

AMCA 91st Annual Meeting

*Printed Program as of 3/1**

MONDAY, MARCH 3rd, 2025

**5:00 PM - 8:00
PM**

***Grand Opening of Exhibit Hall & Welcome
Reception***

Hall A

6:30 AM - 8:00 AM

RISE Breakfast

Ballroom B

TUESDAY, MARCH 2nd, 2025

8:00 AM - 12:00 PM*

**unless otherwise noted*

Plenary

8:00 AM - 12:00 PM

Meeting Room: Ballroom A

8:10

Program Announcements

Isik Unlu

8:15

**Best Management Practices for Adoption of New
Technology for Surveillance and Control of Mosquitoes
AMCA's Presidential Address**

Rui-De Xue

8:15

Presidential Address

Rui-De Xue

8:35

Awards Presentation

Rui-De Xue

9:05

John Beidler: The Three Dimensions of a Complete Life

Gordon Pattersons

10:30

AMCA Technical Advisor Update

Daniel Markowski

10:55

Wing Beats – Your Trade Journal

Dennis Moore

11:05

**Just a little pinprick – the History, Natural History, and The
Natural History Museums, London collections of
Mosquitoes**

Erica McAlister

10:00 AM - 10:30 AM

Break in Exhibit Hall

Hall A

Sponsored By Azelis

12:00 PM - 1:45 PM

Lunch and Exhibits Open

Hall A

Sponsored By S.C. Johnson

1:45 PM - 3:15 PM*

**unless otherwise noted*

Effective Outreach and Educational Strategies for Mosquito Control Symposium

Moderator: Andrea McKinney

1:45 PM - 3:15 PM

Meeting Room: 202

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|-------------|-----------|--|
| 1:45 | 21 | Mosquito Lingo: Buzzing into the Basics
Karen Mojica |
| 2:00 | 23 | Don't Look Up, Look Down! A Free Mosquito Surveillance Mobile App and Fun Educational Resources to Support your Local Community Outreach
Russanne Low, Cassie Soeffing |
| 2:15 | 24 | Una Carta de Amor: Loving and Using Educational Ideas from Other Districts
Rachel Curtis-Robles, Andrea McKinney, Judith Pierce |
| 2:30 | 25 | IPM Education at a State Correctional Facility
Michele Rehbein, Ary Faraji |
| 2:45 | 26 | Educational Impact of the Aedes aegypti Male Mosquito Release Project with Wolbachia in Puerto Rico: A Community Approach
Veronica Rodriguez |
| 3:00 | 27 | Something fishy is happening in Ms. Skeeto's Science Lab
Cindy Mulla |

Environmental drivers of West Nile virus Symposium

Moderator: Nicholas DeFelice, Alexander Keyel

1:45 PM - 3:15 PM

Meeting Room: 208 A

1:45	28	Symposium Introduction: The importance of environmental conditions for understanding West Nile virus dynamics Alexander Keyel
1:51	29	Forecasting West Nile virus incidence with environmental drivers Michael Johansson, Ryan Harp, Karen Holcomb
2:03	30	<i>Exploring the interplay between warming temperatures and future implications for West Nile virus transmission</i> Johnny Uelmen, Marta Shockett, Catherine Lippi, Rebecca Smith, Sadie Ryan
2:15	31	The Impact of Temperature on West Nile Virus Vector-Virus Interactions Rachel Fay
2:27	32	West Nile genomics in the Southwest Crystal M. Hepp
2:39	33	A Spatially Resolved and Environmentally Informed Forecast Model of West Nile Virus in Coachella Valley, California Matthew Ward, Meytar Sorek-Hamer, Jennifer A. Henke, Aman Patel, Nicholas DeFelice
2:51	34	Spatially refined estimates of the risk of West Nile virus Nicholas DeFelice

Innovative Vector Management Strategies in Puerto Rico Surveillance & Control Symposium I

Moderator: Luis Quintanilla

1:45 PM - 3:15 PM

Meeting Room: 209

1:45	42	PRVCU: An Integrated Vector Management Program for the Prevention and Control of the <i>Aedes aegypti</i> in Puerto Rico Julieanne Miranda-Bermúdez
2:00	43	<i>Aedes aegypti</i> Resistance to Adulticides: Data-Driven Approaches and Collaborative Study Efforts in Puerto Rico Reynaldo Morales, Mark A. Concepcion, Joanelis Medina-Quintana, Julieanne Miranda-Bermúdez, Grayson Brown
2:15	44	Bayamon Integrated Vector Management Demonstration Program

Rafael Saavedra, Julieanne Miranda-Bermúdez, Jania García-Zeno, Cristhian Sanchez, Carlos Santiago, Luis Marrero

- 2:30 45 **Community Outreach Efforts for the Prevention of dengue in Puerto Rico**
Janía García-Zeno, Miladys Pérez-Vélez
- 2:45 46 **Protecting Indoor Spaces: Screens and Spatial Repellents in Southern Puerto Rico**
Nexilianne Borrero-Segarra, Julieanne Miranda-Bermúdez
- 3:00 47 **Uncovering DENV dynamics through mosquito surveillance and testing.**
Luisa Otero-Lopez, José Ruiz-Valcarcel, Amaury Morales, Mark A. Concepcion, Joanelis Medina-Quintana, Roberto Barrera

Larvicide Resistance: Investigating and Adapting to an Emerging Threat Symposium

Moderator: Kristina Lopez, Tianyun Steven Su

1:45 PM - 3:15 PM

Meeting Room: 208 B

- 1:45 35 **The NEVBD Pesticide Resistance Monitoring Program: six years of larvicide resistance surveillance in the Northeastern US**
Elisabeth Martin
- 1:57 36 **Spatial and Temporal Trends in Larvicide Use in Florida: Implications for Mosquito Resistance Management**
Raquel Lima de Souza, Eva Buckner
- 2:09 37 **Making the dream work: Statewide container *Aedes* larvicide resistance testing through collaboration with Florida mosquito control programs**
Eva Buckner, Raquel Lima de Souza, Tianyun Steven Su, Nathan Burkett-Cadena, Eric P. Caragata, Ana Romero-Weaver
- 2:21 38 **Why easy, if it can be complicated? Testing knowledge on methoprene resistance evaluation methods.**
Christopher Bibbs
- 2:45 40 **From S-methoprene to S-methobutene: Implication for activity and stability enhancement and resistance management in mosquitos**
Tianyun Steven Su
- 2:57 41 **Lack of cross resistance between S-methoprene and *L. sphaericus* in *Culex pipiens* from the Chicago, IL region**

Kristina Lopez, Patrick Irwin, Mark Tomek, Robert Holub,
Susan Paskewitz, Lyric Bartholomay, Mark Clifton

- 2:33 238 ***Product Stewardship: Developing Best Practices for Monitoring Resistance for Spinosad***
Derek Drews, Andrew Rivera

Mosquito Lightning Symposium

Moderator: Ary Faraji

1:45 PM - 3:15 PM

Meeting Room: Ballroom A

- 1:45 7 **Whitewater Mosquito Patrol: Rafting the River, Battling the Bite**
Brian Byrd
- 1:45 9 **Can Africa's Ability to Leap forward in Emerging Technologies be extended to Managing Mosquito-Borne Diseases?**
J. Wakoli Wekesa
- 1:45 1 **Salt Lake City Mosquito Abatement District's EQUINE MOSQUITO CONTROL UNIT**
Ary Faraji
- 1:45 2 **Let's talk about sex, baby**
Catalina Alfonso-Parra
- 1:45 4 **The Gulf South Vector Educational Center for Training, Outreach and Resources**
Claudia Riegel, Janet Hurley
- 1:45 5 **Opportunities: Biomaterials in Biting Arthropod Research**
Bradley Willenberg
- 1:45 6 **Dust off your trigonometry and bring a compass**
Sarah Wheeler
- 1:45 8 **Unearthing Spotted Fever Group Rickettsiosis (SFGR) Foci in Central America**
Kyndall Dye-Braumuller, Melissa S. Nolan
- 1:45 10 **The Fine Art of Mosquito Hospitality: A Guide to Keeping Your Unwelcome Guests Alive**
Aine Lehane, Lindsay Baxter, Elisabeth Martin, Laura Harrington
- 1:45 11 **Not the Bees: Three years of nontarget research in three minutes**
Jacob D. Hart, Katie Hare, Christopher Lesser

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|------|----|--|
| 1:45 | 12 | Tracking mosquito movement using edible DNA barcoded microcrystals
Rebekah Kading, Natalie Wickenkamp, Kaleb Davis, Julius Stuart, Alec Jones, Christopher Snow |
| 1:45 | 13 | Duet® Gives Bugs the Jitters, Enhances Spray Exposure
Andrew Rivera, Derek Drews |
| 1:45 | 14 | Pyriproxyfen and Plastic - The NeverEnding Story?
Angela Caranci, Greg Williams, Jennifer Wong, Jessica Coolidge, Mark Breidenbaugh |
| 1:45 | 15 | Hunting tigers in the city. No horses yet.
Lukas Murajda |
| 1:45 | 16 | Fyfanon flew far
Kim Hung, Alex Echenberg, Arturo Gutierrez, Jacob Tarango, Melissa Snelling, Jennifer A. Henke, Gonzalo Valadez, Michael Chylik, Gregorio Alvarado |
| 1:45 | 17 | A glance under the hood: visualizing what artificial intelligence algorithms are using to make their amazing (and sometimes not so amazing) species identification predictions.
Thomas Jenkins |
| 1:45 | 18 | Catch it or catch up: The case for proactive surveillance of neglected vectors
Bethany McGregor |
| 1:45 | 20 | Early investigations of Colorado Tick Fever Virus transovarial transmission in <i>Dermacentor andersoni</i> in Wyoming
Mikenna Smith, Kelsey Mitchell |

3:15 PM - 4:00 PM **Break in Exhibit Hall**
Hall A

3:15 PM - 4:00 PM **Ice Cream Social**
Hall A
Sponsored By
Valent Bio Sciences

4:00 PM - 5:30 PM*
*unless otherwise noted

Data Connections: NASA Earth Science Applications and Innovative Technologies to Monitor Vector Habitats Symposium

Moderator: Helena J. Chapman

4:00 PM - 5:30 PM

Meeting Room: 208 A

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|-------------|-----------|---|
| 4:00 | 70 | Innovative Applications of NASA Earth Observations for Public Health Decision Support
John A. Haynes |
| 4:46 | 72 | NASA Data Supports Longterm Study of Rift Valley fever
Assaf Anyamba |
| 5:04 | 73 | Engage communities in mosquito surveillance and mitigation using NASA's GLOBE Observer Mosquito Habitat Mapper citizen science tool for vector control and research
Russanne Low, Di Yang, Xiao Huang |

Innovative Vector Management Strategies in Puerto Rico Surveillance & Control Symposium II

Moderator: Noemi Martinez-Tull

4:00 PM - 5:30 PM

Meeting Room: 209

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|-------------|-----------|---|
| 4:00 | 74 | The Role of Super pooling and Molecular Surveillance for Integrated Vector Management Programs.
Joanelis Medina-Quintana, Marla García, Grayson Brown, Julieanne Miranda-Bermúdez |
| 4:15 | 75 | Puerto Rico Vector Management Association
Noemi Martinez-Tull, Amarilys Asencio-Torres |
| 4:30 | 76 | Puerto Rico Vector Surveillance and Quality Control Programs
Cristhian Sanchez |
| 4:45 | 77 | Innovative Communications Strategies for Effective Mosquito Control in Puerto Rico
Julieanne Miranda-Bermúdez |

New Ideas, Tools and Equipment Development

Moderator: Michael Riles

4:00 PM - 5:30 PM

Meeting Room: 202

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|-------------|-----------|--|
| 4:00 | 58 | Efficacy and User Acceptability of Novel Mosquito Repellent Formulations in Thailand
Alongkot Ponlawat |
| 4:10 | 59 | Essential oil repellents as protection technologies against mosquitoes in a North Florida forest |

		Robert Aldridge, Seth Gibson, Edmund Norris, Haley Dabbs, Jedediah Kline, Barbara Bayer, Frances V. Golden
4:20	60	Autocidal-icious adventures in mass rearing: Facilitating sterile- and incompatible-insect technologies within mosquito abatement districts Stephen Dobson
4:30	61	Establishing outdoor greenhouse insectaries for combating limited rearing space Taylor Taylor
4:40	62	Larval habitats and phenological profiles of <i>Culicoides</i> biting midges in Kansas, USA Bethany McGregor, Travis Davis
4:50	63	Optimizing vector surveillance coverage using multivariate environmental similarity surface maps Benjamin Nyman, Karthikeyan Chandrasegaran
5:00	64	SEPARATOR and NextGenSIT are ready for safe and efficacious mosquito control. Nikolay Kandul
5:10	65	The Silence of the Buzz: An Innovative Attract and Kill Method for Challenging Mosquitoes Greg White

4:00 PM - 5:33 PM*

**unless otherwise noted*

Director/Manager's Daily Dilemma Symposium

Moderator: Rui-De Xue

4:00 PM - 5:33 PM

Meeting Room: 201

4:00	48	Introduction about the Director/Manager Dilemma Symposium Rui-De Xue
4:03	49	Strategies for Operating a Vector and Urban Pest Control Program by the General Fund in New Orleans, Louisiana. Claudia Riegel, Carrie Cottone
4:13	50	A Day in the Life of a District Director: The Three “Ps” Sherry Burroughs

4:23	51	A tale of the journey from the independent mosquito and vector control district to military entomologist and back again Mark Breidenbaugh
4:33	52	Responding to irrational and unhinged residents, Lee County, Florida David Hoel
4:43	53	What do you mean there is no water in the building?: Daily dilemma management Michelle Brown
4:53	54	Navigating Murky Waters: Challenges in Managing Politics and Elected Officials – Insights from the Executive Director Adriane Rogers
5:03	55	Mosquitoes Easy---People, not so easy! James Clauson
5:13	56	The Importance of Employee Evaluations: Enhancing Performance, Development and Organizational Success Andrea Leal, Michael Behrend
5:23	57	Daily dilemma: staffing a revolving door Herff Jones

4:00 PM - 5:40 PM*

**unless otherwise noted*

Aerial Mosquito Management Using Novel Triple-Action Adulticide Symposium

Moderator: Beth Ranson

4:00 PM - 5:40 PM

Meeting Room: 208 B

4:00	66	Semi-field evaluation of ground and aerial ULV applications using ReMoa Tri against pyrethroid-resistant <i>Aedes aegypti</i> from Collier County, Florida Decyo McDuffie, Sara Kacinskis, Rachel Bales, Leanne Lake, Samantha Ramirez-Lachmann, Haley Johnson, Keira Lucas
4:25	67	Aerial Drift and Deposition Evaluations of ReMoa Tri & Dibrom Leanne Lake

- 4:50 68 **Efficacy of Triple Action Adulticide ReMoa Tri Against Resistant *Aedes aegypti* in a Field Cage Trial in San Juan, Puerto Rico**
Reynaldo Morales, Luis Pérez, Luis Marrero, Joanelis Medina-Quintana, Julieanne Miranda-Bermúdez, Grayson Brown
- 5:15 69 **ReMoa Tri: Aerial Evaluations in the Southern U.S.**
Haley Johnson

5:45 PM - 7:15 PM ***Latin American discussion***
209

WEDNESDAY, MARCH 5th, 2025

7:15 AM - 8:15 AM ***Welcome Networking Breakfast Hosted by Community & Member Engagement Subcommittee***
Ballroom A
Sponsored By
Central Life Sciences

8:00 AM - 2:00 PM ***Trustee/Commissioner Tour***
Sponsored By
Valent BioSciences

8:00 AM - 3:00 PM ***Education Day***

8:30 AM - 10:00 AM*
**unless otherwise noted*

Adult Control and Insect Resistance Challenges

Moderator: Neil Sanscrainte

8:30 AM - 10:00 AM

Meeting Room: 208 B

- 8:30 96 **Determining the Insecticide Resistance Status of *Culex pipiens* s.l. collected in Clark County, Nevada**
Trishan Wickramasinghe, Richard M. Oxborough, Vivek Raman, Christian DeHaan, David Quichocho, Camila Baez, Zoe Sanchez, Karen L. Figueroa Chilito, Austin Tang, Chad L Cross, Louisa Messenger
- 8:40 97 **A statistically rigorous but organism and time efficient framework for determination of median lethal dose or concentration in insects**
Alden Estep, Neil Sanscrainte, Kendra Dagg, Fred Stell

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| 8:50 | 98 | Evaluating Insecticide Resistance: comparing topical and bottle bioassays
Tara Thiemann, Sarah Wheeler, Edmund Norris |
| 9:00 | 99 | Evaluating the mosquitocidal toxicity of sarolaner against the key disease vector <i>Aedes aegypti</i>.
Kendra Dagg, Edwin A. Burgess, Alden Estep, Neil Sanscrainte |
| 9:10 | 100 | Exploring Pyrethroid Resistance Mechanisms in <i>Aedes aegypti</i> and <i>Culex quinquefasciatus</i> in Arizona: A Focus on Target-Site and Metabolic Resistance
Donald Ward, Ashlyn Maag, Jack Reihing, Lila Stanley, Jesus Levya, Damilola Oyelakin, Mikayla Utnehmer, Mackenna Berg, Alden Estep, Silvie Huijben |
| 9:20 | 101 | Malaria vector control in sub-Saharan Africa: complex trade- offs to combat the growing threat of insecticide resistance
Louisa Messenger, Richard M. Oxborough, Karen L. Figueroa Chilito, Filemon T. Tokponnon |
| 9:30 | 102 | Phenotypic and genotypic insights into mosquito insecticide resistance in Thailand (2021-2024)
Arissara Pongsiri |
| 9:40 | 103 | Recreating ULV Sprays in the Lab to Evaluate Adulticide Formulations
Greg White |
| 9:50 | 104 | Selective Pressures and Resistance Evolution in Mosquito Populations: Challenges and Opportunities
Silvie Huijben |

Latin American Student Competition I

Moderator: Griffith S. Lizarraga

8:30 AM - 10:00 AM

Meeting Room: 202

Sponsored By

Oxitec & Valent Bio Sciences

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| 8:40 | 88 | Characterization of the culturable gut microbiota of <i>Anopheles triannulatus</i> collected in a Colombian malaria-endemic region
Estefani Piedrahita, Laura Lopez, Margarita Correa |
| 8:50 | 89 | Detritus and larval interspecific competition on female <i>Aedes aegypti</i> phenotypic traits, nutrient profile, and DENV-1 vector competence
Limarie Reyes Torres, Barry Alto, Donald Yee |

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| 9:10 | 91 | <p>Characterization of <i>Aedes aegypti</i> populations from different regions of Brazil: life-history traits and insecticide resistance</p> <p>Barbara Souza, Jessica Gouvea, Jessica Bezerra, Luciana Araripe, Jose Bento Lima, Ademir Martins</p> |
| 9:20 | 92 | <p>Entomofavela Maré – community-based <i>Aedes</i> surveillance in a conflicting zone in Rio de Janeiro, Brazil.</p> <p>GABRIEL NASCIMENTO, Marcia Lenzi, Jose Bento Pereira Lima, Ademir Martins</p> |
| 9:30 | 93 | <p>Genetics of pyrethroid resistance in <i>Anopheles darlingi</i>, the main malaria vector</p> <p>Aline Loureiro, Quesia Amorim, Simone Ladeia-Andrade, Jose Bento Lima, Ademir J. Martins</p> |
| 9:40 | 94 | <p>Metabolomic and miRNomic Signatures Across the <i>Aedes aegypti</i> Life Cycle</p> <p>Mariana Jimenez, Gerardo Trujillo, Iram Rodriguez-Sanchez</p> |
| 9:50 | 95 | <p>Mirnomics and toxicology for the control of <i>Aedes aegypti</i>.</p> <p>Wendy Nohemi Guel Perez, Fernanda Hernandez, Cindy Gonzalez, Dannai Navarro, Iram Rodriguez-Sanchez, Mariana Jimenez, Gerardo Trujillo</p> |

Student Competition I

Moderator: Kristina Lopez

8:30 AM - 10:00 AM

Meeting Room: 201

Sponsored By

Envu, Oxitec, & Valent BioSciences

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| 8:30 | 78 | <p>Adulticidal activity of Hemp Extracts against <i>Aedes aegypti</i></p> <p>Erick Martinez, Peter M. Piermarini</p> |
| 8:40 | 79 | <p>Characterizing the microbiome and prevalence of <i>Wolbachia</i> in <i>Culex</i> mosquitoes in the midwestern U.S.</p> <p>Rebecca (Becky) Cloud, Patrick Irwin, Carla Cáceres</p> |
| 8:50 | 80 | <p>Endemicity of malaria and dengue trumps the study of <i>Culex</i> spp. mosquitoes and associated pathogens.</p> <p>Abdisalam Abdi, gabriel Hamer, Ryan Almeida</p> |
| 9:00 | 81 | <p>Permethrin susceptibility in <i>Culicoides</i> biting midges from Florida</p> <p>Vilma Cooper, Eva Buckner, Nathan Burkett-Cadena</p> |

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| 9:10 | 82 | Are efforts to conserve urban bees increasing risk of mosquito-borne disease?
Hannah Dehus, Caralee Shepard, Sam Ward, Mary M. Gardiner, Megan E. Meuti |
| 9:20 | 83 | Assessing the Role of Deforestation in Shaping Mosquito Abundance Patterns Across Brazil
Allison Hughes, Melissa S. Nolan, Kyndall Dye-Braumuller |
| 9:30 | 84 | Developing salivary gland ELISAs to measure human exposure to La Crosse virus vectors
Hannah Alexandar, Brian Byrd, Ross Boyce, Berlin Berlin Londoño-Renteria |
| 9:40 | 85 | Evaluation of surveillance traps for host-seeking La Crosse virus vectors in Southern Appalachia
Madeleine Craig, Charlie Sither, Roxanne Connelly, Brian Byrd |
| 9:50 | 86 | Like a moth to an interrupted flame - modifying the CDC light trap to increase species richness
Mitchell Mullin, Yoosook Lee, Lindsay Campbell, Brian Byrd |

Yesterday's Threat, Today's Solutions: AMCA's New Nationwide Mosquito Control Awareness Campaign Symposium

Moderator: Daniel Markowski

8:30 AM - 10:00 AM

Meeting Room: 209

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| 8:30 | 114 | AMCA's National Communication Campaign for Mosquito Control: Yesterday's Threat, Today's Solutions
Daniel Markowski |
| 8:40 | | Yesterday's Threats, Today's Solution
Clara Campbell, Bridget Harrison, Ansley Luce, Stephanie Kong |
| 9:10 | 115 | Maximizing Impact: How Marin-Sonoma MVCD is Implementing AMCA's National Campaign and Innovative Resources
Peter Bonkrude |
| 9:20 | | Utilizing the AMCA's National Education Campaign tools for advocacy messaging
Angela Beehler |
| 9:33 | 116 | From Mosquito Bites to Communication Insights
Michele Rehbein |
| 9:45 | | Enhancing National Mosquito Management: The AMCA's IMM Training Resources and Programs |

8:30 AM - 10:15 AM*

**unless otherwise noted*

**Transforming Boundaries into
Bridges: Lessons Learned from Asia
and Americas for Dengue Control
Symposium**

Moderator: Isik Unlu

8:30 AM - 10:15 AM

Meeting Room: 208A

Sponsored By Azelis, Central
Life Sciences, Clarke, Envu,
Target, Valent BioSciences

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| 8:30 | 177 | New twist in dengue fight: <i>Aedes aegypti</i>'s nocturnal feeding habits challenge current control measures
Kabirul Bashar, Isik Unlu, Md. Mujammel Haque, Tasnim Bashar Zarin |
| 8:45 | 178 | Innovative Approaches to Understanding Dengue Virus and Vector Dynamics: From Detection and Characterization to Comprehensive Surveillance Integration within Existing Systems
Smriti Khadka |
| 9:00 | 179 | Project <i>Wolbachia</i>: Enhancing Singapore's Integrated Strategy for Dengue Prevention
Denise Tan, Jue Tao Lim, Borame Sue Dickens, Li Yun Tan, Caleb Lee, Mohammad Faizal Zulkifli, Jonathan Liew, Yee Ling Lai, Chia Chen Chang, You Ming Ng, Lu Deng, Kathryn Vasquez, Chee Seng Chong, Shuzhen Sim, Judith Chui Ching Wong, Cheong Huat Tan, Lee Ching Ng |
| 9:15 | 180 | Emerging Dengue Threat in Indian Subcontinent and Mitigating Strategies
Dr Ashwani Kumar |
| 9:30 | 181 | <i>The Nexus of Innovative and Integrated Vector Control: Solutions for Effective Dengue Management</i>
Laetitia Leroy |
| 9:45 | 182 | The Unusual Challenges and Advantages of a Non-Profit Organization: The Puerto Rico Vector Control Unit in the Current Dengue Outbreak.
Grayson Brown |

10:00 183 Dengue Prevention and Control Program in Mexico
Fabian Correa-Morales

8:30 AM - 4:00 PM*

**unless otherwise noted*

Field Day! - Puerto Rico Mosquito Vector Control Unit

8:30 AM - 4:00 PM

10:00 AM - 10:45 AM

Break in Exhibit Hall

Hall A

Sponsored By

Valent BioSciences

10:45 AM - 12:15 PM*

**unless otherwise noted*

11 Annual AMCA Arthropod Vector Highlights Symposium

Moderator: Lee Cohnstaedt

10:45 AM - 12:15 PM

Meeting Room: 208 A

10:45 135 Highlights of Vector Biology

Cameron Osborne

11:15 136 Highlights of vector control

Jason Richardson

**11:45 137 Advances and challenges in vector-borne forecasting
and modeling**

Michael Johansson

**Applying Military Vector Control Skillset to Civilian Mosquito Control
Initiatives Symposium**

Moderator: Whitney Qualls

10:45 AM - 12:15 PM

Meeting Room: 209

**10:45 147 Transitioning field research and collaborations from the
military to a civilian mosquito control district**

David Hoel

**11:00 148 U.S. Navy Entomology to Vector Disease Control
International: Similar Goals, Challenges and Outcomes**

Peter Obenauer, Broox Boze

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| 11:15 | 149 | Anchored but still Swatting: A Navy Entomologist Transitions to a Michigan Mosquito Control District
Carl Doud |
| 11:30 | 150 | How Serving as a Navy Entomologist Led to a Role in Mosquito Surveillance in Citrus County, Florida
Frederick Stell |

Education to Support Vector Control

Moderator: Rebeca de Jesús Crespo

10:45 AM - 12:15 PM

Meeting Room: 208 B

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| 10:45 | 106 | Socio-ecological drivers of <i>Aedes aegypti</i> and <i>Aedes albopictus</i> assemblages in cities of Louisiana, USA
Rebeca de Jesús Crespo |
| 11:05 | | Using Mosquitoes in NASA Science as theme, we built a new collaborative program with big science partners to bring master naturalist-level environmental education to all ages and incorporating reciprocity through participatory citizen science.
Anita Schiller, Russanne Low |
| 11:15 | 108 | Coordination and Communication: Establishing Partnerships with Local Beekeepers
Ruben Rosas |
| 11:25 | 109 | Density-dependence and different dimensions of changing weather shape abundance patterns of common mosquito species (Diptera: Culicidae) in Bloomington, Indiana, USA
Luis Chaves |
| 11:35 | 110 | Educating Animal Welfare Professionals on Vector-borne Diseases
Erin Cloherty Duvernay, Ana Zorilla, Susanne Straif-Bourgeois, Emily Roberson, Jill VanWhy-Spoonmore, Claudia Riegel |
| 11:45 | 111 | Rapid Response: Preparing and Planning for Mosquito-Driven Public Health Emergencies
Jennifer R. Gordon, Daniel Markowski |
| 11:55 | 112 | Teaching with maggots: How your skills can help local and state labs solve crimes
Kristen Healy |
| 12:05 | 113 | The unexpected effects of sea level rise on ‘freshwater’ mosquitoes |

**Latin American Student
Competition II/Latin American
Symposium I**

Moderator: Griffith S. Lizarraga

10:45 AM - 12:15 PM

Meeting Room: 202

Sponsored By Central Life
Sciences, Clarke, Valent
BioSciences

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| 10:45 | 128 | <p>Non-conventional insecticides for controlling <i>Aedes aegypti</i> resistant to conventional insecticides</p> <p>Daniela Cerda Apresa, Selene M Gutierrez-Rodriguez, Jesus A. A. Davila-Barboza, Beatriz Lopez-Monroy, Iram Rodriguez-Sanchez, Ma.Guadalupe Rojas-Verde, Humberto Quiroz-Martinez, Adriana E. Flores</p> |
| 10:55 | 129 | <p>Phenotypic contrast of <i>Aedes aegypti</i> against broflanilide and permethrin.</p> <p>Dannai Navarro, Mariana Jimenez, Iram Rodriguez-Sanchez, Cindy Gonzalez, Fernanda Hernandez, Gerardo Trujillo</p> |
| 11:05 | 130 | <p>Primera Evaluación a Gran Escala de la Resistencia a Piretroides en <i>Anopheles darlingi</i> (Diptera: Culicidae) en Brasil (2021 a 2024): Un Paso Importante en el Control de la Malaria</p> <p>Quesia Amorim, Cynara Rodovalho, Ademir Martins, Priscila Serravale, Patrícia Guimarães, Aline Loureiro, Diogo Bellinato, Jose Bento Pereira Lima</p> |
| 11:15 | 131 | <p>Transcriptomic profile of <i>Aedes aegypti</i> (DIPTERA: CULICIDAE) after exposure to insecticides</p> <p>Cindy Gonzalez, Mariana Jimenez, Iram Rodriguez-Sanchez, Fernanda Hernandez, Dannai Navarro, Gerardo Trujillo</p> |
| 11:25 | 132 | <p>"EVALUACIÓN DEL EFECTO DEL LARVICIDA BIOLÓGICO Y EL ADULTICIDA PIRIMIFOS METIL APLICADO CON ULTRA BAJO VOLUMEN CON EQUIPAMIENTOS PORTÁTILES SOBRE <i>Aedes aegypti</i> (DIPTERA: CULICIDAE)</p> <p>jose Luis Laura Rivadeneira, jose Luis Laura Rivadeneira</p> |
| 11:45 | 134 | <p>ARBOVIRUS SURVEILLANCE IN POLK COUNTY MOSQUITO CONTROL</p> <p>Hugo Ortiz-Saavedra, Jackson Mosley</p> |

Student Competition II

Moderator: Kristina Lopez

10:45 AM - 12:15 PM

Meeting Room: 201

Sponsored By

- 11:45** **Evaluating Larvicide Resistance and Cross Resistance in the *Culex pipiens* Assemblage**
Ali Ross, Lyric Bartholomay, Susan Paskewitz, Mark Clifton
- 11:55** **Establishment of *Wolbachia* infection in the biting midge *Culicoides sonorensis* via Larval and Adult Feeding**
Amanda Ramirez, Corey L. Brelsfoard
- 10:45** **121** **Measuring blood meal degradation in the primary La Crosse virus vector *Aedes triseriatus***
Jaslyn Stamey
- 10:55** **122** **Re-emerging Mosquito Pathogen Surveillance in Charleston, SC**
Ahalya Muraleedharan, Andrew Pierson, Arianna Cook, Madeleine Meyer, Kia Zellars, Melissa S. Nolan, Kyndall Dye-Braumuller
- 11:05** **123** **Resisting resistance: Identifying biochemical biomarkers for pyrethroid resistance in *Aedes aegypti* mosquitoes**
Carla-Cristina Edwards
- 11:15** **124** **Synchronicity of miRnomics and Metabolomics During the *Aedes aegypti* Life Cycle**
Mariana Jimenez, Iram Rodriguez-Sanchez
- 11:25** **125** **Target and non-target effects of Bti larviciding on ephemeral pond communities**
Jaclyn Everly, Steven Juliano
- 11:35** **126** **Uncovering reproductive consequences of seasonal differences in mosquito ejaculate**
Chloe Chiu, Megan E. Meuti

12:15 PM - 1:45 PM

Lunch

Hall A

Sponsored By

Central Life Sciences & Oxitec

12:15 PM - 1:45 PM*

**unless otherwise noted*

Poster Session

12:15 PM - 1:45 PM

Meeting Room: Hall A

- | | | |
|-------|-----|--|
| 12:15 | P-1 | Expanded Monitoring of Insecticide Resistance and Follow-up Bioassays in <i>Aedes aegypti</i> Collected in Southern Puerto Rico in 2019 and 2023.
Gilberto Felix, Ryan Hemme, Kristen Adkins, Roberto Barrera, Victoria Ocasio-Smith, Marta Diaz |
| 12:15 | P-2 | An evaluation of available formulated residual insecticides with cone bioassays in <i>Aedes aegypti</i> from Ponce, Puerto Rico
Gilberto Felix, Marta Diaz, Luis Rivera, Roberto Barrera, Ryan Hemme, Kristen Adkins, Amechelle Leander |
| 12:15 | P-3 | Adaptation and Optimization of a Triplex Reverse Transcription Polymerase Chain Reaction Protocol for Arbovirus Surveillance in Canyon County Idaho
Heather Ward |
| 12:15 | P-4 | Insecticide Resistance in <i>Anopheles (Nyssorhynchus) darlingi</i> Populations from Barcelos, Brazilian Amazon: Implications for Malaria Vector Control
Simone Ladeia-Andrade, Quésia S. Amorim, Jose Bento Lima, Ademir J. Martins, Aline Loureiro, Maria José Oliveira, Íria Rufasto, Nelson F. Fé, Maria Anice M. Sallum, Paulo Ribolla, Amaro Brito |
| 12:15 | P-5 | Characterization of the intrinsic insecticidal activities of geraniol against the yellow fever mosquito, <i>Aedes aegypti</i>
Paola Feliciano, Peter M. Piermarini |
| 12:15 | P-6 | TESTING A COMBINED IIT/SIT APPROACH TO CONTROL MOSQUITO-BORNE DISEASES AT SCALE IN SOUTH MEXICO
Azael Che Mendoza, Abdiel Martín-Park, Yamili Contreras-Perera, Norma Pavía-Ruz, Josué Villegas-Chim, Henry Puerta-Guardo, Wilbert Bibiano-Marín, Gabriela González-Olvera, Guadalupe Ayora-Talavera, Anuar Medina-Barreiro, Jorge Palacio-Vargas, Fabian Correa-Morales, Gonzalo Vazquez-Prokopec, Zhyiong Xi, Pablo Manrique-Saide, Gabriela González-Olvera |
| 12:15 | P-7 | SUSCEPTIBILITY TO TEMEPHOS AND MALATHION INSECTICIDES OF <i>AEDES AEGYPTI</i> (DIPTERA: CULICIDAE) POPULATIONS IN THE STATE OF SÃO PAULO, BRAZIL |

Ellen Leiva, Neide Munerato, Karina Nalon, Juliana De Deus, Vanessa Otrera, Marcos Silva, Adriano Pinter, Antonio Medeiros-Sousa, Vera Camargo-Neves, Mauro Marrelli

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|-------|------|--|
| 12:15 | P-8 | The attractant effects of three cyanobacterial taxa on <i>Aedes aegypti</i> oviposition.
Jerry Champion, Luisa Otero-Lopez, Carolle Garcia-Medina, Roberto Barrera |
| 12:15 | P-9 | Cage and experimental house trials to optimize the use of dried attractive bait stations (DABS) for <i>Aedes aegypti</i> control.
Luis Quintanilla, Leonardo Ortega, Marco Neira, David Larsen |
| 12:15 | P-10 | Operational effectiveness of ground and aerial applications of ReMoa Tri
Richard Ryan, Keira Lucas |
| 12:15 | P-11 | Using UAS to Quantify Containers in Urban Baton Rouge, LA Waterways
Madeline Fryer, Mark Benfield, Claudia Riegel, Rebeca de Jesús Crespo |
| 12:15 | P-12 | Predicting <i>Aedes vexans</i> Populations Using Artificial Intelligence and Hyperlocal Weather Observations in Saginaw Michigan
Jesse Vollmar, Michael Asher |
| 12:15 | P-13 | Developing a cohort of active tree holes for La Crosse virus interventions
Madeleine Craig, Roxanne Connelly, Nicholas Lundy, Brian Byrd |
| 12:15 | P-14 | The Vieques Septic Systems Project
Jorge Nina Espinosa, Lirio Márquez D'Ácunti |
| 12:15 | P-15 | Assessing Minimum Risk 25(b) Products for Control of Blacklegged Ticks in the Upper Midwest, USA
Brad Tucker, David Jansen, Tela Zembsch, Susan Paskewitz, Lyric Bartholomay |
| 12:15 | P-16 | Baseline Surveys of Household Containers: Identifying <i>Aedes aegypti</i> Larval Habitats in Iquitos, Peru
Jacob Ford, Amy Morrison, Valerie Paz-Soldan |
| 12:15 | P-17 | VectorByte Data Platform and Training
Samuel Rund |
| 12:15 | P-18 | Evaluation of Regional Surveillance of West Nile Virus and St. Louis Encephalitis Virus in the Panhandle of Texas |

		Sierra N. Lewis, Dr. Joseph R. (JR) McMillan, Dr. Cherissa AbdulHamid, Melissa Clawson, Hunter Covey, Corey L. Brelsfoard, Christi Olszewski
12:15	P-19	Impact of Microplastic Pollutants on Mosquito Development and Survival Christina Roth, Sofia Cuenca Rojas, Sarah Kelly, Kyle Swade, Marina Koether, Nicholas Green, Andrew Haddow
12:15	P-20	Investigating the impact of perfluorooctanoic acid (PFOA) on the mosquito <i>Aedes albopictus</i> (Diptera: Culicidae) Sarah Kelly, Kyle Swade, Nicholas Green, Marina Koether, Andrew Haddow
12:15	P-21	New insights from mosquito surveillance collaboration between University of Notre Dame and St. Joseph County Environmental Health Department, Indiana, 2021-2024 Michelle Huang, Samuel Rund, Jennifer Robichaud, Brett Davis, Mary Ann McDowell
12:15	P-22	Baseline <i>Aedes</i> surveillance on Kwajalein Atoll, The Republic of Marshall Islands Erlynda Chutaro, Calvin Juda, Francyne Wase-Jacklick, Tamara Buhagiar, Saul Lozano, Anna Drexler, Limb K. Hapairai
12:15	P-23	A novel snapshot approach to surveillance of urban mosquitoes across the Caribbean David Bruce Conn, Denise Andriot Conn
12:15	P-24	What is the prevalence of <i>Aedes aegypti</i> in schools in Puerto Rico? Veronica Acevedo-Soto, José Ruiz-Valcarcel, Reinaldo Rivera, Rafael Saavedra, Samuel Lacen, Joanelis Medina-Quintana, Grayson Brown, Gabriela Paz-Bailey, Roberto Barrera
12:15	P-25	Tropical Islands Training and Evaluation Center (TITEC): Findings from the 2024 Vector Control Needs Assessment in Puerto Rico and the Pacific Amarilys Asencio-Torres
12:15	P-26	Innovative 3D Printed Traps: A Cost-Effective Solution for Mosquito Surveillance Kelly Furey
12:15	P-27	Electrifying Drones: Ford F-150 Lightning Powers a Greener Mosquito Control Future Mark Wieland, Eric Haas-Stapleton

- 12:15 P-28 **Assessing aerobic treatment units for mosquito habitat compatibility and pollutants**
Heather Penton, Nicholas DeLisi, Kevin A. Caillouet
- 12:15 P-29 **Treatment Prioritization of Larval Habitats for *Aedes albopictus* and *Culex quinquefasciatus* in New Orleans, Louisiana, USA.**
Alexandros Pavlakis, Jennifer Breaux, Katie Westby, Claudia Riegel
- 12:15 P-30 **Towards residential control of the eastern tree hole mosquito (*Aedes triseriatus*) – results of a larval bioassay field trial of Altosid SR20 in a La Crosse endemic area**
Jaslyn Stamey, Michael Riles, Mary Nordgulen, Daniel Killingsworth, Roxanne Connelly, Brian Byrd
- 12:15 P-31 **Mass Rearing Techniques of *Toxorhynchites rutilus* for Use in Operations in New Orleans, Louisiana.**
Andra McClue, Cynthia Harrison, Alexandros Pavlakis, Janet C. McAllister, Claudia Riegel
- 12:15 P-33 **Immature forms of mosquitoes (Diptera: Culicidae) in Phytotelmata in an environmental protection area in São Paulo, Brazil**
Walter Ceretti-Junior, Antonio Medeiros-Sousa, Marcia Bicudo de Paula, Karolina Barrio-Nuevo, Ramon Wilk-da-Silva, Rafael Oliveira-Christe, Eduardo Evangelista, Mauro Marrelli
- 12:15 P-34 **Guam Vector Management**
Niel Tirador, Leilani L. Navarro, Rosanna Y. Rabago, Limb K. Hapairai, M. Nadeau
- 12:15 P-35 **Predicting the seasonal abundance of the cattail mosquito (*Coquillettidia perturbans*) in Minnesota, USA**
Scott Larson
- 12:15 P-36 **Oviposition deterrent and ovicidal effects of *Salvia munzii* essential oil on insecticide-resistant *Aedes aegypti* (L.)**
Selene M Gutierrez-Rodriguez, Jesus A. A. Davila-Barboza, Beatriz Lopez-Monroy, Iram Rodriguez-Sanchez, Ivan Cordova-Guerrero, Sergio A Galindo-Rodriguez, Humberto Quiroz-Martinez, Adriana E. Flores
- 12:15 P-37 **What do you do in the winter? Immature mosquito surveillance outside the “mosquito season” in Northern Virginia and its impacts on program operations.**

Joshua Smith, Tilde Hoff, Rachel Kempf, Andrew Lima,
Lauren Lochstampfor

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| 12:15 | P-38 | Exploring Fungi as a Carbon Dioxide Source for Enhancing Attractiveness of the BG-Sentinel 2® Mosquito Trap
Janet C. McAllister, Madeline Fryer, Alexandros Pavlakis, Claudia Riegel |
| 12:15 | P-39 | Collaborating with City Code Enforcement to Address Urban Mosquito Sources in the Coachella Valley
Antonio Molina, Gregorio Alvarado, Jeffrey Rushing, Jonathan DeSantis, Salvador Becerra |
| 12:15 | P-40 | Insect Preservation For Hands-on Outreach Projects
Kara Gaylor, Jamesina Scott, Michelle Meighan, Julian Chavez |
| 12:15 | P-42 | Distribution of Anopheles Mosquitoes in the USA to Support Locally Acquired Malaria Outbreak Response
Rithika Chari, Rebecca Levine, Saul Lozano |
| 12:15 | P-43 | Public Health Leadership Development Needs Assessment
Chris Stelzig, Erin Cadwalader |
| 12:15 | P-41 | Evaluating a modified CO2-baited CDC light trap to improve trapping effectiveness in a La Crosse virus endemic area.
Mitchell Mullin, Charlie Sither, Yoosook Lee, Lindsay Campbell, Brian Byrd |

12:15 PM - 4:00 PM **Exhibits Open**
Hall A

1:45 PM - 3:15 PM*
**unless otherwise noted*

Latin American Symposium II
Moderator: Griffith S. Lizarraga
1:45 PM - 3:15 PM
Meeting Room: 202

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|------|-----|---|
| 1:45 | 152 | Entomological Surveillance and Control of <i>Aedes aegypti</i> and <i>Aedes albopictus</i> in Rural Districts of São Domingos do Prata, MG |
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Stella Carneiro, Ima Braga, Jose Bento Lima

- 1:55 153 Impact of an insecticidal paint on the reproductive physiology of *Aedes aegypti* in a dengue endemic area of Colombia**
Guillermo Rua-Urbe, Idalina Navarro-Barreto, Maria Isabel Arroyo-Arroyo, Breinnerd breinnerd.velasquez@udea.edu.co
- 2:05 154 Strategies for *Aedes aegypti* Control in Wide Areas: Spatial Application of *Bacillus thuringiensis israelensis* – Bti WDG**
Ima Braga
- 2:15 155 The Mexican experience “Good Mosquitoes” for *Aedes aegypti* control**
Abdiel Martín-Park, Yamili Contreras-Perera, Azael Che-Mendoza, Norma Pavía-Ruz, Josué Villegas-Chim, Emilio Trujillo-Peña, Henry Puerta-Guardo, Wilbert Bibiano-Marín, Anuar Medina-Barreiro, Jorge Palacio-Vargas, Fabian Correa-Morales, Hugo Defín-González, Héctor Gómez-Dantés, Pablo Manrique-Saide
- 2:25 156 Assessment of indoor spatial application using the Aero System® for *Aedes aegypti* control and the use of ovitraps to guide intervention actions**
Ima Braga, Dionisio Costa, Danielle Chaves, Stella Carneiro, Luciana Dias, Douglas Duarte, Jose Bento Lima
- 2:35 157 Avaliação do Natular ® 20EC para controle residual de *Culex* sp. e *Anopheles* sp. no estado de Rondônia, Brasil**
Christian Carlo Rezende
- 2:45 158 Efficacy and Persistence of Natular DT Mini Larvicide for the Control of *Aedes aegypti* Larvae in Brazil: A Study in Simulated Field Conditions with Local Populations and the Rockefeller Strain**
Jose Bento Pereira Lima, Quesia Amorim, Thiago Ribeiro, Diogo Bellinato, Kathyanne Barbosa, Rafael Alves, Osita Nascimento, Ana Paula Corrêa, Geandro Gama, Keison Cavalcante, Allan Kardec Galardo, Maria Alice Santos
- 2:55 159 EFICACIA Y RESIDUALIDAD DEL LARVICIDA BIOLÓGICO VECTOMAX PARA EL CONTROL DE LARVAS DE *Anopheles darlingi* TRANSMISOR DE LA MALARIA EN LA AMAZONIA BOLIVIANA**
jose Luis Laura Rivadeneira, jose Luis Laura Rivadeneira
- 3:05 160 First records of *Aedes tormentor* and *Culex panocossa* in Tamaulipas, Mexico**
Aldo Ortega, Mario Rodríguez, Lihua Wei, Guillermo Estrada, Nadia Fernández

Legislative and Regulatory Symposium I

Moderator: Mark Clifton

1:45 PM - 3:15 PM

Meeting Room: 208 B

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|-------------|------------|---|
| 1:45 | 161 | Structures of Mosquito and Vector Control Programs Around the United States
Nina Dacko |
| 2:00 | 162 | Where to house mosquito control? Advantages and Disadvantages of independent versus dependent mosquito control programs
Isik Unlu |
| 2:15 | 163 | The Organizational Structure and Success of the Puerto Rico Vector Control Unit
Julieanne Miranda-Bermúdez |
| 2:30 | 164 | Chatham County Mosquito Control: A County Level Department
Ture Carlson |
| 2:45 | 165 | Harnessing the Power of Independence: The Role of Special Districts in Mosquito Control
Ryan Clausnitzer |

Vector Control

Moderator: Dennis Moore

1:45 PM - 3:15 PM

Meeting Room: 209

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| 1:45 | 138 | Enhancing Efficiency and Sustainability in Black Fly Control: Implementation of a Bulk Container Treatment System
Casey Herrmann |
| 1:55 | 140 | Determining Insecticide Resistance in <i>Culex tarsalis</i>: Phenotypic, Genotypic, and Enzymatic Profiles from Maricopa County, Arizona
Mackenna Berg, Donald Ward, Alex Aldosari, Matthew Mcculloch, Bryce Monsevais, James Will, Silvie Huijben |
| 2:05 | 141 | Establishing a novel age-grading method for <i>Culex tarsalis</i> populations using pixel intensity of wing photos.
Greg Pugh, Zane Wilson, Ryan Yoe, Peyton Ferris, Michelle Savran, Jackson DeCook, Blue Hephaestus, Claire Stewart, Timothy A. Burton, Bryce Asay, Brian D. Foy |

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| 2:15 | 142 | Investigating <i>Culex pipiens</i> and <i>Culex tarsalis</i> activity patterns to determine optimal application times for adult mosquito control interventions
Sarah Wheeler, Daniel Mendoza, Mario Novelo, Whitney Clack, Kara Kelley |
| 2:25 | 143 | Mapping dengue virus transmission risk based on real-time surveillance data with VectorSurv
Christopher Barker, Aynaz Lotfata, Jody Simpson |
| 2:35 | 144 | Pilot field trials of freeze-dried beets as an oviposition lure for <i>Aedes aegypti</i> in New Orleans, Louisiana, USA
Samuel B. Jameson, Brendan H. Carter, Nicole F. Luna, Dawn Wesson |
| 2:45 | 146 | When do you intervene? Making real-time control decisions with your surveillance data using VectorSurv and other popular software tools
Olivia C. Winokur |
| 2:55 | | Applying Machine Learning Models to Predict West Nile Virus Outbreaks in California and the U.S.
Yunfei Liao |
| 3:05 | | Climate Adaptation and Genetic Differentiation in the Mosquito Species <i>Culex tarsalis</i>
Yunfei Liao |

Young Professionals Symposium: Roles in Response: How vector-control professionals manage public health emergencies
Moderator: Vilma Cooper, Kassidy Caride, Kyndall Dye-Braumuller, Drew Lysaker, Andrew Rivera, Chloe Wang
 1:45 PM - 3:15 PM
Meeting Room: 201

1:45 PM - 3:25 PM*
**unless otherwise noted*

Vector Surveillance and Resistance Monitoring
Moderator: Candace Royals
 1:45 PM - 3:25 PM
Meeting Room: 208 A

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| 1:45 | 167 | Fantastic Midges and Where to Find Them: an update of <i>Culicoides</i> species in Puerto Rico
Juan De Leon, Luis Quintanilla, Bethany McGregor |
|------|-----|---|

1:55	168	Enhanced Mosquito Surveillance Project Aimed at Stabilizing the Vector Index to Determine an Adulticide Application Threshold, Larimer County, Colorado – 2024 Matylda Lally, Tobias “Toby” Koch, Lauren Craft, Kendra Smits, Matt Bauer
2:05	169	Unwanted and Uninvited: <i>Culex (Phenacomyia) lactator</i>, a New Mosquito Species in Broward County, Florida Odette Reza-Brown
2:15	170	Decoding mosquito diversity in the Caribbean - insights from a ‘Snapshot Survey’ on Aruba, Bonaire and Curaçao Jordy van der Beek
2:25	171	Essential oil-based insecticides pose reduced threats to off-target species, such as honey bees (<i>Apis mellifera</i>). Ellis Johnson, Arunas Damijonaitis
2:45	173	Evaluation of a non-pyrethroid botanical molecule derived from Pogostemon cablin oil as a spatial repellent. Edmund Norris, Shawn Culley, Jedidiah Kline, greg allen, dan kline, adam bowman, Haley Dabbs
2:55	174	Resistance Bottle Bioassays: We may have a problem... now what? Heather Ward
3:05	175	Spatial and Temporal Dynamics of Aedes Mosquitoes: Assessing Dengue Risk in Urban Environments Morgan Jibowu, Sarah M. Gunter
3:15	176	The effect of dual-active-ingredient, long-lasting insecticidal nets on insecticide resistance in malaria vectors in Benin: results of a 3-year, three-arm, cluster-randomised, controlled trial Arthur Sovi, Constantin J Adoha, Boulais Yovogan, Chad L Cross, Dominic P Dee, Alphonse Keller Konkon, Aboubakar Sidick, Manfred Accrombessi, Minassou Juvenal Ahouandjinou, Razaki Osse, Edouard Dangbenon, Linda Towakinou, Clement Agbangla, Germain Gil Padonou, Thomas s Churcher, Corine Ngufor, Jackie Cook, Natacha Protopopoff, Martin C Akogbeto, Louisa Messenger

3:15 PM - 4:00 PM

Break in Exhibit Hall

Hall A

3:15 PM - 4:00 PM

Donut Social

Hall A

Sponsored By
Azelis

4:00 PM - 5:00 PM

Vendor Meeting & Reception
3rd floor Foyer

4:00 PM - 5:30 PM*

**unless otherwise noted*

Adult Vector Control using ULV Applications

Moderator: Ary Faraji

4:00 PM - 5:30 PM

Meeting Room: 209

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|-------------|------------|--|
| 4:00 | 205 | <i>Aerial Adulticiding Best Practices: Case Studies using Duet HD</i>
Kattie Morris, Victoria Hyrczyk |
| 4:10 | 206 | Characterizing the intrinsic and extrinsic factors driving resting behavior of <i>Aedes aegypti</i> to advance vector control
David Jimenez-Vallejo, Azael Che-Mendoza, Anuar Medina-Barreiro, Gabriela González-Olvera, Juan Sebastian Duran Ahumada, Pablo Manrique-Saide, Guillermo Chan, Felipe del Castillo-Centeno, Gonzalo Vazquez-Prokopec |
| 4:20 | 207 | Evaluating the Environmental Friendliness of Essential Oil Based Insecticides
Arunas Damijonaitis |
| 4:30 | 208 | Insecticide Switch Alters Resistance Patterns in <i>Aedes aegypti</i> in Tapachula, Mexico
Karla Saavedra-Rodriguez, Alma Lopez-Solis, Francisco Solis-Santoyo, Patricia Penilla |
| 4:40 | 209 | Evaluating the efficacy of ReMoa Tri against native <i>Aedes taeniorhynchus</i> populations in Charlotte County, Florida, USA
Beth Kovach, Scott D. Schermerhorn |
| 4:50 | 210 | Refinement of AGDISP for wide-area space sprays in mosquito control
Jane Bonds, David Brown |
| 5:00 | 211 | Re-purposing oral flea-and-tick products (=isoxazoline drugs) for mosquito control
Emily Gisi, Olajumoka Adewale, Jefferson Vaughan |

Latin American Symposium III

Moderator: Griffith S. Lizarraga

4:00 PM - 5:30 PM

Meeting Room: 202

- 5:10 Eficacia del Adulticida ReMoa Tri Contra *Aedes aegypti* Resistentes de San Juan, Puerto Rico**
Luis Pérez, Luis Marrero, Reynaldo Morales, Joanelis Medina-Quintana, Julieanne Miranda-Bermúdez, Grayson Brown
- 4:00 185 Fostering Community Engagement Through Schools: Integrating IIT-SIT for *Aedes* Control in Mexico**
Norma Pavía-Ruz, Josué Villegas-Chim, Emilio Trujillo-Peña, David Chay-Hernández, Wilbert Bibiano-Marín, Azael Che Mendoza, Abdiel Martín-Park, Yamili Contreras-Perera, Anuar Medina-Barreiro, Zhyiong Xi, Pablo Manrique-Saide
- 4:10 186 Implementation research prior to the release of male mosquitos in support for IIT-SIT population suppression of *Aedes aegypti* in Mexico**
Norma Pavía-Ruz, Josué Villegas-Chim, Emilio Trujillo-Peña, David Chay-Hernández, Wilbert Bibiano-Marín, Azael Che Mendoza, Abdiel Martín-Park, Yamili Contreras-Perera, Anuar Medina-Barreiro, Zhyiong Xi, Pablo Manrique-Saide
- 4:20 187 Insecticide susceptibility and resistance mechanisms in *Aedes aegypti* populations exposed to pirimiphos-methyl by targeted indoor residual spraying (TIRS) in Merida, Mexico.**
Gabriela González-Olvera, Alicia Méndez-Manzanero, Anuar Medina-Barreiro, Azael Che-Mendoza, Oscar David Kirstein, Pablo Manrique-Saide, Audrey Lenhart, Gonzalo Vazquez-Prokopec
- 4:30 188 Metabolic Responses in *Aedes aegypti*: Insights into Post-Feeding and Insecticide Exposure Dynamics**
Iram Rodriguez-Sanchez, Adriana E. Flores, Rodrigo Morales, Mariana Jimenez
- 4:40 189 Mosquito taxonomy in Mexico: 200 years of history**
Aldo Ortega, Jorge Rodríguez
- 4:50 190 NASA Satellite Data for Vector Surveillance Toolkits**
Helena J. Chapman, Laura M. Judd, John A. Haynes
- 5:00 191 Omics a new tool for the control of culicidae**
Gerardo Trujillo, Mariana Jimenez, Maria de Lourdes Ramirez-Ahuja, Iram Rodriguez-Sanchez

Legislative and Regulatory Symposium II

Moderator: Mark Clifton

4:00 PM - 5:30 PM

Meeting Room: 208 B

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|-------------|------------|--|
| 4:00 | 193 | California Senate Bill 1251: Enhancing Public Health through Mosquito Abatement Inspections in Electrical Utility Vaults
Jodi Holeman |
| 4:15 | 194 | Legislation and Public Health: Illinois Mosquito Abatement Districts' Role in Shaping Pesticide Policy
Mark Clifton |
| 4:30 | 195 | Florida's Response To Unwarranted Surveillance
Nicholas Lefkow, Aaron Lloyd, David Hoel |
| 4:45 | 196 | Would you like I.C.E. with that? An all-encompassing guide to living with the new mandates of EV compliance in California.
David Wexler, Casey Stevenson |
| 5:00 | 166 | Trading mosquitoes for metrics: Florida's Special District Accountability Act puts Independent Mosquito Control Districts under the microscope
Keira Lucas |
| 5:15 | | Journey of 329 miles: The long road to expanding the Collier Mosquito Control District's boundaries
Jonathon Little |

Operations, Response and Planning for Vector Control

Moderator: Jake Hartle

4:00 PM - 5:30 PM

Meeting Room: 208 A

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|-------------|------------|--|
| 4:00 | 197 | Streamlining Mosquito Arbovirus Surveillance: In-House Data Migration to Web-Based Software
Alexis De La Cruz, Yaziri Gonzalez |
| 4:10 | 198 | A Century of Progress in Indian River Mosquito Control District
Sherry Burroughs |
| 4:20 | 199 | From Data to Decision-Making: Developing an Automated Dashboard for Mosquito Surveillance in Chicago
Alexandra Gagner, Jepchumba Koech, Jonathan Levy, Brandon Bernhardt, Deniz Yuce, Peter Ruestow, Claudia Blanco, Janna L. Kerins |

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| 4:30 | 200 | What do you do in the winter? Immature mosquito surveillance outside the “mosquito season” in Northern Virginia.
Joshua Smith, Tilde Hoff, Rachel Kempf, Andrew Lima, Lauren Lochstampfor |
| 4:50 | 202 | Assessment of Common Carbon Dioxide Sources Used for Mosquito Trapping
Sarah Wheeler, Daniel Mendoza, Mario Novelo, Kara Kelley |
| 5:00 | 203 | Arbovirus Surveillance in Polk County Mosquito Control
Jackson Mosley, Hugo Ortiz-Saavedra |
| 5:00 | 204 | MATE: Mosquito Abatement Through Economic Empowerment in Rural Ethiopia
Eric Haas-Stapleton, Dereje Alemayehu, Ryan Clausnitzer |

Young Professionals Symposium: Career Roundtables

Moderator: Vilma Cooper, Kassidy Caride, Kyndall Dye-Braumuller, Drew Lysaker, Andrew Rivera, Chloe Wang

4:00 PM - 5:30 PM

Meeting Room: 201

5:30 PM - 6:30 PM

Young Professionals Social (Invitation Only Event)

207

Sponsored By

Valent BioSciences

6:30 PM - 7:30 PM

Past President's Reception (Invitation Only Event)

THURSDAY, MARCH 6th, 2026

8:30 AM - 10:00 AM*

**unless otherwise noted*

Adult Control ATSB/SIT/Wolbachia

Moderator: Darrel Bagiotti

8:30 AM - 10:00 AM

Meeting Room: 208 B

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| 8:30 | 227 | Engineered Nectaries using Capillary Alginate Hydrogel (Capgel) Biomaterials for Attractive Toxic Sugar Bait (ATSB) Platforms |
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Bradley Willenberg, Christopher Bibbs, Evelyn J. Franco,
Diane Roach, Jordyn Diaz, Ailed Sanchez

- 8:40 228 **Evaluating the Efficacy of Outdoor Residual Spraying (ORS) for *Aedes aegypti* Control in Ponce, Puerto Rico**
Sydney Crawley, Nexilianne Borrero-Segarra, Julieanne Miranda-Bermúdez, Josiah Ritchey, Grayson Brown
- 8:50 229 **First year of targeted sterile insect releases to control *Aedes aegypti* in the West Valley region of southern California**
Solomon Birhanie, Jennifer Castellon, Michelle Brown
- 9:00 230 **Suppression of *Aedes aegypti* using Incompatible Insect Technique on Virgin Gorda, British Virgin Islands**
Johanna Ohm, Amy Lynd, Charlotte McDevitt, Anetia D. Herbert, Angel R. Cupid, Vernessa R. Bellot, Bradley White, Jacob Crawford
- 9:10 231 **Advancements for the SIT program for *Aedes aegypti* suppression in Lee County, FL.**
Rachel Morreale, Steven Stenhouse, Johanna Bajonero, Danilo Carvalho, Aaron Lloyd, David Hoel
- 9:30 233 **Evaluations of novel attractants, repellents, and traps at Anastasia Mosquito Control District of St. Johns County, Florida**
Whitney Qualls, Rui-de Xue
- 9:50 235 **Optimization of irradiation sterility dose in *Aedes aegypti* for sterile insect technique (SIT) project in Orange County, California**
Chloe Wang, Timothy Morgan, Sokanary Sun, Amber Semrow

Adult Vector Control and Vector-Borne Diseases Surveillance

Moderator: Kevin A. Caillouet

8:30 AM - 10:00 AM

Meeting Room: 208 A

- 8:30 236 **Estimating ZIKV seroprevalence in a DENV endemic population: the use of blood donors and multiplex serology to monitor arbovirus outbreaks in the Dutch Caribbean**
Louella Kasbergen
- 8:40 237 **Senecio sterile mosquito hub – optimizing the production process meeting commercial real world requirements**
Hanan Lepek

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| 9:00 | 239 | Age Grading Mosquitoes, <i>Culex tarsalis</i>, and <i>Culex pipiens</i> In the working environment.
Danny Miller |
| 9:10 | 240 | An operational approach to standardizing mosquito borne disease response plans in Lee County, Florida.
Edward Foley, David Hoel, Aaron Lloyd |
| 9:20 | 241 | Insecticide resistance cage trial results for Eastern Equine Encephalitis vectors in Massachusetts
Priscilla Matton, Kaitlyn O'Donnell, Derek Drews |
| 9:30 | 242 | Mosquito Sugar Feeding and Survivorship on Endemic Flowers of the Greater Salt Lake Area
Ella Branham, Irvane Nelson, Ilia Rochlin, Thomas Widmer, Nathaniel Byers, Gunter C. Muller, Ary Faraji, Christopher Bibbs |
| 9:40 | 243 | UV or not UV: Prey Recognition and Crypsis in the Pigmented Larvae of <i>Toxorhynchites</i>
Christopher Bibbs, Christian Furness |
| 9:50 | 244 | Embracing a new approach to work distribution, breaking down barriers, and getting back to breeding sites more swiftly
Salvador Becerra, Gregorio Alvarado, Antonio Molina, Marko Petrovic, Edward Prendez |

Application of GIS for Vector Control and Surveillance

Moderator: Milton Sterling

8:30 AM - 10:00 AM

Meeting Room: 202

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|------|-----|---|
| 8:30 | 218 | Should routine surveillance traps be placed in problem spots or in a uniform grid?
Kevin A. Caillouet, Nicholas DeLisi, Joshua A. Foulon, Mark Myer, Hieu Duong, Calvin Smotherman |
| 8:40 | 219 | Ticks and biting midges: VectorSurv tools for “other vectors”
Lincoln Wells |
| 8:50 | 220 | Using Smarter Tools to Strengthen Mosquito Control Strategies in Chicago, 2023
Alexandra Gagner, Jepchumba Koech, Bethlehem Solomon, Claudia Blanco, Stephanie R R. Black, Janna L. Kerins, Peter Ruestow |
| 9:00 | 221 | Using UAS with FieldSeeker GIS Software and ArcGIS Online |

Chad Minter

- 9:10 222 **Changes: A 66-yr historical record of the Minneapolis/St. Paul mosquito fauna including notes on range shifts of Minnesota species**
Diann Crane, Carey LaMere, Scott Larson
- 9:20 223 **Drone-Based LiDAR Mapping of Mangrove Microtopography for Targeting *Aedes taeniorhynchus* Production Sites**
Atom Rosales, Rachel Bales, Gabriel Katz, Olivia Konieczny, Joe Bonnacorsi, Keira Lucas
- 9:30 224 **Invasive Mosquito Species Monitoring/Surveillance in Lee County Florida**
Milton Sterling
- 9:40 225 **Looking for Life in the Margins: Enhanced surveillance in an outbreak of locally acquired malaria**
Max Dersch, Christopher Lesser, Mark Latham, Katie Hare
- 9:50 226 **What's new with VectorSurv?**
Tim Valdepena

Diseases and Vector Studies

Moderator: Melissa S. Nolan

8:30 AM - 10:00 AM

Meeting Room: 209

- 8:30 245 **Ecologic factors contributing to West Nile virus hyperendemicity in South Carolina, USA**
Melissa S. Nolan, Kyndall Dye-Braumuller, Kia Zellars, Madeleine Meyer
- 8:40 246 **Heartworm infection rates across the Sacramento and Yolo counties**
Mario Novelo
- 8:50 247 **Lack of competence of U.S. mosquito species for circulating Oropouche virus**
Alexander Ciota, Anne Payne, Jessica Stout, Peter Dumoulin, Lea Heberlein, Alan Dupuis
- 9:00 248 **Determining the Epidemic Potential of Ross River Virus in the Continental United States Through the Anthropophilic Disease Vector, *Aedes albopictus*.**
Joseph Spina
- 9:10 249 **Novel Tick-Borne Pathogen *Candidatus* Midichloriaceae Causing First Trimester Pregnancy Loss**

John Newman, Caitlin Hughes, Karen Bloch, Khalil Deveau, Thao Truong, Behzad Naiafian, Abelardo Moncayo, Lili Tao, Joshua Lieberman, Hernán Correa

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| 9:20 | 250 | The Effects of Climate Change on Mosquitoes and Mosquito-borne Disease in Iberia Parish, Louisiana
David Martin |
| 9:30 | 251 | Validation of an internal tick RNA control for use in viral detection assays on the Rocky Mountain wood tick (<i>Dermacentor andersoni</i>)
Kelsey Mitchell, Mikenna Smith |
| 9:40 | 252 | When it rains it pours: Navigating the challenges of Pasco County's lively arboviral season and enhancing emergency response strategies
Agne Prasauskas, Adriane Rogers |
| 9:50 | 253 | Wyoming's first tick surveillance and pathogen testing program: Initial collections & Colorado Tick Fever Virus infection results
Mikenna Smith, Kelsey Mitchell |

Vector and Vector-borne Disease Management: A European Perspective Symposium I

Moderator: Alexandra Chaskopoulou

8:30 AM - 10:00 AM

Meeting Room: 201

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| 8:30 | 212 | Integrated Mosquito Management (IMM) in Europe and the role of the European Mosquito Control Association
Sandra Gewehr |
| 8:45 | 213 | There is nothing simple about vector control
Marieta Braks |
| 9:00 | 214 | Mosquito control in response to local dengue transmission in Europe
Grégory L'Ambert |
| 9:15 | 215 | Identifying mosquitoes for surveillance and control in Europe
Filiz Gunay, Nathan Burkett-Cadena, Lindsay Campbell, Barry Alto |
| 9:30 | 216 | In search of new tools towards improving sand fly management strategies in Europe
Alexandra Chaskopoulou |
| 9:45 | 217 | Eighteen years of pan-European vector mapping |

8:30 AM - 10:45 AM **Exhibits Open**
Hall A

10:00 AM - 10:45 AM **Break in Exhibit Hall**
Hall A
Sponsored By
SC Johnson

10:45 AM - 12:15 PM*
**unless otherwise noted*

Genetic Studies of Vector Species
Moderator: Colby Colona
10:45 AM - 12:15 PM
Meeting Room: 209

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|--------------|------------|---|
| 10:45 | 279 | Elucidating the molecular epidemiology of West Nile Virus in Southern Nevada
Austin Tang, William Bendik, Vivek Raman, Chad L Cross, Louisa Messenger |
| 10:55 | 280 | Amplicon sequencing identifies novel insecticide resistance mutations associated with changes to PBO synergy in pyrethroid-resistant <i>Anopheles gambiae</i> s.l. from the Democratic Republic of Congo
Bethanie Pelloquin, Fiacre Agossa, Holly Acford-Palmer, Tiffany Clark, Sheila Ogomoa, Miriam Williams, Narcisse Basosila, Francis Watsenga, Emery Metelo, Richard M. Oxborough, Yibayiri Osee Sanogo, Ferdinand Ntoya, Emma Collins, Sophie Moss, Charles McLoughlin, Monica Campos, Jody Phelan, Mark Rowland, Thomas Walker, Noboru Minakawa, Emile Zola Manzambi, Eric Mukomena, Susana Campino, Louisa Messenger |
| 11:05 | 281 | Genetic Structure and Evidence of Introgression in Saudi Arabian <i>Aedes aegypti</i> Populations
Abadi M. Mashlawi, Dario Balcazar, Andrea Gloria-Soria, Cathy Walton |
| 11:15 | 282 | Identification of the 1016Gly and 989Pro knockdown resistance mutations in Florida, USA <i>Aedes aegypti</i>
Neil Sanscrainte, Alden Estep, Frieda Lamberg, Darrel McStoots, Susan Gosselin |

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| 11:25 | 283 | Identifying key olfactory co-receptors <i>Aedes aegypti</i> use to distinguish attractive human skin commensal communities
Kaylee Marrero, John S. Castillo, Andre L. Da Costa Silva, Matthew DeGennaro |
| 11:35 | 284 | Operational Relevance and Efficacy of Microplate Assays for Evaluating Potential Naled Resistance in Lee County, Florida
Nick Cotter |
| 11:45 | 285 | Overexpression of cytochrome P450s and cuticular genes may be driving reduced PBO synergy in intensely resistant populations of the major malaria vector <i>Anopheles coluzzii</i>
Bethanie Pelloquin, Moussa Sylla, Noboru Minakawa, Mark Rowland, Louisa Messenger |
| 12:05 | 287 | Whole transcriptome sequencing reveals distinct insecticide resistance mechanisms across the lifespan of the major malaria vector <i>Anopheles arabiensis</i>
Bethanie Pelloquin, Jackline Martin, Nancy Matowo, Ecaterine Edith Vamos, Natacha Protopopoff, Noboru Minakawa, Louisa Messenger |

Insecticide Resistance Workshop: Review of Semi-Field Trial Best Practice Document

Moderator: Laura Harrington, Aine Lehane

10:45 AM - 12:15 PM

Meeting Room: 201

Integration of Drone Technology to Protect Public Health Symposium

Moderator: Joel Buettner

10:45 AM - 12:15 PM

Meeting Room: 208 B

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|-------|-----|---|
| 10:45 | 266 | Enhancing Vector Control Through UAS Integration: Precision Mosquito Management with PAMAS
Jose Martin |
| 10:57 | 267 | Using Unmanned Aerial Systems (UAS) to treat inaccessible habitat that supports the production of mosquitoes in Benton County.
Rodolfo Cruz |
| 11:09 | 268 | Introducing drone larviciding to North Carolina: Brunswick County goes airborne
Michael Doyle, Abram Young |
| 11:45 | 263 | AMCA Drone Program Update 2025 |

Larval Vector Control

Moderator: Norbert Becker

10:45 AM - 12:15 PM

Meeting Room: 208 A

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|-------|-----|---|
| 10:45 | 271 | A Novel Eco friendly Control of Arboviruses Vectors (<i>Aedes aegypti</i> and <i>Ae. albopictus</i>) Using <i>Trachyspermum ammi</i> seed extract -Mediated Silver Nanoparticles (AgNPs)
Shabab Nasir |
| 10:55 | 272 | Field evaluation of ground-based ULV liquid larvicidal effects on <i>Aedes aegypti</i> larvae in Oxitec Release Boxes
Catherine Pruszyński, Eldred Wirsching |
| 11:05 | 273 | Monitoring of resistance in <i>Aedes aegypti</i> population from different habitats against different insecticides
Shabab Nasir, Awais Chatha |
| 11:15 | 105 | Lessons learned from a crisis response workshop session for local mosquito control programs throughout Puerto Rico
Angana Roy, Noemi Martinez-Tull, Amarilys Asencio-Torres |
| 11:25 | 275 | Evaluation of Altosid XR, Tekko 0.2G, and 0.5G for <i>Culex</i> larval control under field and semi-field conditions in suburban Cook county, IL
Patrick Irwin, jacqueline Sanderson |
| 11:35 | 276 | Exploring Mosquitofish as an Operational Tool for Mosquito Control
Rachel Bales, Atom Rosales, Suzanne Li, Keira Lucas |
| 11:45 | 277 | Preliminary evaluation of toxicity of two essential oils to <i>Aedes taeniorhynchus</i> larvae.
Lawrence Hribar |
| 12:05 | 278 | The use of microbial control agents and copepods in an integrated control programme against the Asian Tiger Mosquito <i>Aedes albopictus</i> in Germany
Norbert Becker |

12:15 PM - 1:45 PM

Lunch On Own

1:45 PM - 3:15 PM*

**unless otherwise noted*

Danger From Below: Challenges and Solutions to Control Mosquito Populations in Catch Basins Symposium

Moderator: Tianyun Steven Su

1:45 PM - 3:15 PM

Meeting Room: 208 A

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|-------------|------------|---|
| 1:45 | 303 | The History and Efficacy of Sumilarv
Steve Gullickson |
| 1:55 | 304 | Storm water catch basins: The bane of mosquito control districts
Patrick Irwin |
| 2:05 | 305 | Efficacy trials of Sumilarv in northwest Riverside County, CA
Angela Caranci |
| 2:15 | 306 | A case for looking beyond emergence inhibition
Justin Harbison |
| 2:25 | 307 | Efficacy trials of Sumilarv in Grand Island, Nebraska
Thomas Janousek |
| 2:35 | 308 | A novel approach to drain management
James Will |
| 2:45 | 309 | Efficacy Trials Using Sumilarv in Lee County, Florida
Constance Darrisaw, David Hoel, Aaron Lloyd |
| 2:55 | 310 | Comparative activity and efficacy of Sumilarv 0.5G in simulated catch basins against urban mosquito species
Tianyun Steven Su |

New Vector Control Tools: UAS and Artificial Intelligence

Moderator: Greg Williams

1:45 PM - 3:15 PM

Meeting Room: 202

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|-------------|------------|--|
| 1:45 | 288 | Challenges of Operating Unmanned Aerial Systems in Rural Areas
Rick Ortiz, iver Romero, Gregorio Alvarado, Edward Prendez, Kim Hung, Marko Petrovic |
| 1:55 | 289 | Improving IDX artificial intelligence vector identification tool for the identification of cryptic species: Culex pipiens pipiens and Culex quinquefasciatus
Autumn Goodwin, Roy Faiman, Hannah Markle, Allysa Schultz, Sameerah Talafha, Thomas Jenkins, Margaret Glancey, Andrea Gloria-Soria, Norah Saarman, Tristan Ford |

- 2:05 290 Predicting Geographic Expansion and Genetic Adaptation of *Aedes aegypti* in Southern Nevada using Machine Learning Techniques**
Karen L. Figueroa Chilito, William Bendik, Vivek Raman, Chad L Cross, Louisa Messenger
- 2:15 291 A revised model to predict Rift Valley fever virus transmission risk for livestock**
Assaf Anyamba, Lory Willard, Heidi Tubbs, Karlyn Harrod, Bhaskar Bishnoi, Stephanie S. Uz, Claudia Pittiglio, Seth Gibson
- 2:25 292 From Bites to Bytes: The opportunities, successes, and challenges of mosquito Big Data**
Samuel Rund
- 2:35 293 Machine Learning and Artificial Intelligence for Increasing Mosquito Surveillance Efficiency: An Update on the *Aedes* Egg Counter App**
Kyndall Dye-Braumuller, Andre L. Da Costa Silva, Jun Zhou, Matthew DeGennaro, Sarah M. Gunter, Melissa S. Nolan
- 2:45 294 Technical progress of Scout, an imaging attachment using artificial intelligence for remote automated assessment of vector abundance and species diversity in mosquito traps**
Jewell Brey, Jaykob Cave-Stevens, Hannah Markle, Khushi Gupta, Sameerah Talafha, Thomas Jenkins, Vicky Ikonomidou, Sanket Padmanabhan, Mohan Pushadapu, George Constantine, Tristan Ford, Roy Faiman, Autumn Goodwin
- 2:55 296 Using Birdsong Surveillance and Machine Learning via BirdNET to Help Identify Reservoirs of West Nile Virus**
Heather Penton, Mark Myer, Nicholas DeLisi, Kevin A. Caillouet

Socio-behavioral aspects of sustainable public health vector control Symposium

Moderator: Andrew Lover

1:45 PM - 3:15 PM

Meeting Room: 208 B

- 1:45 297 Project Listen: Investigating the Experiences and Challenges of Public Health & Vector Control Professionals in New England**
Johanna Ravenhurst, Nora Finnerty, Genesis Medina, Ariel Scalise, Emilia Zaentz, Sarah Goff, Andrew Lover

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|------|-----|---|
| 1:57 | 298 | Training and Professional Development Needs of Vector Surveillance and Control Professionals
Aine Lehane, Emily Mader, Laura Harrington |
| 2:09 | 299 | Let's talk about ticks: The developing strategies for tick communication
Yanitza Cruz Crespo, Shannon Cruz, Emily Struckhoff, Maria Luisa Tejada de Rivero Sawers, Erika Machtinger |
| 2:21 | 300 | Extension Ticks All the Boxes: Navigating Extension Needs and Public Health Collaborations in the Ohio River Valley
Erika Machtinger, Emily Struckhoff, Olivia Bognanni, Drew Lysaker, Indira Chakravarti |
| 2:33 | 301 | Using psycho-social approaches to advance acceptability of effective tick control strategies
Heather Kopsco, Linghui Wu, Sung-Joo Lee, Aidan Lee, Yilong Huang, Maria Diuk-Wasser |

3:15 PM - 3:45 PM **Break**
Sponsored By
Veseris

3:45 PM - 5:15 PM*
**unless otherwise noted*

Arboviral Surveillance throughout the United States and Surrounding Areas

3:45 PM - 5:15 PM
Meeting Room: 208 A

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| 4:00 | 320 | Arboviral Surveillance in Hawaii: Past Experience and Future Initiatives
Nathan Tan, Youki Yamasaki, Jeomhee Hasty, Myra Ching-Lee, Remedios B. Gose, Kristen Taniguchi, Edward P. Desmond, Sarah Kemble, Matthew Kurano |
| 4:15 | 321 | Arboviral Surveillance in Maricopa County, Arizona
James Will, John Townsend |
| 4:30 | 322 | Arboviral Surveillance in St Johns County, Florida
Steve Peper, Edward Zeszutko |
| 4:45 | 323 | Methods, Challenges, and Opportunities for Arboviral Surveillance in the US Tropical Islands of the Caribbean and Pacific
Luis Quintanilla, Grayson Brown, Nexilianne Borrero-Segarra |

Arboviral Surveillance throughout the United States and Surrounding Areas Symposium

Moderator: Steve Peper

3:45 PM - 5:15 PM

Meeting Room: 208 A

Social Media Symposium

Moderator: Nicole Graves

3:45 PM - 5:15 PM

Meeting Room: 202

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|-------------|------------|---|
| 3:45 | 311 | Ring Neighbors, Verified Agency
Nicole Graves |
| 4:00 | 312 | Neighbors love free stuff: Using Nextdoor as an outreach platform
Rachel Curtis-Robles, Kacie Ring, Tara Roth, Angie Nakano, Arielle Crews, Theresa Shelton |
| 4:15 | 313 | Maximizing Community Engagement and Disease Prevention Through Social Media
Veronica Rodriguez, Jennifer Ramírez López |
| 4:30 | 314 | Leaning on Younger, Cooler Seasonal Staff for Social Media Content
Alex Carlson, Kathy Beadle |
| 4:45 | 315 | Building Bridges: Effective Communication Practices for Organizations
Jenifer McBride, Mark McCreary |
| 5:00 | | Roundtable Discussion |

Vector-Borne Diseases and Interventions on Vectors

3:45 PM - 5:15 PM

Meeting Room: 208 B

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|-------------|------------|---|
| 3:45 | 324 | Integrating eDNA and qPCR to distinguish between <i>Aedes aegypti</i> and <i>Aedes sierrensis</i> reproduction sites
Eric Haas-Stapleton, Annika Olson, Miguel Barretto, Ryan Clausnitzer |
| 4:05 | 326 | Predicting <i>Aedes triseriatus</i> Parity and Age with Mid-Infrared Spectroscopy
Charlie Sither, Mark Rothermund, Bradley Guilliams, Scott Huffman, Brian Byrd |
| 4:15 | 327 | Effects of seasonality and developed land cover on <i>Culex</i> mosquito abundance and microbiome diversity |

Jiayue (Gabriel) Yan, Kirk Green, Kylee Noel, Chang-Hyun Kim, Chris Stone

- 4:25 328 A Cornucopia of Blood: Host Preference of *Culex nigripalpus* in Collier County**
Gabriella Steele, Lawrence E. Reeves, Robert Straser, Rebecca Heinig
- 4:35 329 Changes in reported local mosquito surveillance and control capacity between 2017 and 2023**
Angana Roy
- 4:45 330 Base Everything on Surveillance**
Rick Chapoose
- 4:55 331 Lee County Mosquito Control District's Response to Imported Oropouche Virus in Lee County, Florida.**
Aaron Lloyd, David Hoel
- 5:05 332 How does concurrent ingestion of microfilaria and virus enhance virus transmission**
Michael Turell, Jefferson Vaughan

6:00 PM - 7:00 PM *Pre-Banquet Social*
Terrace
Sponsored By
Azelis

7:00 PM - 9:30 PM *Banquet*
Ballroom A
Sponsored By
Oxitec

8:30 AM - 9:30 AM *AMCA Annual Members Meeting*
202

9:30 AM - 12:30 PM *Board of Directors Meeting*