymenoptera: Formicidae) communities in a simplified habitat over a ten-year period  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Javier G. Miguelena, Ph.D. – Arkansas State University Co-Author: Gibrán Pérez-Toledo – Instituto de Ecología A.C. Co-Author: Mariana Cuautle Arenas – Universidad Autónoma de Tlaxcala Co-Author: Citlalli Castillo-Guevara – Universidad Autónoma de Tlaxcala 10-Minute Presentation Systematics, Evolution, and Biodiversity	
10:42 AM – 10:54 AM MST Break Location: Phoenix Convention Center, 132 A, PCC	
10:54 AM – 11:06 AM MST The Lepidoptera collection of the University of New Hampshire  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Tucker White – University of New Hampshire Co-Author: Monique Raymond (she/her/hers) – University of New Hampshire Co-Author: István Mikó – University of New Hampshire Co-Author: Cameron Mehalek Co-Author: Grace Gaucher – University of New Hampshire Co-Author: Owen Bastille – University of New Hampshire Co-Author: Sophia Zaslow – University of Georgia Co-Author: Charlotte Martell – University of New Hampshire 10-Minute Presentation Systematics, Evolution, and Biodiversity	
11:06 AM – 11:18 AM MST	

Putting a face to the name: Turning BINs into species with the help of a fresh collection  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Jacob MH Jones – University of California Co-Author: Julia Perez – University of California Co-Author: John Heraty – University of California Co-Author: Christiane Weirauch – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity
11:18 AM – 11:30 AM MST Putting a name to the face: Turning BINs into species with the help of a museum collection  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Julia Perez – University of California Co-Author: John Heraty – University of California Co-Author: Christiane Weirauch – University of California Co-Author: Jacob MH Jones – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity
11:30 AM – 11:42 AM MST Native and exotic ladybird beetles (Coccinellidae) from the Canary Islands  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Jerzy Romanowski, Ph.D. – Universitas Kristen Satya Wacana Co-Author: Piotr Ceryngier – Universitas Kristen Satya Wacana Co-Author: Karol Szawaryn – Polish Academy of Sciences 10-Minute Presentation Systematics, Evolution, and Biodiversity
11:42 AM – 11:54 AM MST Ethanol storage minimally affects spider stable isotope signatures  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Charles A. Braman – University of California 10-Minute Presentation Systematics, Evolution, and Biodiversity
11:54 AM – 12:06 PM MST Towards a global insect trait database  Location: Phoenix Convention Center, 132 A, PCC Presenting Author: Pedro Cardoso (he/him/his) – University of Lisbon 10-Minute Presentation Systematics, Evolution, and Biodiversity

9:30 AM – 12:30 PM MST 10-min: PBT, Insecticide Resistance Moderator: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University Moderator: Sonu Koirala B K (she/her/hers) – The Pennsylvania State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:30 AM – 9:42 AM MST Boosting fitness costs to sustain efficacy of Bt crops: the way forward  Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Yves Carriere – University of Arizona Co-Author: Bruce E. Tabashnik (he/him/his) – University of Arizona 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:42 AM – 9:54 AM MST Decoding mechanisms of chemical adaptation in <i>Leptinotarsa decemlineata</i>  Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University Co-Author: Timothy W. Moural (he/him/his) – The Pennsylvania State University Co-Author: James A. Abendroth – The Pennsylvania State University Co-Author: Qi-Ren Chen – The Pennsylvania State University Co-Author: Mike S. Wolfin (he/him/his) – The Pennsylvania State University Co-Author: Andrei Alyokhin – University of Maine 10-Minute Presentation Physiology, Biochemistry, and Toxicology
9:54 AM – 10:06 AM MST Evolution of resistance of a fall armyworm population from Puerto Rico to azadirachtin, a natural compound derived from neem seed extracts: implications for the long-term sustainability of this pest management tool.  Location: Phoenix Convention Center, 131 C Presenting Author: David Mota-Sanchez, Ph.D. – Michigan State University Co-Author: Omar Alejandro Posos-Parra, Sr. – Michigan State University Co-Author: Sharanabasappa Deshmukh – Nayaka University of Agricultural and Horticultural Sciences Co-Author: Barry Pittendrigh – Purdue University 10-Minute Presentation Physiology, Biochemistry, and Toxicology
10:06 AM – 10:18 AM MST Break Location: Phoenix Convention Center, 131 C
10:18 AM – 10:30 AM MST

Field-evolved resistance of the fall armyworm (<i>Spodoptera frugiperda</i>) (J.E. Smith) (Lepidoptera: Noctuidae) from Puerto Rico to a voltage-dependent sodium channel blocker: indoxacarb. Location: Phoenix Convention Center, 131 C Presenting Author: Omar Alejandro Posos-Parra, Sr. – Michigan State University Co-Author: Barry Pittendrigh – Purdue University Co-Author: Eric Patterson – Michigan State University Co-Author: Christina DiFonzo – Michigan State University Co-Author: John C. Wise – Michigan State University Co-Author: David Mota-Sanchez, Ph.D. – Michigan State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
10:30 AM – 10:42 AM MST Management of red flour beetles, <i>Tribolium castaneum</i>, using eggshell nano-powder Location: Phoenix Convention Center, 131 C Presenting Author: Amie Elizabeth Norton – Kansas State University Co-Author: Thomas W. Phillips, Ph.D. – Kansas State University Co-Author: Jeff Whitworth – Kansas State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
10:42 AM – 10:54 AM MST RNA sequencing uncovers acaricide resistance mechanisms in <i>Tetranychus urticae</i> on hops Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Sonu Koirala B K (she/her/hers) – The Pennsylvania State University Co-Author: Gaurab Bhattarai – USDA-ARS Co-Author: Adekunle Adesanya (he/him/his) – Corteva Agriscience Co-Author: Douglas Walsh – Washington State University Co-Author: Fang (Rose) Zhu, Ph.D. (she/her/hers) – The Pennsylvania State University 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
10:54 AM – 11:06 AM MST Selection and biochemical basis of chlorantraniliprole resistance in <i>Helicoverpa armigera</i> Location: Phoenix Convention Center, 131 C Presenting Author: Afifa Naeem – Ayub Agricultural Research Co-Author: Farhan Mahmood Shah – Bahauddin Zakariya Co-Author: Faisal Hafeez – Ayub Agricultural Research Co-Author: Soha Asghar – University of Sialkot 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
9:30 AM – 12:30 PM MST	

10-min: PBT, Thermal Physiology Moderator: Adrian L. Fisher II – Arizona State University Moderator: Julian F. Hillyer – Vanderbilt University 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
9:30 AM – 9:42 AM MST Cecropin D: A novel anti-Plasmodium peptide from the malaria vector <i>Anopheles gambiae</i> Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Caire Barreto – Johns Hopkins University Co-Author: Victor Manuel Jonathan Cardoso-Jaime (he/him/his) – Johns Hopkins University Co-Author: George Dimopoulos – Johns Hopkins University 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
9:42 AM – 9:54 AM MST Cold tolerance of an invasive fruit pest, african fig fly Zaprionis indianus (Diptera: Drosophilidae) Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Muhammad Noor-Ul-Ane – University of Kentucky Co-Author: Nicholas M. Teets – University of Kentucky 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
9:54 AM – 10:06 AM MST Geographic variation in thermal tolerance of western corn rootworm Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Karl Adam Roeder – USDA-ARS 10-Minute Presentation Physiology, Biochemistry, and Toxicology	
10:06 AM – 10:18 AM MST Break Location: Phoenix Convention Center, 224 B, PCC	
10:18 AM – 10:30 AM MST Metabolic rates, natural history, and collective behavior of ants, from Rhode Island to Palestine Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Jane S. Waters – Providence College Co-Author: Santiago Meneses – New Jersey Institute of Technology Co-Author: Ioulia Bespalova – Providence College Co-Author: Kaylee Mulligan – Providence College Co-Author: Grace Pierson – Providence College	

10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:30 AM – 10:42 AM MST	
Nuptial gifts aid female butterflies in coping with dry environments	
Location: Phoenix Convention Center, 224 B, PCC	
Presenting Author: Chloé Chabaud – University of Arizona	
Co-Author: Natasha Tigreros – University of Arizona	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:42 AM – 10:54 AM MST	
The effects of heat exposure on honey bee (<i>Apis mellifera</i>) microbial community and physiology	
Location: Phoenix Convention Center, 224 B, PCC	
Presenting Author: Adrian L. Fisher II, II – Arizona State University	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
10:54 AM – 11:06 AM MST	
Thermoregulatory failure during heat stress of honey bee (<i>Apis mellifera</i>) colonies	
Location: Phoenix Convention Center, 224 B, PCC	
Presenting Author: Jon F. Harrison – Arizona State University	
Co-Author: Adrian L. Fisher II, II – Arizona State University	
Co-Author: Jordan R. Glass – University of Wyoming	
Co-Author: Cahit Ozturk – Arizona State University	
Co-Author: Jun Chen – Arizona State University	
Co-Author: Jennifer H. Fewell – Arizona State University	
Co-Author: Brian H. Smith – Arizona State University	
Co-Author: Yun Kang – Arizona State University	
Co-Author: Gloria DeGrandi-Hoffman – USDA-ARS	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
11:06 AM – 11:18 AM MST	
Warmer temperature accelerates the aging-dependent decrease of hemocytes in mosquitoes	
Location: Phoenix Convention Center, 224 B, PCC	
Presenting Author: Saksham Rajan Saxena (he/him/his) – Vanderbilt University	
Co-Author: Jordyn S. Barr (she/her/hers) – Vanderbilt University	
Co-Author: Julian F. Hillyer – Vanderbilt University	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
11:18 AM – 11:30 AM MST	

The role of rapid cold hardening in protecting <i>Drosophila melanogaster</i> against damage from sublethal cold stress	
Location: Phoenix Convention Center, 224 B, PCC	
Presenting Author: Laura Unfried – University of Kentucky	
Co-Author: Nicholas M. Teets – University of Kentucky	
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
9:30 AM – 12:30 PM MST	
10-min: MUVE, Veterinary Entomology and Related Disease Vector Research	
Moderator: Caleb B. Hubbard – University of California	
Moderator: Georgina Victoria Bingham, Ph.D. – University of Nebraska	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
9:30 AM – 9:42 AM MST	
A programmatic overview of the Gulf South Vector Educational Centers for Training, Outreach, and Resources (VECTOR) Group	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Sonja L. Swiger – Texas A&M University	
Co-Author: Claudia Riegel – City of New Orleans Mosquito, Termite, and Rodent Control Board	
Co-Author: Mark Janowiecki, BCE – City of New Orleans Mosquito, Termite, and Rodent Control Board	
Co-Author: Janet Ann Hurley, ACE – Texas A&M University	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
9:42 AM – 9:54 AM MST	
Vector and pathogen surveillance in south Texas: Understudied vector species	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Sarah Mays Maestas, Ph.D. – The University of Texas Rio Grande Valley	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology
9:54 AM – 10:06 AM MST	
Field efficacy of boat and drone Bti applications to suppress black fly populations in the Colorado River	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Michael Cavallaro – City of Bullhead	
Co-Author: Christopher Bramley – Clark County Vector Control	
Co-Author: Elmer W. Gray – University of Georgia	
Co-Author: Peter Adler – Clemson University	
10-Minute Presentation	Medical, Urban, and Veterinary Entomology

10:06 AM – 10:18 AM MST

Artificial intelligence applied to vector identification and monitoring



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Autumn Goodwin – VecTech

Co-Author: Roy Fairman – VecTech

Co-Author: Tristan Ford – VecTech

Co-Author: Jewell Brey – VecTech

Co-Author: Sameerah Talafha – VecTech

Co-Author: Thomas Jenkins – VecTech

Co-Author: Sanket Padmanabhan – VecTech

10-Minute Presentation Medical, Urban, and Veterinary Entomology

10:18 AM – 10:30 AM MST

A leading drug candidate for a heritable metabolic disorder significantly reduces malaria parasite

development in a globally invasive mosquito vector



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Yared Debebe Desta – University of Idaho

Co-Author: Nora Cespedes – University of Idaho

Co-Author: Kevin Omondi Ochwedo, Ph.D. – University of Idaho

Co-Author: Megan E. Dobson – University of Idaho

Co-Author: Hannah L. Kaylor – University of Idaho

Co-Author: Jun Isoe – University of Arizona

Co-Author: Brendan Riske – University of Arizona

Co-Author: Michael Riehle, Ph.D. – University of Arizona

Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho

10-Minute Presentation Medical, Urban, and Veterinary Entomology

10:30 AM – 10:42 AM MST

Break

Location: Phoenix Convention Center, 221 C

10:42 AM – 10:54 AM MST

Bugs and boids: Addressing veterinary entomology challenges through behavioral research



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Caleb B. Hubbard – University of California

Co-Author: Alec C. Gerry – University of California

Co-Author: Juanita K. Jellyman – California State Polytechnic University

Co-Author: Efrain Loera – California State Polytechnic University

Co-Author: Amy C. Murillo – University of California

10-Minute Presentation Medical, Urban, and Veterinary Entomology

10:54 AM – 11:06 AM MST

Factors in the pathogenesis of buffalo fly-associated lesions



Location: Phoenix Convention Center, 221 C

Presenting Author: Peter J. James – University of Queensland

Co-Author: Noman Naseem – University of Queensland

Co-Author: Ali Raza – University of Queensland

Co-Author: Muhammad Kamran – University of Queensland

Co-Author: Rachel Allavena – University of Queensland

Co-Author: Constantin Constantinoiu – James Cook University

Co-Author: Michael McGowan – University of Queensland

Co-Author: Conny Turni – University of Queensland

Co-Author: Ala Tabor – University of Queensland

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:06 AM – 11:18 AM MST

Novel environmentally sensitive transdisciplinary integrated pest management tactics



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Georgina Victoria Bingham, Ph.D. – University of Nebraska

Co-Author: Gary Brewer – University of Nebraska

Co-Author: Natalie M. Johnston (she/her/hers) – University of Nebraska

Co-Author: Roberto Cortinas – University of Nebraska

Co-Author: David Boxler – University of Nebraska

Co-Author: Mason Hardin – University of Nebraska

10-Minute Presentation Medical, Urban, and Veterinary Entomology

11:18 AM – 11:30 AM MST

Towards developing a standardized method for evaluating fly worry behaviors in horses



Location: Phoenix Convention Center, 221 C, PCC

Presenting Author: Cassandra Olds – Kansas State University

Co-Author: Cassandra Olds – Kansas State University Co-Author: Cheyenne Town – Kansas State University Co-Author: Victoria Pickens (she/her/hers) – Kansas State University	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:30 AM – 11:42 AM MST The Toll pathway regulates tick immune response  Location: Phoenix Convention Center, 221 C Presenting Author: Ondrej Hajdusek – Czech Academy of Sciences Co-Author: Marie Jalovecka – Institute of Parasitology Co-Author: Veronika Urbanova – Czech Academy of Sciences Co-Author: Radek Sima – Czech Academy of Sciences Co-Author: Petr Kopacek – Czech Academy of Sciences Co-Author: Jan Perner – Czech Academy of Sciences	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
11:42 AM – 11:54 AM MST The transcriptional response elements in the promoter region of CYP6M2, an insect P450 gene regulated in the mosquito <i>Anopheles gambiae</i>  Location: Phoenix Convention Center, 221 C Presenting Author: Balarabe Rabiou – University of Abuja	
10-Minute Presentation Medical, Urban, and Veterinary Entomology	
9:30 AM – 1:00 PM MST Professional Entomology Certifications Create Diverse Career Pathways Organizer: Laura M. Krueger, BCE (she/her/hers) Organizer: Andrew Mason Sutherland, BCE – University of California	
Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
9:30 AM – 9:35 AM MST Introductory remarks Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Laura M. Krueger, BCE (she/her/hers)	
9:35 AM – 9:50 AM MST An overview of ESA's professional entomology credentials  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Willet Hossfeld, ICE-CCP (he/him/his) – Entomological Society of America	

Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
9:50 AM – 10:10 AM MST Teacher, technical director, soldier, BCE: Varied lives within board certification  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Ted Snyder, BCE (he / they) – Escuela Verde	
Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
10:10 AM – 10:25 AM MST Some who wander ARE lost: Using certifications to get your dream job  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Robert D. Gilbert, BCE, PHE – Blue Sky Pest Control	
Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
10:25 AM – 10:40 AM MST Crack the code  Location: Phoenix Convention Center, 221 A Presenting Author: Sylvia Kenmuir, BCE – BASF	
Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
10:40 AM – 10:55 AM MST The ACE: Empowering PMPs to be their best  Location: Phoenix Convention Center, 221 A Presenting Author: Matt Hilton – Blue Sky Pest Control	
Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
10:55 AM – 11:10 AM MST Battling the world's most deadly animal: ESA's Public Health Entomology Certificate  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Michael DuBose, PHE – Orange County Mosquito and Vector Control District	

Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
11:10 AM – 11:20 AM MST Break Location: Phoenix Convention Center, 221 A	
11:20 AM – 11:35 AM MST Toppling perceptions of the "Ivory Tower": How board certification helped me to connect with my professional clientele  Location: Phoenix Convention Center, 221 A Presenting Author: Andrew Mason Sutherland, BCE – University of California Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
11:35 AM – 11:50 AM MST Elevating commercial pest control  Location: Phoenix Convention Center, 221 A Presenting Author: Edna Alfaro Inocente – Sprague Pest Solutions Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
11:50 AM – 12:05 PM MST Public health entomology and the BCE Medical Veterinary Specialty  Location: Phoenix Convention Center, 221 A Presenting Author: Kim Hung, BCE – Coachella Valley Mosquito and Vector Control District Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
12:05 PM – 12:25 PM MST The role of the American Board of Forensic Entomology (ABFE) for the practice and the development of medico-legal entomology  Location: Phoenix Convention Center, 221 A Presenting Author: Denise Gemmellaro (she/her/hers) – Kean University Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
12:25 PM – 12:45 PM MST	

Expert witness testimony and the BCE  Location: Phoenix Convention Center, 221 A Presenting Author: Douglas Seemann, BCE – BCE Services, LLC Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems Certification	
10:00 AM – 11:00 AM MST Past Presidents' Brunch Location: Sheraton Phoenix Downtown, Deer Valley Organizer: Marianne Alleyne – University of Illinois Organizer: Chris J. Stelzig, CAE – Entomological Society of America Functions/Events/Meetings	
10:00 AM – 11:00 AM MST Conversation Starter: Ento-Fashion Location: Phoenix Convention Center, The Hive (in the Exhibit Hall) Moderator: Abigail Hayes – University of Connecticut Functions/Events/Meetings Conversation Starter	
10:45 AM – 12:45 PM MST Empowering the Future of Insect Scientists: BIPOC Entomologists and Allies Leading Change Location: Phoenix Convention Center, 125 AB, PCC Organizer: Michelle L. Boone (she/her/hers) – National Park Service Organizer: John Mola – Colorado State University Organizer: Raul F. Medina – Texas A&M University Workshop Diversity, Equity, and Inclusion	
12:00 PM – 1:00 PM MST Open P-IE Feedback Session Location: Phoenix Convention Center, 124 AB Organizer: Cesar R. Rodriguez-Saona (he/him/his) – Rutgers University Organizer: Anjel Helms – Texas A&M University Functions/Events/Meetings Plant-Insect Ecosystems	

12:30 PM – 2:00 PM MST MUVE Final Business Meeting Location: Phoenix Convention Center, 223, PCC Organizer: Kyle K. Jordan, BCE – BASF Organizer: Ary Faraji, BCE – Salt Lake City Mosquito Abatement District Functions/Events/MeetingsMedical, Urban, and Veterinary Entomology
1:00 PM – 2:00 PM MST Reviewer Recruitment Luncheon Workshop: Review, Publish, or Perish Location: Phoenix Convention Center, 125 AB, PCC Organizer: Nan-Yao Su – University of Florida Panelist: Therese M. Poland (she/her/hers) – USDA-Forest Service Panelist: Dominic Reisig – North Carolina State University Panelist: Dalton Ludwick (he/him/his) – USDA-ARS Panelist: Changlu Wang – Rutgers University Panelist: Jessica McEwan – Entomological Society of America Mini WorkshopPublications
1:30 PM – 2:30 PM MST Entomology 2025 Program Committee Meeting Location: Phoenix Convention Center, 124 AB Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America Organizer: Rosina Romano, MTA, CMP, DES – Entomological Society of America Functions/Events/MeetingsCommittee Meeting
1:30 PM – 2:30 PM MST Supporting Inaction for Whitefly IPM: Putting Your Natural Enemies to Work Location: Phoenix Convention Center, 128 AB, PCC Organizer: Macey Keith – University of Arizona Organizer: Naomi Pier – University of Arizona Mini Workshop
1:30 PM – 2:30 PM MST What is It Like to Be a Military Entomologist? Location: Phoenix Convention Center, 129 A Organizer: Michelle G. Colacicco-Mayhugh, BCE – U.S. Army Organizer: Jaree Johnson, BCE – Armed Forces Pest Management Board Mini Workshop
1:30 PM – 3:30 PM MST

Empowering Resilience: Protecting Food Security and Native Ecosystems from Invasives with Entomology Organizer: Hailey N. Shanovich – United States Geological Survey Organizer: Naomi Candelaria (she/her/hers) – USDA-NIS Member SymposiumPlant-Insect EcosystemsSystematics, Evolution, and Biodiversity	⤴
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 131 C Presenting Author: Hailey N. Shanovich – United States Geological Survey	
1:35 PM – 2:00 PM MST Multidisciplinary research strategies to address and manage emerging and native invasive insect pests of US agriculture and landscapes Location: Phoenix Convention Center, 131 C Presenting Author: Dawn Gundersen-Rindal (she/her/hers) – USDA-ARS Member SymposiumPlant-Insect EcosystemsSystematics, Evolution, and Biodiversity	
2:00 PM – 2:25 PM MST Identifying genetic differentiation among sorghum aphids (<i>Melanaphis sorghi</i>) and where we go from here Location: Phoenix Convention Center, 131 C, PCC Presenting Author: Jocelyn Holt – Rice University Member SymposiumPlant-Insect EcosystemsSystematics, Evolution, and Biodiversity	
2:25 PM – 2:35 PM MST Break Location: Phoenix Convention Center, 131 C	
2:35 PM – 3:00 PM MST Protecting urban and forest trees with impact predictions: The i-Tree Pest Predictor Tool Location: Phoenix Convention Center, 131 C Presenting Author: Kathryn Thomas – U.S. Geological Survey Member SymposiumPlant-Insect EcosystemsSystematics, Evolution, and Biodiversity	
3:00 PM – 3:25 PM MST Unveiling potential invasive species in two hyperdiverse beetle groups: 10 years of weevil and <i>Agrilus</i> systematics research Location: Phoenix Convention Center, 131 C, PCC	

Presenting Author: Lourdes Chamorro – USDA Co-author: Kojun Kanda – USDA-APHIS Co-author: Grey Gustafson (he/him/his) – Northern Arizona University Co-author: Diego Souza – Field Museum Co-author: Duane D. McKenna – University of Memphis Co-author: Bruno A S de Medeiros, Ph.D. – Field Museum Member Symposium Plant-Insect Ecosystems Systematics, Evolution, and Biodiversity	
3:25 PM – 3:30 PM MST Closing remarks Location: Phoenix Convention Center, 131 C Presenting Author: Hailey N. Shanovich – United States Geological Survey	
1:30 PM – 3:30 PM MST Beyond Eusociality: Social Science Work in Entomology Organizer: Tyler Carney – University of Florida Organizer: Rachel E. Mallinger – University of Florida Member Symposium	^
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Tyler Carney – University of Florida	
1:35 PM – 1:55 PM MST Pollinators in art through the ages: Bees, hives, and apiaries  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Deirdre A. Prischmann-Voldseth – North Dakota State University Member Symposium	
1:55 PM – 2:15 PM MST Applying Kellert's attitudinal dimensions to assess Florida residents' attitudes towards pollinators  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Tyler Carney – University of Florida Co-Author: Melissa Kreye – The Pennsylvania State University Co-Author: Rachel E. Mallinger – University of Florida Co-Author: Lillian Khristina Hendrick (she/her/hers) – University of Florida Co-Author: Damian Adams – University of Florida Member Symposium	

2:15 PM – 2:35 PM MST Community-driven pollinator conservation: A case study using No Mow May and the WiBee app  Location: Phoenix Convention Center, 127 B, PCC Presenting Author: Hannah Gaines Day – University of Wisconsin Co-Author: Genevieve Pugsek – Xerces Society for Invertebrate Conservation Co-Author: Claudio Gratton – University of Wisconsin Member Symposium	
2:35 PM – 3:00 PM MST Panel discussion Location: Phoenix Convention Center, 127 B, PCC	
1:30 PM – 3:30 PM MST 10-min: P-IE, Microbial Control and Microbial Interactions Moderator: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS Moderator: Josephine B. Antwi – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems	^
1:30 PM – 1:42 PM MST Bait formulations to deliver entomopathogenic fungi to grasshoppers and Mormon crickets  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems	
1:42 PM – 1:54 PM MST Eco-friendly pest management strategies for late-season root crops: Integrating entomopathogenic fungi and RNA interference in Northeastern diversified farms  Location: Phoenix Convention Center, 126 C Presenting Author: Maryam Nouri-Ain, Ph.D. – University of Vermont Co-Author: Vic Izzo – University of Vermont Co-Author: Scott A. Lewins (he/him/his) – University of Vermont 10-Minute Presentation Plant-Insect Ecosystems	
1:54 PM – 2:06 PM MST Effect of synthetic fungicides used in strawberry on <i>Hirsutella</i> sp.: An entomopathogenic fungus of <i>Phytonemus pallidus</i>  Location: Phoenix Convention Center, 126 C Presenting Author: Andr�ea Duclos – Universit� Laval Co-Author: Fr�d�ric McCune – Universit� Laval	

Co-Author: Maxime Delisle-Houde – Université Laval Co-Author: Joseph Moisan Deserres – Laboratoire d'Expertise et de Diagnostic en Phytoprotection du MAPAQ Co-Author: Stéphanie Tellier – Direction régionale de la Capitale-Nationale et de la Chaudière-Appalaches du MAPAQ Co-Author: Russell Tweddell – Université Laval Co-Author: Valérie Fournier – Université Laval 10-Minute Presentation Plant-Insect Ecosystems
2:06 PM – 2:18 PM MST Effects of <i>Trichoderma virens</i> on cotton aphids  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Janaina Camara Siqueira da Cunha – Texas A&M University Co-Author: Greg Sword – Texas A&M University 10-Minute Presentation Plant-Insect Ecosystems
2:18 PM – 2:30 PM MST Efficacy and persistence of entomopathogenic fungi against <i>Rhynchophorus ferrugineus</i> on date palm: Host-to-host transmission  Location: Phoenix Convention Center, 126 C Presenting Author: Waleed S. Alwaneen – King Abdulaziz City for Science and Technology Co-Author: Khawaja Ghulam Rasool – King Saud University Co-Author: Mureed Husain (he/him/his) – King Saud University Co-Author: Abdulrahman S S. Aldawood (he/him/his) – King Saud University 10-Minute Presentation Plant-Insect Ecosystems
2:30 PM – 2:42 PM MST Entomopathogenic fungi for control of spotted lanternflies  Location: Phoenix Convention Center, 126 C, PCC Presenting Author: Ann E. Hajek – Cornell University Co-Author: Eric Clifton (he/him/his) – BioWorks Inc. Co-Author: Jason Tyler Bielski (he/him/his) – Virginia Tech Co-Author: Stefan T. Jaronski (Me/Me/Mine) – USDA-ARS 10-Minute Presentation Plant-Insect Ecosystems
2:42 PM – 2:54 PM MST Laboratory and field evaluations of <i>Beauveria bassiana</i> (Hypocreales: Cordycipitaceae) for control of spotted lanternfly, <i>Lycorma delicatula</i> (Hemiptera: Fulgoridae)  Location: Phoenix Convention Center, 126 C Presenting Author: Emily Russavage (she/her/hers) – University of Maryland Co-Author: Melissa Benzinger McGlynn – USDA-APHIS

Co-Author: Phillip A. Lewis – USDA-APHIS Co-Author: Michael Raupp – University of Maryland Co-Author: Chris Riley – Bartlett Tree Experts Co-Author: Emily Wallis – USDA-APHIS Co-Author: Paula Shrewsbury – University of Maryland 10-Minute Presentation Plant-Insect Ecosystems
2:54 PM – 3:06 PM MST Soil-applied <i>Photorhabdus</i>-derived secondary metabolites reduce root infection of <i>Meloidogyne incognita</i> in cotton  Location: Phoenix Convention Center, 126 C Presenting Author: Ayako Kusakabe, Ph.D. – University of Arizona Co-Author: Molly S. Hunter (she/her/hers) – University of Arizona Co-Author: S. Patricia Stock – California State University 10-Minute Presentation Plant-Insect Ecosystems
3:06 PM – 3:18 PM MST Testing the efficacy of entomopathogenic fungi in controlling green peach aphid in potatoes  Location: Phoenix Convention Center, 126 C Presenting Author: Josephine B. Antwi – Oregon State University Co-Author: Rodney Cooper – USDA-ARS Co-Author: Kenneth Frost – Oregon State University 10-Minute Presentation Plant-Insect Ecosystems
1:30 PM – 4:00 PM MST CANCELLED: Tour: Userly Mountain Regional Park Hike  Location: Phoenix Convention Center, North Ballroom Foyer, PCC Functions/Events/Meetings
1:30 PM – 4:30 PM MST Emerging Voices in Vector-borne Disease: One Health, Health Equity, and Sustainability Organizer: Nicole A. Scavo, M.S. (she/her/hers) – Indiana University Organizer: Cassandra Durden, M.S. (she/her/hers) – Centers for Disease Control and Prevention Section Symposium Medical, Urban, and Veterinary Entomology
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Nicole A. Scavo, M.S. (she/her/hers) – Indiana University

1:35 PM – 1:55 PM MST Systemic inequalities as a major risk factor for emergent zoonotic and vector-borne disease in the wealthy global North: A meta-analysis  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Kyle Shanebeck – University of California Section Symposium Medical, Urban, and Veterinary Entomology
1:55 PM – 2:15 PM MST Gentrification, health equity, and tick-borne pathogens: A multidisciplinary exploration  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Samniqueka Halsey – University of Missouri Co-Author: Alyssa Smolensky – University of Missouri Co-Author: Chantelle Wimms – University of Missouri Co-Author: Evan Aljundi – University of Missouri Co-Author: Skylar Ciccolini – University of Missouri Co-Author: Kaleea R. Lewis – University of Missouri Section Symposium Medical, Urban, and Veterinary Entomology
2:15 PM – 2:35 PM MST Teaching about inequity in vector-borne diseases management through a socioscientific issue framework  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Jordan Salomon – Texas A&M University Co-Author: Sarah Poor (she/her/hers) – Texas A&M University Co-Author: Francisco Ferreira (he/him/his) – Texas A&M University Co-Author: Yuexun Tian – Texas A&M University Co-Author: Julia Gonzalez (she/her/hers) – Texas A&M University Co-Author: Nicole A. Scavo, M.S. (she/her/hers) – Indiana University Section Symposium Medical, Urban, and Veterinary Entomology
2:35 PM – 2:45 PM MST Break Location: Phoenix Convention Center, 221 B, PCC
2:45 PM – 3:05 PM MST Understanding historical inequalities and designing a sustainable research framework for vector-borne diseases  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Pilar Fernandez – Washington State University

Section Symposium Medical, Urban, and Veterinary Entomology
3:05 PM – 3:25 PM MST From IPM to IVM: Adapting principles for a holistic approach to pest management in animal systems  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Hannah Tiffin – The Pennsylvania State University Co-Author: Jennifer R. Gordon (she/her/hers) – Bug Lessons Consulting LLC Co-Author: Karen C. Poh (she/her/hers) – USDA-ARS Section Symposium Medical, Urban, and Veterinary Entomology
3:25 PM – 3:45 PM MST Vaccines: A sustainable tool for vector control and prevention of vector-borne diseases  Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Sri Jyosthsna Kanchariapalli – Texas Tech University Section Symposium Medical, Urban, and Veterinary Entomology
3:45 PM – 3:50 PM MST Break Location: Phoenix Convention Center, 221 B, PCC
3:50 PM – 4:05 PM MST Panel discussion Location: Phoenix Convention Center, 221 B, PCC
4:05 PM – 4:10 PM MST Closing remarks Location: Phoenix Convention Center, 221 B, PCC Presenting Author: Nicole A. Scavo, M.S. (she/her/hers) – Indiana University
1:30 PM – 4:30 PM MST Careers Outside Academia Exist... Check Out Industry! Organizer: Michelle Hartzler, BCE (she/her/hers) – 360 Pest and Food Safety Consulting Organizer: Dusana Bondy, ACE-I – Abell Pest Control INC Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Michelle Hartzler, BCE (she/her/hers) – 360 Pest and Food Safety Consulting
1:35 PM – 1:50 PM MST

Unwittingly dedicating your life to pest management 101!  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Dusana Bondy, ACE-I – Abell Pest Control INC Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
1:50 PM – 2:05 PM MST Breaking boundaries: From academic research to product innovation  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Sally Abbar, Ph.D. – Envu Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
2:05 PM – 2:20 PM MST Listen when the door knocks!  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Dominique Stumpf, CAE (she/her/hers) – National Pest Management Association Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
2:20 PM – 2:30 PM MST Break Location: Phoenix Convention Center, 221 A, PCC
2:30 PM – 2:45 PM MST Building a career path in a global landscape  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Nina Jenkins – ConidioTec LLC Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
2:45 PM – 3:00 PM MST Metamorphosis from academia to industry  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Victoria Pocius – Douglas Products Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
3:00 PM – 3:15 PM MST A rocky road turned into stepping stones: My journey to pest management professional  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Nancy Troyano, BCE – Rentokil-Terminix

Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
3:15 PM – 3:30 PM MST Help wanted!  Location: Phoenix Convention Center, 221 A, PCC Presenting Author: Kim Kelley-Tunis, BCE – Nisus Section Symposium Medical, Urban, and Veterinary Entomology Plant-Insect Ecosystems
3:30 PM – 3:50 PM MST Panel discussion Location: Phoenix Convention Center, 221 A, PCC
3:50 PM – 4:05 PM MST Discussion Location: Phoenix Convention Center, 221 A, PCC
1:30 PM – 4:30 PM MST From the Ground Up: Using Carabids to Investigate Questions Across Diverse Habitats Organizer: Evan Waite (he/him/his) – Arizona State University Organizer: Kayla I. Perry (she/her/hers) – The Ohio State University Organizer: Curt Harden – Clemson University Member Symposium Systematics, Evolution, and Biodiversity
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 127 A Presenting Author: Evan Waite (he/him/his) – Arizona State University
1:35 PM – 1:53 PM MST Technological and traditional entomological sampling: A study of carabid beetles in intact and recovering forests  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Robert Boyd, III (he/him/his) – Kent State University Co-Author: Kayla I. Perry (she/her/hers) – The Ohio State University Co-Author: Suranga Basnagala – The Ohio State University Co-Author: Thomas P. Franzem – Kent State University Co-Author: Christie Bahlai – Kent State University Member Symposium Systematics, Evolution, and Biodiversity
1:53 PM – 2:11 PM MST Dynamic identification keys for ground beetles (Coleoptera: Carabidae): NEON sites and beyond 

Location: Phoenix Convention Center, 127 A Presenting Author: Evan Waite (he/him/his) – Arizona State University Member Symposium Systematics, Evolution, and Biodiversity
2:11 PM – 2:29 PM MST Conservation grazing management and carabid assemblages in restored and semi-natural grasslands  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Nicholas Barber (he/him/his) – San Diego State University Co-Author: Jochen Krauss – University of Würzburg Co-Author: Fabian Boetzl – University of Würzburg Co-Author: Nikki Sauer – University of Würzburg Co-Author: Melissa Nelson – Northern Illinois University Co-Author: Sheryl C. Hosler (she/her/hers) – The Pennsylvania State University Co-Author: Holly P. Jones – Northern Illinois University Member Symposium Systematics, Evolution, and Biodiversity
2:29 PM – 2:39 PM MST Break Location: Phoenix Convention Center, 127 A
2:39 PM – 2:57 PM MST Responses from ground beetles (Coleoptera: Carabidae) to different fire and site characteristics: A global meta-analysis  Location: Phoenix Convention Center, 127 A Presenting Author: Stephen Mason – Drexel University Co-Author: Vaughn Michael Shirey (any/all/none) – University of California Co-Author: Lauren Ponisio – University of Oregon Co-Author: Jon Gelhaus – Drexel University Member Symposium Systematics, Evolution, and Biodiversity
2:57 PM – 3:15 PM MST Cover crops enhance ground beetle activity in agroecosystems (a meta-analysis)  Location: Phoenix Convention Center, 127 A Presenting Author: Carmen Blubaugh – University of Illinois Co-Author: Elizabeth Kells Rowen (she/her/hers) – West Virginia University Member Symposium Systematics, Evolution, and Biodiversity
3:15 PM – 3:33 PM MST

Reclaimed oil pads harbor higher abundances and species richness of Carabidae but fall short of reestablishing the native prairie community  Location: Phoenix Convention Center, 127 A Presenting Author: Joshua W. Campbell – USDA-ARS Co-Author: Evan Waite (he/him/his) – Arizona State University Co-Author: Christina Palmrose-Kreiger – Arizona State University Co-Author: Natalie M. West – USDA-ARS Co-Author: Tatyana A. Rand – USDA-ARS Co-Author: Dave H. Branson – USDA-ARS Member Symposium Systematics, Evolution, and Biodiversity
3:33 PM – 3:51 PM MST Fragmentation and disturbance: Impacts on tree and carabid beetle communities in Midwest hardwood forests  Location: Phoenix Convention Center, 127 A Presenting Author: Tierney R. Brosius (she/her/hers) – Augustana College Co-Author: Michael Reisner – Augustana College Member Symposium Systematics, Evolution, and Biodiversity
3:51 PM – 4:09 PM MST Ground truthing biodiversity benefits of regenerative agroecosystems  Location: Phoenix Convention Center, 127 A, PCC Presenting Author: Christine Elliott (she/her/hers) – Purdue University Co-Author: Ian Kaplan – Purdue University Member Symposium Systematics, Evolution, and Biodiversity
4:09 PM – 4:12 PM MST Closing remarks Location: Phoenix Convention Center, 127 A Presenting Author: Evan Waite (he/him/his) – Arizona State University
1:30 PM – 4:30 PM MST 10-min: PBT, Ecotoxicology and Environmental Risk Assessment Moderator: Daiana De Souza – BASF Moderator: Ana R. Cabrera (she/her/hers) – Bayer Crop Science 10-Minute Presentation Physiology, Biochemistry, and Toxicology
1:30 PM – 1:42 PM MST

Can AI-powered monitoring, and modeling bridge the knowledge gap between honey bee ecotoxicology studies in the lab and field?

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Silvio Knaebe – Eurofins Agrosience Services

Co-Author: Ming Wang – Helmholtz Centre for Environmental Research – UFZ

Co-Author: Frederic Tausch – APIC

Co-Author: Katharina Schmidt – APIC

Co-Author: Matthias Diehl – APIC

Co-Author: Holger Bargaen – Eurofins Agrosience Services

Co-Author: Farnaz Faramarzi – Eurofins Agrosience Services

Co-Author: Volker Grimm – Helmholtz Centre for Environmental Research – UFZ

10-Minute Presentation Physiology, Biochemistry, and Toxicology

1:42 PM – 1:54 PM MST

Chemical control of *Diatraea saccharalis Fabricius*, 1794 (Lepidoptera: Crambidae) in rice cultivation (Oryza sativa L.), and its effect on some biological controllers

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Carlos Andres Sendoya-Corrales – University of Florida

Co-Author: Isaura Viviana Rodríguez-Torres – National University of Colombia

Co-Author: Nora Mesa-Cobo – National University of Colombia

Co-Author: Romina Gazis – University of Florida

10-Minute Presentation Physiology, Biochemistry, and Toxicology

1:54 PM – 2:06 PM MST

Developing new tools for improved symbiont-mediated RNAi in the Western honey bee

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Lucio Navarro-Escalante – University of Texas

Co-Author: Kadena K. Cope – University of Texas

Co-Author: A. H. M. Zuberi Ashraf – University of Texas

Co-Author: Patrick J. Lariviere – University of Texas

Co-Author: Nancy A. A. Moran – University of Texas

Co-Author: Jeffrey E. Barrick – University of Texas

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:06 PM – 2:18 PM MST

Diversity and pesticide exposures of pollen collected from managed honeybees and wild small carpenter bees from different agricultural landscapes

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Zhaorigetu Hubhachen (he/him/his) – Central State University

Co-Author: Danielle Kroh – Central State University

Co-Author: Sandra Rehan (she/her/hers) – York University

Co-Author: Reed M. Johnson – The Ohio State University

Co-Author: Hongmei Li-Byarlay – Central State University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:18 PM – 2:30 PM MST

Environmental factors affecting RNAi in Colorado potato beetle

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Mike Darrington – University of Kentucky

Co-Author: Nicholas M. Teets – University of Kentucky

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:30 PM – 2:42 PM MST

Evaluation of a solvent, a suspension agent, and a surfactant for use in non-Apis bee toxicity tests

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Ana R. Cabrera (she/her/hers) – Bayer Crop Science

Co-Author: Joshua Zuber – Bayer Crop Science

Co-Author: Daniel R. Schmehl (he/him/his) – Bayer Crop Science

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:42 PM – 2:54 PM MST

Break

Location: Phoenix Convention Center, 224 B, PCC

2:54 PM – 3:06 PM MST

Moving beyond honey bees as a surrogate: modeling approaches to expand the pesticide risk assessment landscape

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Jeffrey Minucci (he/him/his) – U.S. Environmental Protection Agency

Co-Author: Ethan Wave Huang – ORISE at US EPA

Co-Author: Elizabeth A. Paulukonis – ORISE at US EPA

Co-Author: Cassandra Strauch – ORISE at US EPA

Co-Author: Tom Purucker – U.S. Environmental Protection Agency

10-Minute Presentation Physiology, Biochemistry, and Toxicology

3:06 PM – 3:18 PM MST

Model Bee-havior: modifications and a formal sensitivity analysis for adapting BEE-STEWARD to simulate population dynamics of the endangered bumble bee *Bombus affinis*

Location: Phoenix Convention Center, 224 B, PCC

Presenting Author: Ethan Wave Huang – ORISE at US EPA Co-Author: Jeffrey Minucci (he/him/his) – U.S. Environmental Protection Agency Co-Author: Tom Purucker – U.S. Environmental Protection Agency	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:18 PM – 3:30 PM MST Some laboratory studies on the toxicity and hematological effects of some essential oils on <i>Tribolium castaneum</i>  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Zain Ul Abdin, Ph.D. – University of Agriculture Co-Author: Muhammad Bilal Afzal – University of Agriculture Co-Author: Shanza Nawaz – University of Agriculture Co-Author: Hasooba Hira – University of Agriculture Co-Author: Umair Sial – University of Agriculture Co-Author: Muhammad Tayyib – University of Agriculture Co-Author: Waseem Akram – University of Agriculture	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:30 PM – 3:42 PM MST The effects of insecticides on honey bee pattern categorization ability and memory  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Ryan Zou (he/him/his) – Dougherty Valley High School	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:42 PM – 3:54 PM MST The metabolic interactions between the black soldier fly and fungi  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Itai Opatovsky – MIGAL - Galilee Research Institute Co-Author: Lilach Ben-Mordechai – MIGAL - Galilee Research Institute Co-Author: Tzach Vitenberg – MIGAL - Galilee Research Institute Co-Author: Neta Herman – MIGAL - Galilee Research Institute	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:54 PM – 4:06 PM MST The utility of immature honey bee toxicity bioassays for assessing mortality and sublethal effects from pesticide exposure  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Daiana De Souza – BASF Co-Author: Max Feken – Syngenta	

Co-Author: Hudson V.V. Tomé – FMC Corporation Co-Author: Daniel R. Schmehl (he/him/his) – Bayer Crop Science	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
4:06 PM – 4:18 PM MST Functional modification of lipid metabolism genes during diapause in <i>Aedes albopictus</i>  Location: Phoenix Convention Center, 224 B, PCC Presenting Author: Mara Heilig – Georgetown University Co-Author: Peter Armbruster – Georgetown University	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
1:30 PM – 5:30 PM MST Insect Individuality: Why Viewing Insects as Individuals Matters for Tomorrow's Insect Science Organizer: Amy Toth – Iowa State University Organizer: Elizabeth Tibbetts, Ph.D. – University of Michigan Organizer: Jennifer Jandt – University of Otago Member Symposium	
1:30 PM – 1:40 PM MST Individual insects as windows into biological complexity, ecological adaptability, and invertebrate health  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Amy Toth – Iowa State University Member Symposium	
1:40 PM – 1:55 PM MST Economic foraging in a floral marketplace: Decision making in bumblebees  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Claire Hemingway – University of Tennessee Co-Author: Jennie DeVore – University of Texas Co-Author: Felicity Muth – University of Texas Member Symposium	
1:55 PM – 2:10 PM MST Individuality in the hive: How variation in worker stress susceptibility can bolster social insect colony health  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Alexander Walton – University of Alberta	

Co-Author: Jacob Hermann – University of Alberta Co-Author: Olav Rueppell – University of Alberta Member Symposium
2:10 PM – 2:25 PM MST Individuality influences social success in <i>Polistes</i> paper wasps  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Elizabeth Tibbetts, Ph.D. – University of Michigan Member Symposium
2:25 PM – 2:40 PM MST Bumble bee (<i>Bombus terrestris</i>) foraging patterns and cognition in semi-natural simple or diverse floral environments  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Jennifer Jandt – University of Otago Co-Author: Connal McLean – University of Otago Co-Author: Lisa Evans – The New Zealand Institute for Plant and Food Research Limited Member Symposium
2:40 PM – 2:55 PM MST Multi-level selection in <i>Temnothorax</i> ants may result in decoupled life-history trade-offs  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Sarah Bengston – City University of New York Member Symposium
2:55 PM – 3:10 PM MST Unveiling critical habitat: Behavioural insights into overwintering and nesting requirements of bumblebee queens using radio telemetry  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Nigel Raine (he/him/his) – University of Guelph Co-author: Amanda Liczner – University of Guelph Co-author: Elizabeth Franklin – University of Guelph Member Symposium
3:10 PM – 3:15 PM MST Break Location: Phoenix Convention Center, 222 A, PCC
3:15 PM – 3:30 PM MST

Individual differences in decision making in foraging bumble bees: Implications for optimality?  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Aimee Dunlap – University of Missouri Co-Author: Becky Hansis-O'Neill – University of Missouri Co-Author: Rachel Brant – University of Missouri Co-Author: Isabel Rojas-Ferrer – University of Missouri Member Symposium
3:30 PM – 3:45 PM MST Puzzle-solving bumblebees show a capacity for complex learning that is shaped by observer and demonstrator characteristics  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Alice Bridges – University of Sheffield Member Symposium
3:45 PM – 4:00 PM MST Adult insect diet has a pronounced effect on cuticle thickness and injury resistance in <i>Narnia femorata</i> (Hemiptera: Coreidae)  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Christine Miller – University of Cambridge Co-Author: Ginny Greenway – University of East Anglia Co-Author: Tamsin Woodman – University of Edinburgh Co-Author: Zachary Emberts – Oklahoma State University Co-Author: Simon Chen – University of Cambridge Co-Author: Walter Federle – University of Cambridge Member Symposium
4:00 PM – 4:15 PM MST The ethical entomologist: If insects are individuals, what might we owe them?  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Meghan Barrett (she/her/hers) – Indiana University Indianapolis Member Symposium
4:15 PM – 4:30 PM MST Better beetle battles: How individuals respond to prior social experience and shape competition in the forked fungus beetle  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Clara Stahlmann Roeder – University of Virginia

Co-Author: Vincent Formica – Swarthmore College Co-Author: Edmund Brodie III – University of Virginia Member Symposium	
4:30 PM – 4:45 PM MST Intraindividual behavioral drift as an evolutionary strategy  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Benjamin de Bivort – Harvard University Co-Author: Ryan Maloney – Harvard University Co-Author: Athena Ye – Harvard University Co-Author: Sam-Keny Saint-Pre – Harvard University Co-Author: Tom Alisch – Harvard University Co-Author: David Zimmerman – Harvard University Co-Author: Nicole Pittoors – Harvard University Member Symposium	
4:45 PM – 5:00 PM MST Plasticity and evolutionary transitions in individuality  Location: Phoenix Convention Center, 222 A, PCC Presenting Author: Dinah Davison – Kansas State University Co-Author: Richard Michod – University of Arizona Member Symposium	
5:00 PM – 5:30 PM MST Panel discussion Location: Phoenix Convention Center, 222 A, PCC	
1:30 PM – 5:30 PM MST Empowering Entomology Leaders to Create an Inclusive Workplace Organizer: Scott T. O'Neal – Corteva Agriscience Organizer: Anastasia M. Cooper (she/her/hers) – Auburn University Organizer: Nicole F. Quinn – University of Florida Organizer: Sajjan Grover – Bayer Crop Science Organizer: Morgan Pinkerton (she/her/hers) – University of Florida Organizer: Anna Briggs Program Symposium Diversity, Equity, and Inclusion Early Career	

1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Scott T. O'Neal – Corteva Agriscience	
1:35 PM – 1:55 PM MST So you want to talk about DEI  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Keri Ann Sather-Wagstaff – Clemson University Program Symposium Diversity, Equity, and Inclusion Early Career	
1:55 PM – 2:15 PM MST Workplaces that empower insect scientists to create tomorrow's crop protection solutions  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Michelle Smith, BCE-Emeritus – Corteva Agriscience Program Symposium Diversity, Equity, and Inclusion Early Career	
2:15 PM – 2:35 PM MST CANCELLED: Harnessing the power of employee resource groups to amplify our unique voices – Examples of empowering individuals in industry  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Frankie Stubbins (he/him/his) – Bayer Crop Science Program Symposium Diversity, Equity, and Inclusion Early Career	
2:35 PM – 2:45 PM MST Break Location: Phoenix Convention Center, 122 B	
2:45 PM – 3:05 PM MST Investing in diverse entomologists in the USDA Agricultural Research Service  Location: Phoenix Convention Center, 122 B Presenting Author: Alvin M. Simmons – USDA-ARS Program Symposium Diversity, Equity, and Inclusion Early Career	
3:05 PM – 3:25 PM MST Building and maintaining your laboratory from the ground up using principles of diversity, equity, and inclusion  Location: Phoenix Convention Center, 122 B, PCC	

Presenting Author: William R. Morrison, III (he/him/his) – USDA-ARS Program Symposium Diversity, Equity, and Inclusion Early Career
3:25 PM – 3:45 PM MST A framework for inclusive research  Location: Phoenix Convention Center, 122 B Presenting Author: Ana M. Velez (she/her/hers) – University of Nebraska Program Symposium Diversity, Equity, and Inclusion Early Career
3:45 PM – 3:55 PM MST Break Location: Phoenix Convention Center, 122 B
3:55 PM – 4:15 PM MST Justice and belonging for 2SLGBTQIA+ entomologists is possible and needed  Location: Phoenix Convention Center, 122 B Presenting Author: Edel Perez-Lopez – Université Laval Program Symposium Diversity, Equity, and Inclusion Early Career
4:15 PM – 4:35 PM MST Permeable walls: Diversity in museum spaces and scientific societies  Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Jessica L. Ware, Ph.D. (she/her/hers) – American Museum of Natural History Program Symposium Diversity, Equity, and Inclusion Early Career
4:35 PM – 4:55 PM MST Supporting women in agriculture  Location: Phoenix Convention Center, 122 B Presenting Author: Sally Taylor – Cotton Incorporated Program Symposium Diversity, Equity, and Inclusion Early Career
4:55 PM – 5:25 PM MST Panel discussion Location: Phoenix Convention Center, 122 B
5:25 PM – 5:30 PM MST Closing remarks Location: Phoenix Convention Center, 122 B, PCC Presenting Author: Scott T. O'Neal – Corteva Agriscience

1:30 PM – 5:30 PM MST Tomorrow's Rice Pests Are on the Move, How Can Our Entomology Science Stop Them Today? Organizer: Nupur Sarkar (she/her/hers) – Texas A&M University Organizer: Lina Bernaola – Texas A&M University Member Symposium Plant-Insect Ecosystems
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 122 C Presenting Author: Nupur Sarkar (she/her/hers) – Texas A&M University
1:35 PM – 2:05 PM MST Global trends in pest management in rice: Implications for U.S. rice  Location: Phoenix Convention Center, 122 C Presenting Author: Michael Stout (he/him/his) – Louisiana State University Member Symposium Plant-Insect Ecosystems
2:05 PM – 2:25 PM MST Unique pests for a unique production system: Past and recent arthropod issues in California rice  Location: Phoenix Convention Center, 122 C Presenting Author: Luis Espino – University of California Co-author: Ian Grettenberger – University of California Member Symposium Plant-Insect Ecosystems
2:25 PM – 2:45 PM MST Biological control of rice stink bugs in Brazil: An overview  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Thais Freitas (she/her/hers) – Federal University of Pampa Member Symposium Plant-Insect Ecosystems
2:45 PM – 3:05 PM MST Rice billbug and its impact in furrow-irrigated rice production systems  Location: Phoenix Convention Center, 122 C Presenting Author: Chase Floyd – University of Missouri Co-Author: Nick Bateman – University of Arkansas Co-Author: Ben Thrash – University of Arkansas Co-Author: Donald Cook – Mississippi State University Co-Author: Tyler B. Towles – Mississippi State University

Member Symposium Plant-Insect Ecosystems
3:05 PM – 3:10 PM MST Break Location: Phoenix Convention Center, 122 C
3:10 PM – 3:30 PM MST Investigating the impact of silicon accumulation on constitutive and herbivore-induced gene expression using OsLsi1 deficient mutant rice lines  Location: Phoenix Convention Center, 122 C Presenting Author: Jyoti Sharma – Louisiana State University Co-Author: Rajat Pruthi – Louisiana State University Co-Author: Thomas Tai – Louisiana State University Co-Author: Michael Stout (he/him/his) – Louisiana State University
Member Symposium Plant-Insect Ecosystems
3:30 PM – 3:50 PM MST Promoting biodiversity for climate-resilient pest management in rice  Location: Phoenix Convention Center, 122 C Presenting Author: Nurmi Pangesti – Country Representative for Cambodia Co-Author: Sokheng Keo (he/him/his) – International Rice Research Institute Co-Author: Maria Liberty Perez Almazan – International Rice Research Institute Co-Author: Carmencita C. Bernal – International Rice Research Institute Co-Author: Sovanroth Heng – Cambodian Agricultural Research and Development Institute Co-Author: Sathya Khay – Cambodian Agricultural Research and Development Institute
Member Symposium Plant-Insect Ecosystems
3:50 PM – 4:10 PM MST Managing rice stink bug in mid-south rice production  Location: Phoenix Convention Center, 122 C Presenting Author: Nick Bateman – University of Arkansas Co-Author: Ben Thrash – University of Arkansas Co-Author: Glenn Studebaker – University of Arkansas Co-Author: Donald Cook – Mississippi State University Co-Author: Chase Floyd – University of Missouri
Member Symposium Plant-Insect Ecosystems
4:10 PM – 4:30 PM MST Combating the rice Delphacid: Current strategies and future directions in Texas rice  Location: Phoenix Convention Center, 122 C, PCC

Presenting Author: Nupur Sarkar (she/her/hers) – Texas A&M University Co-Author: Rebecca A. Pearson – Texas A&M University Co-Author: Lina Bernaola – Texas A&M University
Member Symposium Plant-Insect Ecosystems
4:30 PM – 4:50 PM MST Rice insects in Florida: Monitoring and management in a sentinel state for invasive species  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Julien Beuzelin – University of Florida Co-Author: Matthew VanWeelden – University of Florida Co-Author: De-fen Mou (she/her/hers) – University of Florida Co-Author: Susan Halbert – University of Florida
Member Symposium Plant-Insect Ecosystems
4:50 PM – 5:10 PM MST Efficacy of the parasitoid <i>Telenomus remus</i> (Nixon, 1937) (Hymenoptera: Scelionidae) as biological control agent against the fall armyworm (FAW) <i>Spodoptera frugiperda</i> (Smith, 1797) (Lepidoptera: Noctuidae) in Cambodia  Location: Phoenix Convention Center, 122 C, PCC Presenting Author: Sokheng Keo (he/him/his) – International Rice Research Institute Co-Author: Rica Joy Flor – International Rice Research Institute Co-Author: Samoul Oeurn – Ministry of Agriculture Forestry and Fisheries Co-Author: Ti Nit – Ministry of Agriculture Forestry and Fisheries Co-Author: Sokvisal Kong – Cambodian Agricultural Research and Development Institute Co-Author: Sovanroth Heng – Cambodian Agricultural Research and Development Institute Co-Author: Sathya Khay – Cambodian Agricultural Research and Development Institute Co-Author: Nurmi Pangesti – Country Representative for Cambodia
Member Symposium Plant-Insect Ecosystems
5:10 PM – 5:30 PM MST Panel discussion Location: Phoenix Convention Center, 122 C
1:30 PM – 5:30 PM MST Capturing the Co-benefits of Conservation Habitat and Crop Production Within Agroecosystems Organizer: Daniel R. Schmehl (he/him/his) – Bayer Crop Science Organizer: Matthew E. O'Neal – Iowa State University Organizer: Reed M. Johnson – The Ohio State University Organizer: Pierre Lau (he/him/his) – USDA-ARS
Section Symposium Plant-Insect Ecosystems

1:30 PM – 1:35 PM MST

Introductory remarks

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Daniel R. Schmehl (he/him/his) – Bayer Crop Science

1:35 PM – 1:55 PM MST

On-farm biodiversity: Digital tools and data science can enable additional conservation on agricultural lands 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Pamela Bachman – Bayer Crop Science

Co-Author: Sabrina Liu – Bayer Crop Science

Section Symposium Plant-Insect Ecosystems

1:55 PM – 2:15 PM MST

The effects of conservation agricultural management practices on the pollinator nutritional landscape



Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Giovanni Tundo – USDA-ARS

Co-Author: Pierre Lau (he/him/his) – USDA-ARS

Co-Author: Partson Mubvumba – USDA-ARS

Co-Author: Anthony P. Abbate (he/him/his) – Auburn University

Co-Author: Geoffrey Williams – Auburn University

Co-Author: Caitlin Rering – USDA-ARS

Co-Author: Heather Tyler – USDA-ARS

Section Symposium Plant-Insect Ecosystems

2:15 PM – 2:35 PM MST

Cover cropping for pollinators: Lessons from intensive agroecosystems ranging from dryland wheat-fallow cropping systems to almond orchards 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Arathi Seshadri – USDA-ARS

Section Symposium Plant-Insect Ecosystems

2:35 PM – 2:55 PM MST

Challenges and potential opportunities for pollinator interactions in “pollinator-independent” crops such as soybean 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Jason Harmon – North Dakota State University

Co-Author: Katherine Kral-O'Brien – Iowa State University

Co-Author: Bethany Robertson – North Dakota State University

Co-Author: Torre Hovick – North Dakota State University

Co-Author: Kevin Sedivec – North Dakota State University

Section Symposium Plant-Insect Ecosystems

2:55 PM – 3:15 PM MST

Configuration optimization of conservation easements for native bee pollination services: preliminary results of soybean yield impacts 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Audra Hinson (she/her/hers) – USDA-ARS

Co-Author: Gregory McCarty – USDA-ARS

Co-Author: Ling Du – University of Maryland

Co-Author: George Ogilvie-Russell – USDA-ARS

Co-Author: Rich Iovanna – USDA

Section Symposium Plant-Insect Ecosystems

3:15 PM – 3:25 PM MST

Break

Location: Phoenix Convention Center, 126 A, PCC

3:25 PM – 3:45 PM MST

Floral attractiveness, bee visitation, and yield in Ohio soybean varieties 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Chia-Hua Lin – The Ohio State University

Co-Author: Anderson Hideo Yokoyama – The Ohio State University

Co-Author: Laura Lindsey – The Ohio State University

Co-Author: Reed M. Johnson – The Ohio State University

Section Symposium Plant-Insect Ecosystems

3:45 PM – 4:05 PM MST

Assessing pollinator habitat exposure to pesticides in Iowa USA agroecosystems 

Location: Phoenix Convention Center, 126 A, PCC

Presenting Author: Maura Hall – Iowa State University

Co-Author: Ge Zhang, Ph.D., M.S. (he/him/his) – Washington State University

Co-Author: Matthew E. O'Neal – Iowa State University

Co-Author: Steven Bradbury – Iowa State University

Co-Author: Joel R. Coats, Ph.D. – Iowa State University

Section Symposium Plant-Insect Ecosystems

4:05 PM – 4:25 PM MST

Evaluating the effect of tillage on ground nesting Aculeate wasps in the southeastern United States  Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Anthony Cuminale – Auburn University Co-Author: Joshua W. Campbell – USDA-ARS Co-Author: Anthony P. Abbate (he/him/his) – Auburn University Co-Author: Geoffrey Williams – Auburn University Section Symposium Plant-Insect Ecosystems	
4:25 PM – 4:30 PM MST Closing remarks Location: Phoenix Convention Center, 126 A, PCC Presenting Author: Matthew E. O'Neal – Iowa State University	
1:30 PM – 5:30 PM MST InFormers: Computational and Organizational Insights from the Insect Nervous System Organizer: Theodore P. Pavlic, Ph.D. (he/him/his) – Arizona State University Organizer: Hong Lei – Arizona State University Organizer: Maksim Bazhenov – University of California Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Theodore P. Pavlic, Ph.D. (he/him/his) – Arizona State University	
1:35 PM – 1:55 PM MST What do insect connectomes tell us about neural computation?  Location: Phoenix Convention Center, 126 B Presenting Author: Dmitri Chklovskii – Flatiron Institute Co-author: Kazunori Shinomiya – Flatiron Institute Co-author: Shanshan Qin – Flatiron Institute Co-author: Joshua Pughe-Sanford – Flatiron Institute Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
1:55 PM – 2:15 PM MST Cracking circuits with connectomes: A reverse neuroethology perspective  Location: Phoenix Convention Center, 126 B	

Presenting Author: Gwyneth Card – Columbia University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
2:15 PM – 2:35 PM MST Beyond the connectome: Divisive normalization processors in the <i>Drosophila</i> early olfactory and vision systems  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Aurel A. Lazar – Columbia University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
2:35 PM – 2:45 PM MST Panel discussion Location: Phoenix Convention Center, 126 B	
2:45 PM – 2:55 PM MST Break Location: Phoenix Convention Center, 126 B	
2:55 PM – 3:15 PM MST Fine-grained descending control of steering in walking <i>Drosophila</i>  Location: Phoenix Convention Center, 126 B Presenting Author: Helen Yang – Harvard University Co-Author: Bella Brezovec – Stanford University Co-Author: Laia Capdevila – Aelysia LTD Co-Author: Quinn Vanderbeck – Harvard University Co-Author: Atsuko Adachi – Columbia University Co-Author: Richard Mann – Columbia University Co-Author: Rachel Wilson – Harvard University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	
3:15 PM – 3:35 PM MST How does visual input guide motor behavior at brain-wide scale?  Location: Phoenix Convention Center, 126 B Presenting Author: Thomas R. Clandinin – Stanford University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity	

3:35 PM – 3:55 PM MST Elucidating the neural circuitry underlying aggression in <i>Drosophila</i>  Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Catherine Schretter – Howard Hughes Medical Institute Inc Co-Author: Hui Chiu – California Institute of Technology Co-Author: Alice Robie – Howard Hughes Medical Institute Inc Co-Author: Kristin Branson – Howard Hughes Medical Institute Inc Co-Author: Tanvi Vipra – Howard Hughes Medical Institute Inc Co-Author: Samantha Epstein – Howard Hughes Medical Institute Inc Co-Author: David Anderson – California Institute of Technology Co-Author: Gerry Rubin – Howard Hughes Medical Institute Inc Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
3:55 PM – 4:05 PM MST Panel discussion Location: Phoenix Convention Center, 126 B
4:05 PM – 4:15 PM MST Break Location: Phoenix Convention Center, 126 B
4:15 PM – 4:35 PM MST Deconstructing odor representation in the <i>Drosophila</i> mushroom body  Location: Phoenix Convention Center, 126 B Presenting Author: Sophie Caron – University of Utah Co-Author: Alexander Mackenzie – University of Utah Co-Author: Jilian Ulibarri – University of Utah Co-Author: Dua Azhar – University of Utah Co-Author: Andrew Butts – University of Utah Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
4:35 PM – 4:55 PM MST Invariant odor recognition in an insect olfactory system  Location: Phoenix Convention Center, 126 B Presenting Author: Barani Raman – Washington University Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity

4:55 PM – 5:15 PM MST A neural algorithm for counting memories  Location: Phoenix Convention Center, 126 B Presenting Author: Saket Navlakha – Cold Springs Harbor Laboratory Co-Author: Sanjoy Dasgupta – University of California Co-Author: Daisuke Hattori – University of Texas Section Symposium Physiology, Biochemistry, and Toxicology Systematics, Evolution, and Biodiversity
5:15 PM – 5:25 PM MST Panel discussion Location: Phoenix Convention Center, 126 B
5:25 PM – 5:30 PM MST Closing remarks Location: Phoenix Convention Center, 126 B, PCC Presenting Author: Theodore P. Pavlic, Ph.D. (he/him/his) – Arizona State University
1:30 PM – 5:30 PM MST Working on Our FITness: Empowering Learning with Insect Toolkits Organizer: Emilie Pauline Demard (she/her/hers) – University of Florida Organizer: Erin W. Hodgson (she/her/hers) – Iowa State University Section Symposium Formal and Informal Teaching
1:30 PM – 1:35 PM MST Introductory remarks Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Erin W. Hodgson (she/her/hers) – Iowa State University
1:35 PM – 1:50 PM MST Visioning for the future of insect science education at universities  Location: Phoenix Convention Center, 221 C Presenting Author: Hannah Joy Burrack – Michigan State University Section Symposium Formal and Informal Teaching
1:50 PM – 2:05 PM MST Science to English translation: Making departmental seminars accessible to undergraduates  Location: Phoenix Convention Center, 221 C, PCC Presenting Author: Kelly Carruthers (she/her/hers) – University of Georgia

Section Symposium	Formal and Informal Teaching
2:05 PM – 2:20 PM MST	
Empowering tomorrow's extension entomologists in the classroom	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Jonathan Larson – University of Kentucky	
Section Symposium	Formal and Informal Teaching
2:20 PM – 2:35 PM MST	
Integrating insect science into the curriculum: State college insights	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Brynn Johnson – University of Florida	
Section Symposium	Formal and Informal Teaching
2:35 PM – 2:50 PM MST	
Bugging out for a brighter future: Empowering young minds with the wonders of insect science	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Emily Le Falchier (she/her/hers) – University of Florida	
Co-Author: Carey Minteer – University of Florida	
Co-Author: Kelly Carruthers (she/her/hers) – University of Georgia	
Section Symposium	Formal and Informal Teaching
2:50 PM – 3:05 PM MST	
Engaging the community to capture specimen data: Notes from nature	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Peter Oboyski – Essig Museum of Entomology	
Section Symposium	Formal and Informal Teaching
3:05 PM – 3:25 PM MST	
Break	
Location: Phoenix Convention Center, 221 C	
3:25 PM – 3:40 PM MST	
Empowering educators with pollinator education toolkits	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Elaine Evans (she/they) – University of Minnesota	
Co-Author: Anne Turnham – University of Minnesota	
Co-Author: Monarch Joint Venture – University of Minnesota	

Section Symposium	Formal and Informal Teaching
3:40 PM – 3:55 PM MST	
Engaging fruit growers to implement insect science into management strategies	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Anne Nielsen – Rutgers University	
Section Symposium	Formal and Informal Teaching
3:55 PM – 4:10 PM MST	
Creating opportunities for ag education across careers	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Lourdes Pérez Cordero – Florida Department of Agriculture and Consumer Services	
Section Symposium	Formal and Informal Teaching
4:10 PM – 4:25 PM MST	
Outsmarting the standard: Fun and innovative study tools for professional certifications	
Location: Phoenix Convention Center, 221 C	
Presenting Author: Sylvia Kenmuir, BCE – BASF	
Section Symposium	Formal and Informal Teaching
4:25 PM – 4:40 PM MST	
The role of FITness at a global agricultural company for empowering farmer solutions	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Rayda K. Krell, Ph.D. – Corteva Agriscience	
Co-Author: Boris A. Castro (he/him/his) – Corteva Agriscience	
Co-Author: Clinton D. Pilcher – Corteva Agriscience	
Co-Author: Grace Sward – Corteva Agriscience	
Section Symposium	Formal and Informal Teaching
4:40 PM – 4:45 PM MST	
Closing remarks	
Location: Phoenix Convention Center, 221 C, PCC	
Presenting Author: Emilie Pauline Demard (she/her/hers) – University of Florida	
4:45 PM – 5:15 PM MST	
Discussion	
Location: Phoenix Convention Center, 221 C	
1:30 PM – 5:30 PM MST	

10-min: PBT, Genetics

Moderator: Colin S. Brent (he/him/his) – USDA-ARS

Moderator: Chaoyang Zhao – USDA-ARS

10-Minute Presentation Physiology, Biochemistry, and Toxicology



1:30 PM – 1:42 PM MST

Anopheles Cryptochrome 1: A novel regulator of malaria parasite transmission



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: Mary Kefi, Ph.D. – Johns Hopkins University

Co-Author: Johnny Nakhleh – Johns Hopkins University

Co-Author: Maria Luisa Simoes – Institute of Tropical Medicine Antwerp

Co-Author: Caire Barreto – Johns Hopkins University

Co-Author: Yuemei Dong – Johns Hopkins University

Co-Author: George Dimopoulos – Johns Hopkins University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

1:42 PM – 1:54 PM MST

CRISPR knockout screening in insect and tick cells



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: Stephanie E. Mohr – Harvard University

Co-Author: Matthew Butnaru – Harvard University

Co-Author: Enzo Mameli – Harvard University

Co-Author: Raghuvir Viswanatha – Harvard University

Co-Author: Chenxi Gao – Northeastern University

Co-Author: Ryan C. Smith – Iowa State University

Co-Author: Joao Pedra – University of Maryland

Co-Author: Claire Hu – Harvard University

Co-Author: Norbert Perrimon – Harvard University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

1:54 PM – 2:06 PM MST

Effects of histamine and serotonin on *Anopheles stephensi* spectral sensitivity of circadian entrainment



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: Xiaodi Wang – University of Washington

Co-Author: Kevin Omondi Ochwedo, Ph.D. – University of Idaho

Co-Author: Nora Cespedes – University of Idaho

Co-Author: Ronald Essah Bentil – University of Idaho

Co-Author: Jyotishka Datta – Virginia Tech

Co-Author: Michael Robert – Virginia Tech

Co-Author: Edwin Lewis – University of Idaho

Co-Author: Shirley Luckhart (she/her/hers) – University of Idaho

Co-Author: Jeff Riffell – University of Washington

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:06 PM – 2:18 PM MST

Gain of oenocyte expression of a conserved fatty acyl-CoA elongase gene contributes to the production of sex pheromone



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: Zinan Wang (he/him/his) – University of Kentucky

Co-Author: Yibo Gu – Michigan State University

Co-Author: Shilpi Mohanty – Michigan State University

Co-Author: Taylor Hori – Michigan State University

Co-Author: Cole Richards – Michigan State University

Co-Author: Fei Zhang – Michigan State University

Co-Author: Henry Chung – Michigan State University

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:18 PM – 2:30 PM MST

Genetics of insect resistance to Vip3Aa



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: David G. Heckel – Max Planck Institute for Chemical Ecology

Co-Author: Bruce E. Tabashnik (he/him/his) – University of Arizona

Co-Author: Yutao Xiao – Chinese Academy of Agricultural Sciences

Co-Author: Kaiyu Liu – Central China Normal University

Co-Author: Kongming Wu – Chinese Academy of Agricultural Sciences

Co-Author: Chongyu Liao – Chinese Academy of Agricultural Sciences

Co-Author: Zhenxing Liu – Chinese Academy of Agricultural Sciences

Co-Author: Minghui Jin – Chinese Academy of Agricultural Sciences

Co-Author: Luming Zou – Chinese Academy of Agricultural Sciences

10-Minute Presentation Physiology, Biochemistry, and Toxicology

2:30 PM – 2:42 PM MST

Break

Location: Phoenix Convention Center, 121 C, PCC

2:42 PM – 2:54 PM MST

Harnessing wolbachia: A gene drive approach to combat the citrus greening pathogen *Candidatus*

liberibacter asiaticus



Location: Phoenix Convention Center, 121 C, PCC

Presenting Author: Erica Watson Carter – University of Florida

Co-Author: Milton Chandra Roy, Ph.D. – University of Florida Co-Author: Clebson Dos Santos Tavares (he/him/his) – University of Florida Co-Author: Bryony C. Bonning (she/her/hers) – University of Florida Co-Author: Kirsten Pelz Pelz-Stelinski (she/her/hers) – University of Florida	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
2:54 PM – 3:06 PM MST Identification and functional analysis of the halloween genes in the western tarnished plant bug, <i>Lygus hesperus</i> Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Yu-Hui Wang – USDA-ARS Co-Author: Roni J. Gross – USDA-ARS Co-Author: Inana X. Schutze (she/her/hers) – USDA-ARS Co-Author: Colin S. Brent (he/him/his) – USDA-ARS Co-Author: Joe Hull – USDA-ARS	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:06 PM – 3:18 PM MST In silico secretome analysis of the coffee pest <i>Leucoptera coffeella</i> Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Erika VS Albuquerque, Ph.D. – Embrapa Co-Author: Natalia Martins – Embrapa Co-Author: Marcos Viana – Embrapa Co-Author: Vivian Lucena – Universidade de Brasilia Co-Author: Erick Queiroz – Universidade de Brasilia Co-Author: Leonardo Vidal – Embrapa Co-Author: Eliza Nascimento – Embrapa Co-Author: Wagner Fontes – Universidade de Brasilia Co-Author: Angela Mehta – Embrapa	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:18 PM – 3:30 PM MST Micro RNA cross-kingdom regulation of aphid/<i>Buchnera</i> symbiosis Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Andie Gonzales – Louisiana State University Co-Author: Honglin Feng – Louisiana State University	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:30 PM – 3:42 PM MST	

Mitobiosis: The intra-mitochondrial bacterial symbiosis in Ixodes ticks Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Jan Perner – Czech Academy of Sciences Co-Author: Luise Robbertse – Czech Academy of Sciences Co-Author: Tereza Hatalová – Czech Academy of Sciences Co-Author: Veronika Urbanova – Czech Academy of Sciences Co-Author: Ondrej Hajdusek – Czech Academy of Sciences Co-Author: Greta Bellinzona – University of Pavia Co-Author: David Sassera – University of Pavia	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
3:42 PM – 3:54 PM MST Break Location: Phoenix Convention Center, 121 C, PCC	
3:54 PM – 4:06 PM MST Mitochondrial mismatch: <i>Nasonia</i> hybrid mortality and rescue Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Joshua D. Gibson – Georgia Southern University Co-Author: John Werren – University of Rochester Co-Author: Rachel Edwards – University of Rochester Co-Author: Samantha McGinn – Georgia Southern University Co-Author: Alec Kingsley – University of Rochester	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
4:06 PM – 4:18 PM MST Testing for off-target impacts of gene modification in <i>Lygus</i> Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Colin S. Brent (he/him/his) – USDA-ARS Co-Author: James Hagler – USDA-ARS Co-Author: Joe Hull – USDA-ARS	
10-Minute Presentation Physiology, Biochemistry, and Toxicology	
4:18 PM – 4:30 PM MST Towards genetic biocontrol of spotted wing <i>Drosophila</i> Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Ratnasri Pothula – University of Minnesota Co-Author: Nathan R. Feltman – University of Minnesota Co-Author: John Barfoot – University of Minnesota Co-Author: Michael Smanski – University of Minnesota	

10-Minute Presentation	Physiology, Biochemistry, and Toxicology
4:30 PM – 4:42 PM MST	Transcriptomic analysis of salivary glands in the cotton aphid, <i>Aphis gossypii</i>  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Chaoyang Zhao – USDA-ARS Co-Author: Cesar Escalante – Auburn University Co-Author: Alana Lynn Jacobson – Auburn University
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
4:42 PM – 4:54 PM MST	Use of CRISPR screening in insect cells to reveal the mechanism of insect toxins  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Raghuvir Viswanatha – Harvard University Co-Author: William Robins – Harvard University Co-Author: Donghoon Lee – Harvard University Co-Author: Enzo Mameli – Harvard University Co-Author: Ying Xu – Boston Children's Hospital Co-Author: Min Dong – Boston Children's Hospital Co-Author: Claire Hu – Harvard University Co-Author: Stephanie E. Mohr – Harvard University Co-Author: John Mekalanos – Harvard University Co-Author: Norbert Perrimon – Harvard University
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
4:54 PM – 5:06 PM MST	Canonical terpene synthase genes in arthropods  Location: Phoenix Convention Center, 121 C, PCC Presenting Author: Feng Chen (he/him/his) – University of Tennessee Co-Author: Xinlu Chen – University of Tennessee Co-Author: John M. Urban – Howard Hughes Medical Institute Research Laboratories Co-Author: Jens Wurlitzer – Max Planck Institute Co-Author: Xiuting Wei – University of Florida Co-Author: Jin Han – University of Tennessee Co-Author: Sarah E. O'Connor – Max Planck Institute Co-Author: Jeffrey D. Rudolf – University of Florida Co-Author: Tobias G. Köllner – Max Planck Institute
10-Minute Presentation	Physiology, Biochemistry, and Toxicology
2:30 PM – 3:30 PM MST	

Section Leaders Meeting	Location: Phoenix Convention Center, 124 AB
Organizer: Becky Anthony, CMP, DES (she/her/hers) – Entomological Society of America	
Organizer: Cindy E. Myers – Entomological Society of America	
Organizer: Rosina Romano, MTA, CMP, DES – Entomological Society of America	
Functions/Events/Meetings	Committee Meeting
2:30 PM – 5:30 PM MST	Environmental Entomology and Journal of Economic Entomology Awards and Overview: Empowering Authors Organizer: Melody A. Keena (she/her/hers) – USDA-Forest Service Organizer: Therese M. Poland (she/her/hers) – USDA-Forest Service Organizer: Michael J. Brewer, Ph.D. – Texas A&M University Organizer: Nan-Yao Su – University of Florida Organizer: Lisa G. Neven (she/her/hers) – USDA-ARS
Organized Meeting	Publications
2:30 PM – 2:45 PM MST	Overview of Environmental Entomology: Subject editors, statistics, special collections, and award winners  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Melody A. Keena (she/her/hers) – USDA-Forest Service
Organized Meeting	Publications
2:45 PM – 3:15 PM MST	Environmental Entomology Reviewer's Choice Winner: The aphid <i>Myzus persicae</i> (Hemiptera: Aphididae) acquires chloroplast DNA during feeding on host plants  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Kerry Elizabeth Mauck – University of California Co-Author: William Jacob Pitt – Washington State University Co-Author: Rodney Cooper – USDA-ARS Co-Author: Dawson Byrd – University of California Co-Author: Mona Tran – University of California, Riverside Co-Author: Jaimie Rae Kenney – University of California Co-Author: Erin Wilson-Rankin – University of California
Organized Meeting	Publications
3:15 PM – 3:25 PM MST	Environmental Entomology Reviewer's Choice Runner-up: Attraction of <i>Myzus persicae</i> (Hemiptera: Aphididae) to volatiles emitted from the entomopathogenic fungus <i>Beauveria bassiana</i> 

Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Ruchika Geedi (she/her/hers) – Cardiff University Co-Author: Luis A. Canas – The Ohio State University Co-Author: Michael E. Reding – USDA-ARS Co-Author: Christopher M. Ranger (he/him/his) – USDA-ARS Organized Meeting Publications
3:25 PM – 3:55 PM MST Environmental Entomology People's Choice Winner: <i>Osmia taurus</i> (Hymenoptera: Megachilidae): A non-native bee species with invasiveness potential in North America  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Grace Gutierrez – University of Massachusetts Co-Author: Kate LeCroy (she/her/hers) – Rhodes College Co-Author: T'ai Roulston (he/him/his) – University of Virginia Co-Author: David J. Biddinger (he/him/his) – The Pennsylvania State University Co-Author: Margarita M. Lopez-Urbe – The Pennsylvania State University Organized Meeting Publications
3:55 PM – 4:05 PM MST Environmental Entomology People's Choice Runner-up: Specialist herbivore performance on introduced plants during native host decline  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Grace M. Horne (she/her/hers) – University of California Co-Author: Rea Manderino – Oak Spring Garden Foundation Co-Author: Samuel Jaffe – The Caterpillar Lab Organized Meeting Publications
4:05 PM – 4:10 PM MST Break Location: Phoenix Convention Center, 125 AB
4:10 PM – 4:25 PM MST Overview of the Journal of Economic Entomology and its award winners  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Lisa G. Neven (she/her/hers) – USDA-ARS Co-Author: Michael J. Brewer, Ph.D. – Texas A&M University Co-Author: Nan-Yao Su – University of Florida Organized Meeting Publications
4:25 PM – 4:45 PM MST

Journal of Economic Entomology Reader's Choice Winner: Global Patterns of Insect Resistance to Transgenic Bt Crops: The First 25 Years  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Bruce E. Tabashnik (he/him/his) – University of Arizona Co-Author: Jeffrey A. Fabrick (he/him/his) – USDA-ARS Co-Author: Yves Carriere – University of Arizona Organized Meeting Publications
4:45 PM – 5:05 PM MST Journal of Economic Entomology Editor's Choice Winner: Can Native Plants Mitigate Climate-related Forage Dearth for Honey Bees (Hymenoptera: Apidae)?  Location: Phoenix Convention Center, 125 AB, PCC Presenting Author: Ge Zhang, Ph.D., M.S. (he/him/his) – Washington State University Co-Author: Amy Toth – Iowa State University Co-Author: Ashley St. Clair – Corteva Agriscience Co-Author: Adam G. Dolezal (he/him/his) – University of Illinois Co-Author: Matthew E. O'Neal – Iowa State University Organized Meeting Publications
5:05 PM – 5:25 PM MST Journal of Economic Entomology Editor's Choice Runner-up: Chemical Control and Insecticide Resistance in <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae)  Location: Phoenix Convention Center, 125 AB Presenting Author: Johnnie van den Berg (he/him/his) – North-West University Co-Author: Hannalene Du Plessis – North-West University Organized Meeting Publications
5:25 PM – 5:30 PM MST Discussion Location: Phoenix Convention Center, 125 AB
6:30 PM – 8:00 PM MST Electropenetrography (EPG) Informational Meeting Location: Phoenix Convention Center, 124 AB, PCC Organizer: Elaine A. Backus (she/her/hers) – USDA-ARS Functions/Events/Meetings