THE 17TH ARBOVIRUS SURVEILLANCE AND MOSQUITO CONTROL WORKSHOP
AND THE FMCA’S NE REGIONAL MEETING
(18 CEUs)

Sponsored by AMCD, USDA/CMAVE & FMCA’s NE REGION

Being held at AMCD’s New Base Station Complex at:
120 EOC Drive, St. Augustine, Florida, 32092

MARCH 30-April 1, 2020
www.amcdsjc.org

PROGRAM AGENDA (Tentative)

MONDAY, MARCH 30, 2020

7:30am  Registration … AMCD Staff

PANEL SESSION:

Moderator: Dr. Rui-De Xue, Executive Director, AMCD, St. Augustine, FL

8:05am  Welcome & Introduction … Mrs. Jeanne Moeller, Chairperson AMCD’s Board of Commissioners; Dr. Ken Linthicum, Center Director, USDA/CMAVE, and Mr. Donald Powers, President of the FMCA

8:10am  KEYNOTE SPEAKER: Update on mosquito-borne arbovirus diseases in the U.S.A. … Dr. Lyle Petersen, Director, Division of Vector-borne Diseases, CDC, Ft. Collins, CO

8:40am  KEYNOTE SPEAKER: New insecticides and repellents for mosquito control … Dr. Jeffrey R. Bloomquist, Term & UF Research Foundation Professor, Department of Entomology and Nematology, Emerging Pathogens Institute, University of Florida, Gainesville, FL

9:10am  GUEST SPEAKER: Overview of the IVCC for vector control product development … Dr. Daniel Strickman, IVCC Consultant, Seattle, WA

9:40 A.M. - BREAK

INTERNATIONAL SESSION:

Moderator: Dr. Ken Linthicum, Center Director, USDA/CMAVE, Gainesville, FL

10:00am  Mosquito control programs in Jeddah, Saudi Arabia … Dr. Abdul Ghaffar A. Nawawi, General Supervisor, Pest Control, Alfahhad, Saudi Arabia , Dr. Hany K. Abdelaziz, Manager, Pest Control, Dallah, Jeddah, Saudi Arabia , Mr. Mohammed H. Alzahrani & Eng. Fahhad S. Alzahrani , Jeddah Municipality, Saudi Arabia.

10:20am  Dengue vector mosquito control in Taiwan … Dr. Err-Lieh Hsu, Emeritus Professor, National Taiwan University, Taipei, Taiwan & Dr. Hsiu-Hua Pai, Professor & Vice President, Kaohsiung University, Kaohsiung, Taiwan

10:40am  Dengue vector mosquito control in Thailand … Dr. Pattamaporn Kittayapong, Professor, Mahidol University, Bangkok, Thailand
11:00 am Overview of nanotechnology for repellent against mosquitoes ... Dr Peyman Ghaffari, Chair of COST Action CA 16227 (IMAAC) www.cost.eu/actions/CA16227 & Center for Mathematics, Fundamental Applications and Operations Research (CMAF-CIO), Faculdade de Ciências da Universidade de Lisboa, Campo Grande, 1749-016. Lisboa / Portugal

11:20 am ATSB and bait stations for control of malaria vector mosquitoes in Mali ... Dr. Gunter Muller, Professor, Malaria Research & Training Center, University of Bamako, Mali & Hebrew University, Israel

11:40 am Overview of mosquito control program in Italy ... Dr. Asghar Talbalaghi, Director of Italian Mosquito Control Association and Coordinator of Mosquito Control Operations - Alessandria, Italy

11:55 am Water treatment and its impact on mosquito control ... Dr. Kiril Lisichkov, Full Professor, Faculty of Technology and Metallurgy, University Ss. Cyril and Methodius, Skopje, N. Macedonia

12:10 pm New products from UNIVAR for 2020 ... Mr. Jason E. Conrad, Industry Specialist, UNIVAR

12:20 PM - LUNCH BREAK (in the Helicopter Hangar) (provided by UNIVAR)

PROGRAMS & ASSOCIATIONS:

Moderator: Dr. John C. Beier, Professor & Section Chair, Department of Public Health & Environmental Sciences, University of Miami, Miami, FL

1:10 pm Overview of USDA/CMAVE programs ... Dr. Kenneth Linthicum, Center Director, USDA/CMAVE, Gainesville, FL

1:30 pm The Deployed Warfighter Protection Program and DoD Pest Management Research ... Dr. Gabriela Zollner and MAJ Erica Lindroth, Armed Forces Pest Management Board, Silver Spring, MD

1:50 pm Update on the SOVE ... Dr. Lyle Petersen, President of the SOVE

2:05 pm The Florida DACS mosquito control program update ... Ms. Marah Clark, Environmental Administrator, Entomology and Pest Control Section, DACS, Tallahassee, FL

2:25 pm Overview of DACS/DPI Bureau of Entomological program ... Dr. Leroy Whilby, Chief, Bureau of Entomology, Nematology, and Plant Pathology, DACS/DPI, Gainesville, FL

2:45 pm Update on the FMCA ... Mr. Donald Powers, President of the FMCA, and Sales Representative, FMCA

3:00 pm Psychoda alternata, a public health pest emerging from newly potted plants at an ornamental Nursery ... Dr. Matteo Pallotini, Dr. Roberto Pereira, Dr. Lee Bloomcamp, and Dr. Phil Koehler, UF/ Department of Entomology, Gainesville, FL

3:15 pm From Texas to Florida: Public health concerns of arbovirus. Dr. Steven Peper, Molecular Entomologist, AMCD, St. Augustine, FL

3:30 pm Surveillance for Amblyomma maculatum (Acari: Ixodidae) and Rickettsia parkeri (Rickettsiales: Rickettsiaceae) in the state of Delaware, and their public health implications ... Presenter: Dr. Lauren Maestas, Research Entomologist, USDA/CMAVE, Gainesville, FL

3:45 P.M. - BREAK
DISEASE SURVEILLANCE:

Moderator: Dr. Dongmin Kim, University of Florida, Florida Medical Entomology Laboratory, Vero Beach, FL

4:00 pm The Rift Valley Fever virus, risks and dangers to Americas ... Dr. Michael Turell, Senior Arbovirologist (retired), US Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD

4:20 pm Update on the Keystone virus in Florida ... Dr. J. Glenn Morris, Jr. Professor & Director, Emerging Pathogens Institute, UF, Gainesville, FL

4:40 pm Automated real time collection & high-fidelity identification of vectors ... Dr. Dongmin Kim, Post Doctor, Dr. Nathan Burkett-Cadena, Assistant Professor, University of Florida, Florida Medical Entomology Laboratory, Vero Beach, FL, Dongmin Kim, Terry DeBriere, Satish Cherukumalli, Greg White, Ary Faraji

5:00 pm Arbovirus surveillance report and dengue activity in Florida, 2019 ... Dr. Andrea Morrison, Vector-borne Disease Surveillance Coordinator, Bureau of Epidemiology, DOH, Tallahassee, FL

5:20 pm Variation in vector competence for flaviviruses within and between populations of Aedes aegypti ... Dr. Derrick Mathias, Assistant Professor, University of Florida/IFAS/FMEL, Vero Beach, FL

5:40 pm Lessons in public health practice: integrating mosquito research into mosquito surveillance and control operations ... Dr. John C. Beier, Professor & Chief, Division of Environment & Public Health, Dept. of Public Health Sciences, University of Miami, Miller School of Medicine, Miami, FL

6:00 pm End of session

6:10 pm DINNER & LECTURE (HELICOPTER HANGAR) (ALL PARTICIPANTS): Mosquito larval physiological characteristic in relation to larval control ... Dr. Paul Linser, Professor, University of Florida, Whitney Laboratory, St. Augustine, FL

TUESDAY, MARCH 31, 2020

BIOLOGY & ECOLOGY:

Moderator: Dr. Jerry Hogsette, Lead Scientist & Research Entomologist, USDA/ARS/CMAVE, Gainesville, FL

8:20 am Using the iNaturalist app to assist with mosquito identification ... Dr. Eva Buckner, Assistant Professor & State Extension Specialist, UF/IFAS Florida Medical Entomology Laboratory, Vero Beach, FL

8:40 am Culicoides spp. population dynamics at the Lower Suwannee Wildlife Refuge and nearby horse boarding facility ... Dr. Dan Kline, Research Entomologist, Matthew (Haze) Brown and Tyler Carney, USDA/CMAVE, Gainesville FL

9:00 am Immature mosquito surveillance in urban areas based on 311 citizen complaint calls ... Dr. Andre Wilke, Post Doctorate Associate, University of Miami, Miami, FL

9:20 am Spatial patterns of arbovirus transmission in Northeastern Florida ... Dr. Lindsay O. Campbell, Assistant Professor, UF/IFAS/FMEL, Vero Beach, FL

9:40 am Update on the American Mosquito Control Association ... Dr. Ary Faraji, President of the AMCA, Director /Entomologist, Salt Lake City Mosquito Control District, Salt Lake, UT
10:00 A.M. - BREAK

ATTRACTION/ TRAP/ REPELLENT:

Moderator: Dr. Daniel Kline, Research Entomologist, USDA/CMAVE, Gainesville, FL

10:20am Final testing of an attract and kill device for stable flies ... Dr. Jerry Hogsette, Lead Scientist & Research Entomologist, USDA/ARS/CMAVE, Gainesville, FL

10:40am Update on repellents for skin and clothing ... Dr. Ulrich Bernier, Research Scientist, USDA/ARS/CMAVE, Gainesville, FL

11:00am Spatial repellent emanators and residuals on military materials in a variety of environments” ... Co-authors are many, but maybe just include our immediate group: Seth C. Britch, Kenneth J. Linthicum, Daniel L. Kline, Robert L. Aldridge, Frances V. Golden, Bianca J. Moreno, Barbie E. Bauer, Rachel M. Shepherd, J.D. Kline. USDA/CMAVE, Gainesville, FL

11:20am Evaluation of spatial repellents against Aedes aegypti mosquitoes ... Dr. Muhammad Farooq, Field Biologist, AMCD, St. Augustine, FL

11:40am Comparison of AGO & In2Care traps for control of Aedes mosquitoes ... Mrs. Dena Autry, Assistant Supervisor, AMCD, St. Augustine, FL

11:50pm New products and technology from ADAPCO for 2020 ... Mr. Chris Pederson, ADAPCO, Sanford, FL

12:00 P.M. - LUNCH BREAK (provided by ADAPCO & FMCA)

THE FMCA’S NORTHEAST REGIONAL ROUNDTABLE MEETING ... Dr. Peter Jiang, FMCA’s NE Regional Director

LARVAL & ADULT CONTROL:

Moderator: Dr. J.R. Bloomquist, Professor, Department of Entomology and Nematology, EPI, University of Florida, Gainesville, FL

1:00pm Operational sterile male releases in St. Augustine ... Dr. Daniel A. Hahn, Professor, Department of Entomology & Nematology, University of Florida, Gainesville, FL, Chao Chen, Ken Linthicum, Seth Britch, and Bob Aldridge, Vindhya Aryaprema, Courtney Cunningham, Rui-De Xue, Whitney Qualls

1:20pm Field evaluation of Wolbachia infected male mosquitoes against natural populations of Aedes albopictus and Aedes aegypti ... Dr. Stephen Dobson, Professor, Department of Entomology, University of Kentucky & MosquitoMate, Inc. Lexington, Kentucky

1:40pm Automated sex sorter and mass release technology for SIT mosquitoes ... Mr. Ralph Breslauer, CEO, Senecio, St. Augustine, FL

2:00pm Aerial capability for mosquito control in Florida ... Mr. Mark Latham, Director, Manatee County Mosquito Control District, Palmetto, FL

2:20pm Collier Mosquito Control District: UAS program overview ... Mr. Peter Brake, Director of Technical Development, Collier Mosquito Control District, Naples, FL
MGK’s new products for mosquito control ... Dr. Jennifer Williams, Entomologist, MGK, MN

3:00 P.M. - BREAK

INSECTICIDES AND RESISTANCE:
Moderator: Dr. Uli Bernier, Research Scientist, USDA/ARS/CMAVE

3:20pm  Excito-repellency of Transfluthrin against mosquitoes in Thailand ... Mr. Chutipong Sukkanon, Ph.D. student, Kasetsart University, Bangkok, Thailand

3:40pm  Persistence of malathion resistance in Aedes albopictus after 16 years without usage for mosquito control in Gainesville, Florida ... Dr. Peter Jiang, Entomologist & Director, Gainesville

3:55pm  Relating kdr mutations to loss of operational control in Aedes aegypti ... Dr. Neil Sanscrainte, Molecular Biologist, USDA/CMAVE, Gainesville, FL

4:10pm  Differential toxicity of insecticides to Apis mellifera and Aedes aegypti ... Dr. Hussein Sanchez-Arroyo, Dr. Roberto Pereira, Dr. Rui-De Xue, and Dr. Phil Koehler, UF/Dept. of Entomology, Gainesville, FL

4:25pm  Differential toxicity of insecticide mixtures to Apis mellifera and Aedes aegypti ... Dr. Bettina Moser, Dr. Roberto Pereira, Dr. Rui-De Xue, and Dr. Phil Koehler, UF/Dept. of Entomology, Gainesville, FL

4:40pm  Resistance management by using ATSB ... Dr. Rui-De Xue, Director of AMCD, St. Augustine, FL

4:50pm  A new larvicide evaluation in the laboratory and semi-field ... Mr. Kai Blore, Biotechnician, AMCD, St. Augustine, FL

5:00pm  Investigation of dog heart worm detection in mosquitoes ... Miss Nicole Abruzzo, Student, Dr. Phillip Kaufman, Professor, Dept. of Entomology & Nematology, University of Florida, Gainesville, FL

5:15 P.M. END OF SESSION

WEDNESDAY, APRIL 1, 2020

OTHER PROGRAM:
Moderator: Dr. Ary Faraji, Director, Salt Lake City Mosquito Control Abatement, Salt Lake, UT

8:00am  Good laboratory practice (GLP) in mosquito control product evaluations ... Dr. Karl Malamud-Roam, Vector Control Consultants, CA

8:20am  Natural repellents for textiles and paint for walls in the frame of COST Action CA 16227 ... Dr. Ana M. Grancariz, Professor, Prilaz Baruna Filipovica, Croatia

8:40am  Brevard’s EEE Task Force: streamlining vector control operations to reduce transmission potential ... Mr. Joseph M. Faella, Department Director, R. Christos McDowell, Mike Buono, Steve Whitt, Jonathan Koagel, Keith Minner, Brevard County Mosquito Control, Titusville, FL

9:00am  Overview of Volusia County Mosquito Control Program ... Mrs. Sue Bartlett, Director of Volusia County Mosquito Control District, New Smyrna Beach, FL
9:20am  High pressure system AirStrike ... Mrs. Nicole Williams, Application Dynamics, Florida

9:40am  Service request, service answers, and apps at AMCD ... Mr. Richard Weaver, Business Manager, AMCD, St. Augustine, FL

10:00 A.M. - BREAK

10:20am  Surveillance report of the populations of *Aedes albopictus* and *Aedes aegypti* in St. Johns County, FL ... Mr. Steven T. Smoleroff, Biotech, Mr. Morgan Duett, MC Technician, and Dr. Rui-De Xue, Director, AMCD, St. Augustine, FL

10:40am  AMCD collaboration project update ... Dr. Whitney Qualls, Entomologist/Scientific Manager, AMCD, St. Augustine, FL

11:00am  Laboratory and field evaluation of Spartan Mosquito Eradicator against *Aedes albopictus* ... Dr. Vindhya Aryaprema, Biologist, AMCD, St. Augustine, FL

11:20am  Overview of the AMCD’s education program ... Mr. Edward Zeszutko, Education Specialist, AMCD, St. Augustine, FL

11:40am  Overview of UF/IFAS Extension projects under way in collaboration with Brevard County Mosquito Control ... Mr. Joe Walter, Agricultural Agent, UF/IFAS, Cocoa, FL & R. Christos McDowell, Steve Whitt, Jonathan Koagel, Brevard County Mosquito Control, Titusville, FL

12:00pm  New products from Central Life Sciences for 2020 ... Mrs. Kelly Deutsch, Central Life Sciences

12:10 P.M. - LUNCH BREAK (provided by CENTRAL LIFE SCIENCES)

1:00pm  Tour of the AMCD facility

2:00pm  AMCD program review committee meeting