46th Annual SOVE Conference

Albuquerque, New Mexico, USA
September 27-October 1, 2015
Conference Sponsors

SOVE APPRECIATES THE PREMIER SPONSORS FOR THEIR CONTRIBUTIONS TO OUR CONFERENCE AND EVENTS:

Mir Mulla, Ph.D.
Central Life Sciences
Clarke Mosquito Control
Valent BioScience Corp.
ADAPCO, Inc.
AMVAC
Bayer Environmental Sciences
MGK Company
Culinex
FMC
Dhillon Land Co.
SCIENTIFIC PROGRAM

46th ANNUAL CONFERENCE OF SOCIETY FOR VECTOR ECOLOGY
ALBUQUERQUE, NEW MEXICO
SEPTEMBER 27 – OCTOBER 1, 2015

SUNDAY – SEPTEMBER 27, 2015

2:00 – 6:00 REGISTRATION

4:00 – 5:30 BOARD MEETING
SANDIA MEETING ROOM #3

*NO OTHER ACTIVITY*
*FULL BREAKFAST IS COMPLIMENTARY EVERYDAY*

MONDAY – SEPTEMBER 28, 2015

8:00 – 8:05 WELCOME
Michael Kaufman kaufma15@msu.edu
Vice President

8:05 – 8:10 AWARD PRESENTATIONS
Michael Kaufman kaufma15@msu.edu
Vice President
Bulent Alten kaynas@hacettepe.edu.tr
President

8:10 – 8:15 ANNOUNCEMENTS
Major S. Dhillon mdhillon@northwestmvcd.org
Secretary-Treasurer
8:15 – 8:45  **PRESIDENTIAL ADDRESS**  
Bulent Alten  
kaynas@hacettepe.edu.tr  
Hacettepe University, Turkey

8:45 – 9:20  **KEYNOTE SPEAKER**  
Phil Lounibos  
lounibos@ufl.edu  
Where vectors collide: Determinants of co-existence or exclusion in invasive mosquitoes

9:20 – 9:25  **WALTER LEAL**  
wsleal@ucdavis.edu  
International Congress of Entomology 2016

9:25 – 9:40  **REBECCA TROUT FRYXELL**  
rfryxell@utk.edu  
Ticks: ESA’s tick IPM recommendations

9:40 – 9:55  **REPORTS FROM OVERSEAS SOVE REGIONS:**  
**EURO SOVE**  
Eva Veronesi  
eva.veronesi@uzh.ch

**BRAZILIAN SOVE**  
Paulo Pimenta  
pimenta@cpqrr.fiocruz.br

**ASIAN SOVE**  
Rui-De Xue  
xueamcd@gmail.com  
Qiyong Liu  
liuqiyong@icdc.cn

9:55 – 10:15  **BREAK**

10:15 – 12:15  **SYMPOSIUM 1: MODELING IN VECTOR ECOLOGY RESEARCH**

**Moderator:** Daniel E. Dawson  
dan.dawson@ttu.edu  
The Institute of Environmental and Human Health, Texas Tech University, Lubbock, TX

10:15  Beyond forecasting: Modeling for decision support, policy, and translational research  
**Eric Lofgren**  
lofgrene@vbi.vt.edu  
Virginia Bioinformatics Institute, Virginia Tech University, Blacksburg, VA
Getting back to basics: The role of mechanistic models in identifying drivers of spatiotemporal variation in vector-borne disease transmission

Alex Perkins taperkins@nd.edu
Eck Institute for Global Health, University of Notre Dame, Notre Dame, IN

Modeling vector-borne pathogens: Issues of scale

Florida Medical Entomology Laboratory, University of Florida, Vero Beach, FL

SkeeterBuster, a detailed model of Aedes aegypti populations: Past, present, future

Christian Gunning cegunnin@ncsu.edu, K. Okamoto, E.C. Griffiths, A.L. Lloyd and F. Gould
North Carolina State University, Raleigh, NC

Why can't we still predict West Nile virus outbreak

Krisztian Magori kmagori@gmail.com
Eastern Washington University, Cheney, WA

A spatially-explicit population model for Culex tarsalis in the Southern High Plains built with the program R/Netlogo interface

Daniel E. Dawson dan.dawson@ttu.edu and Christopher J. Salice
The Institute of Environmental and Human Health, Texas Tech University, Lubbock, TX

Predicting the introduction and transmission of Rift Valley Fever virus in the U.S.

Andrew Golnar agolnar@tamu.edu and Gabe Hamer ghamer@tamu.edu
Texas A&M University, College Station, TX

LUNCH

SYMPOSIUM 2: VECTOR-MICROBE INTERACTIONS
Moderators: Dagne Duguma duguma@ufl.edu
Florida Medical Entomology Lab, University of Florida, Vero Beach, FL
Michael Kaufman kaufma15@msu.edu
Michigan State University, East Lansing, MI

1:30 Effects of leaf condition on larvae-microbial interactions in water-filled tree holes
Beth Norman bcheever@msu.edu
Michigan State University, East Lansing, MI

1:45 Unexpected discoveries from our tick microbiome projects
Rebecca Trout Fryxell rfryxell@utk.edu
Dept. of Entomology and Plant Pathology, University of Tennessee, Knoxville, TN

2:00 Changing ecology of tick-borne diseases in the Southern US: A new paradigm
Charles Apperson apperson@ncsu.edu, M. Kakumanu, L. Ponnusamy, H. Sutton, W. L. Nicholson, and S. R. Meshnick
North Carolina State University, Raleigh, NC

2:15 Improving mosquito fitness through insulin signaling
Michael Riehle mriehle@ag.arizona.edu
The University of Arizona, Tucson, AZ

2:30 Ecological interactions of larval mosquitoes and their control with microbiota in aquatic ecosystems
Dagne Dugma duguma@ufl.edu, C. Wilson and W. E. Walton
University of Florida/IFAS: Florida Medical Entomology Lab, Vero Beach, FL, Dept. of Soil and Water Sciences, Gainesville, FL; Dept. of Entomology, University of Calif. Riverside, CA

2:45 Friend-foe interactions: Do gut fungal and bacterial communities influence susceptibility of Aedes mosquitoes to La Crosse virus?
Ephantus Muturi emuturi2@illinois.edu, Chang-Hyun Kim and Allison Hansen
Illinois Natural History Survey, Champaign, IL

3:00 Ecological genomics view of the mosquito gut
Jiannong Xu jxu@nmsu.edu
New Mexico State University, Las Cruces, NM

3:15 – 3:45 BREAK
3:45 – 5:15 SYMPOSIUM 3: INNOVATIONS IN VECTOR CONTROL
Moderator: Stephen Dobson sdobson@uky.edu
Dept. of Entomology, Univ. of Kentucky, Lexington, KY

3:45 Innovation: An embarrassment of riches and nowhere to spend them
Dan Strickman dan.strickman@gatesfoundation.org
Global Health Program, Bill & Melinda Gates Foundation

4:00 Requirements and challenges faced by new vector control paradigms: A focus on spatial repellents
Nicole Achee nachee@nd.edu
Eck Institute for Global Health, Dept. of Biological Sciences, University of Notre Dame, Notre Dame, IN

4:15 Combining IIT and SIT for a powerful and safe synergistic approach to mosquito suppression
Rosemary Susan Lees r.s.lees@iaea.org, Dongjing Zhang, Jeremie RL Gilles and Kostas Bourtzis
Insect Pest Control Section, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Seibersdorf, Austria

4:30 Impact of irradiation on vector competence for dengue and chikungunya viruses among *Aedes aegypti* and *Ae. albopictus* females
Eva Veronesi eva.veronesi@uzh.ch, Fabrizio Balestrino, Alexander Mathis, Jeremie Gilles and Anna-Bella Failloux
University of Zurich Foundation, Switzerland; Institute Pasteur, France and International Atomic Energy, Austria

4:45 Effectiveness of autodissemination stations containing pyriproxyfen in reducing immature *Aedes albopictus* populations
Isik Unlu iunlu@mercercounty.org, Devi S. Suman, Yi Wang, Kim Klingler, Nicholas Indelicato, Ary Faraji and Randy Gaugler
Center for Vector Biology, Rutgers University, New Brunswick, NJ; Mercer County Mosquito Control, West Trenton, NJ and Salt Lake City Mosquito Abatement Dist., Salt Lake City, UT

5:00 Autocidal methods against vectors - male mosquitoes as delivery vehicles
Stephen Dobson sdobson@uky.edu, J. Mains, C. Brelsfoard
and H. Yamada  
Dept. of Entomology, University of Kentucky, Lexington, KY

6:00 – 8:00  
**RECEPTION: OCOTILLO ROOM**

---

**TUESDAY – SEPTEMBER 29, 2015**

8:00 – 8:00  
**FIELD ECOLOGY DAY:**  
ACOMA PUEBLO AND PETROGLYPH NATIONAL MONUMENT  
LUNCH AT THE PUEBLO SITE: HOSTED  
DINNER AT EL PINTO RESTAURANT: HOSTED

---

**WEDNESDAY – SEPTEMBER 30, 2015**

8:00 – 10:00  
**POSTER SESSION**  
SANDIA MEETING ROOM #5

**P-01:** The establishment and dispersal of *Aedes aegypti* in Clovis, California 2013-2015  
**Jodi Holeman** jholeman@mosquitobuzz.net, Consolidated Mosquito Abatement District, Selma, CA; K. Ramirez, C. Smith, and F.S. Mulligan

**P-02:** Nutrition and longevity in *Anopheles coluzzii*  
**Roy Faiman** roy.faiman@nih.gov, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD; D. L. Huestis, and T. Lehmann

**P-03:** Ecological succession of mosquitoes inhabiting waste trees in a subtropical swamp and upland forest in Tampa, Florida  
**Emily Dinh** emilydinh@health.usf.edu, University of South Florida, College of Public Health, Dept. of Global Health, Tampa, FL; and R. J. Novak
P-04: Spatial repellents and feeding deterrents selectively stimulate gustatory receptors in *Aedes aegypti* and *Anopheles quadrimaculatus*

Joseph C. Dickens joseph.dickens@ars.usda.gov, Beltsville Agricultural Research Center, Beltsville, MD; and J. T. Sparks

P-05: Where the reviled things are: Habitat segregation of a diverse mosquito assemblage

Kristen A. Hopperstad kahopper@ncsu.edu, North Carolina State University, Dept. of Entomology, Raleigh, NC; M. Reiskind, R. H. Griffin, and M. S. Janairo

P-06: Mosquito species distribution in suburban, urban, and semi-rural residences in San Antonio, Texas

Megan Wise de Valdez mwisedev@tamusa.tamus.edu, Texas A&M-San Antonio, Program of Biology, San Antonio, TX; J. Darden, and B. McGehee

P-07: Entomologic investigations of households associated with chikungunya virus positive case–patients in Puerto Rico

Gilberto Felix ckn5@cdc.gov, Center for Disease Control and Prevention/NCEZID/DVBID/ Dengue Branch, San Juan, Puerto Rico; R. Barrera, K. Ryff, and R. Hemme

P-08: Fine-scale spatial epidemiology of avian malaria in grassland birds of North-Central Kansas

Samantha A. Wisely wisely@ufl.edu, University of Florida, Dept. of Wildlife Ecology and Conservation, Gainesville, FL; C. Ganser, B. Sandercock, and A. Gregory

P-09: Within-community variation in West Nile vector and virus activity in Northern Colorado

Chester G. Moore chester.moore@colostate.edu; Colorado State University, Dept. of Microbiology, Immunology and Pathology, Arthropod-borne and Infectious Diseases Laboratory, Fort Collins, CO; J. R. Fauver, R. Cornell, B. Andre, J. A. Schurich, and G. D. Ebel

P-10: Spatial and temporal distribution of chikungunya activity in the Americas

Kenneth J. Linthicum kenneth.linthicum@ars.usda.gov, USDA-ARS Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL; A. Anyamba, J. L. Small, R. Jepsen, S. C. Britch, J-P. Chretien, J.L. Sanchez, and C.J. Tucker
P-11: Exploring differential emergence of dengue in two cities with established *Aedes aegypti* populations: A case study in Sonora, Mexico

**Kathleen Walker** krwalker@cals.arizona.edu, University of Arizona, Dept. of Entomology, Tucson, AZ; K. Ernst, M. Riehle, and T. Joy

P-12: EMIRA - Wide scale application of *Bti* in an integrated malaria control program in Kossi, Burkina Faso

**Peter Dambach** peter.dambach@web.de, Institute of Public Health, Heidelberg University, Heidelberg, Germany; I. Traore, A. Kaiser, and N. Becker

P-13: Choice and efficacy bioassays evaluating attractive toxic sugar baits (ATSIB) against *Culex tarsalis* and *Culex quinquefasciatus*

**Whitney A. Qualls** w.qualls@med.miami.edu, University of Miami Miller School, Dept. of Public Health Sciences, Miami, FL; R-D Xue, and G. C. Muller

P-14: How do different microbial groups affect development and emergence of larval *Aedes triseriatus*?

**Michael Kaufman** kaufma15@msu.edu, Michigan State University, Dept. of Entomology, East Lansing, MI; M. Baker, and E. Walker

P-15: Field evaluation of pyriproxyfen against mosquitoes in man-made structures in southern California

**Lal S. Mian** lmian@csusb.edu, Dept. of Health Science and Human Ecology, California State University, San Bernardino, CA; and M.S. Dhillon

P-16: Cross resistance in methoprene-resitant *Culex quinquefasciatus* (Diptera: Culicidae)

**T. Steven Su** tsu@wvmvcd.org, West Valley Mosquito and Vector Control District, Ontario, CA; M. L. Cheng, and J. Thieme

P-17: Tropical pyrethroid resistance and blood-feeding behavior in Puerto Rican *Aedes aegypti* and African *Anopheles gambiae*

**Natasha M. Agramonte** nme@ufl.edu, University of Florida, Emerging Pathogens Institute, Dept. of Entomology, Gainesville, FL; A. D. Gross, D. R. Swale, J. R. Bloomquist, and U. R. Bernier

P-18: P-Impact of autocidal gravid traps (Ago) on the genetic structure of *Aedes aegypti* in southern Puerto Rico

**Ryan R. Hemme** wma0@cdc.gov, Center for Disease Control and Prevention/NCEZID/DVBID/ Dengue Branch, San Juan, Puerto Rico; G. Felix, B. White, and R. Barrera
P-19: Sabadilla versus Pyrethroids: A comparative study of toxicity and mosquitocidal modes of action
Lacey J. Jenson ljenson@vt.edu, Virginia Polytechnic Institute and State University, Blacksburg, VA; and T. D. Anderson

P-20: Local evolution of pyrethroid resistance offsets gene flow among Aedes aegypti collections in Yucatan, Mexico
Karla Saavedra-Rodriguez Karla.Saavedra_Rodriguez@colostate.edu, Dept. of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO; M. Beaty, S. Denham, B. Beaty, L. Eisen, and W. C. Black IV

P-21: Treating cattle for mosquito and sandfly control

P-22: Abundance and diversity of black fly (Simullidae) in San Gabriel Valley: Los Angeles County, CA
Kimberly Nelson knelson@sgvmosquito.org, San Gabriel Valley Mosquito and Vector Control District, West Covina, CA; J. W. Wekesa, K. Fujioka, and SGVMVCD Staff

P-23: Examining short-range dispersal behaviors of house flies (Diptera: Muscidae)
Alec Gerry alec.gerry@ucr.edu, University of California Riverside, Riverside, CA; and L. Zahn

Brian Leydet bleydet@trudeauinstitute.org, Trudeau Institute, Saranac, NY; S. Lanthier, B. Elmore, K. Fantone, C. Naccari, M. Toth, M. Prusinski, L. Meehan, B. Backenson, and T. Sellati

P-25: Preliminary investigations into the ecology of spotted fever group rickettsiae in Northwest Georgia, USA
Audrey E. Osterbind aeosterbind@gmail.com; ymf9@cdc.gov, Bryan N. Ayres ylt9@cdc.gov, Centers for Disease Control and Prevention, Atlanta, GA; J. L. Perniciano, and W. L. Nicholson

P-26: Shared ticks and tick-borne pathogens of cattle and wildlife in south central Florida

**P-27:** Rickettsial organisms found in ticks parasitizing the endangered Florida grasshopper sparrow (*Ammodramus savannanim*)

**Katherine Sayler** saylerk@ufl.edu, University of Florida, Dept. of Wildlife Ecology and Conservation, Gainesville, FL; E. Ragheb, K. Miller, and S. Wisely

**P-28:** Can subclinical infestation by *Dermacentor andersoni* induce resistance to paralysis in sheep?

**Timothy J. Lysyk** timlysyk@gmail.com, Lethbridge Research Centre, Agriculture and Agri-Food Canada, Lethbridge, AB; and S. J. Dergousoff

**P-29:** Neural Kir Channels: A critical conductance pathway in insect nervous systems

**Daniel R. Swale** dswale@agcenter.lsu.edu, Louisiana State University, Dept. of Entomology, Baton Rouge, LA

**P-30:** Regional vector surveillance center for climate change (Chonbuk) 2014 – 2015

**Jong-Jin Lee** jjlee@jbnu.ac.kr, Chonbuk National University, Dept. of Agricultural Biology, Chonbuk, South Korea; B.-S. Park, J.-S. Yoo, S.-J. Lee, J.-S. Kim, H.-A So, and M.-A. Whang

10:00 – 12:00 **SYMPOSIUM 4: NEW APPROACHES TO CULICOIDES AND SAND FLY CONTROL**

**Moderators:** Eva Veronesi eva.veronesi@uzh.ch
University of Zurich Foundation, Switzerland

**Bulent Alten** kaynas@hacettepe.edu.tr
Hacettepe University, Turkey

10:00 *Culicoides* population control using insecticidal sugar baits

**Lee Cohnstaedt** lee.cohnstaedt@ars.usda.gov
Arthropod-Borne Animal Disease Research Unit, USDA-ARS-CGAHR, USA

10:25 Why do we need control measures for *Culicoides* biting midges when we have vaccines?

**Simon Carpenter** simon.carpenter@pirbright.ac.uk
Head of National Capability/Entomology, Pirbright Institute, UK
10:50  Evaluation of the efficacy of OLYSET® plus in a village-based cohort study in the Cukurova, Turkey in an area of hyperendemic cutaneous leishmaniasis

**Bulent Alten** kaynas@hacettepe.edu.tr, Yusuf Ozbel, Ozge Erisoz Kasap, Filiz Gunay, Mehmet Karakus, Sinan Kaynas, Gizem Oguz, Yasemen Sarikaya, and Mert Dogan

Hacettepe University, Faculty of Science, Dept. of Biology, Ecology Division, HUESRL-VERG Lab, Beytepe, Ankara, Turkey; Ege University Faculty of Medicine Dept. of Parasitology, Bornova, Izmir, Turkey; Mehmet Akif University Faculty of Veterinary, Burdur, Turkey

11:15  Integrated vector management against sand fly populations associated with animal facilities

**Alexandra Chaskopoulou** achaskopoulou@ars-ebcl.org, J. Kashefi, S. Demir and P. Koehler

USDA-ARS European Biological Control Lab, Thessaloniki, Greece; American Farm School, Perrotis College, Thessaloniki, Greece; Ege University, Dept. of Biology, Izmir, Turkey; University of Florida, Dept. of Entomology, Gainesville, FL

11:40  Control of sand flies using attractive toxic sugar baits

**Whitney A. Qualls** w.qualls@med.miami.edu, John C. Beier and Gunter C. Muller

University of Miami, Miller School of Medicine, Miami, FL and Hebrew University, Israel

12:00 – 1:30  **LUNCH: HOSTED**

1:30 – 3:30  **SYMPOSIUM 5: STUDENT ORAL PRESENTATIONS**

**Moderators:** William Walton william.walton@ucr.edu

Dept. of Entomology, University of Calif. Riverside, Riverside, CA

**Daniel Dawson** dan.dawson@ttu.edu

The Institute of Environmental and Human Health, Texas Tech University, Lubbock, TX

**Nathan McConnell** nmcco001@ucr.edu

Dept. of Entomology, University of Calif. Riverside, Riverside, CA
1:30 An epizootic of BTV and EHDV among cattle and penned white-tailed deer in the absence of the U.S. vector *Culicoides sonorensis*

**Michael Becker** mbecker@agcenter.lsu.edu and Lane Foil
Louisiana State University, Baton Rouge, LA

1:45 Larval diet alters adult survival and human malaria parasite incubation period, significantly impacting accuracy of disease transmission predictions

**Lillian Moller-Jacobs** llmjacobs23@gmail.com and Matthew Thomas
Penn State University, State College, PA

2:00 *Ixodes scapularis* in North Dakota, an emerging vector population

**Michael W. Dougherty** michael.dougherty@my.und.edu,
Robert A. Gaultney, Nathan M. Russart, John F. Kryda,
Catherine A. Brissette and Jefferson A. Vaughan
Dept. of Biology, University of North Dakota, Grand Forks, ND

2:15 Effects of container size on competition between *Aedes* mosquito larvae

**Peter Brabrant** pjbraba@ilstu.edu and Steven Juliano
Illinois State University, Normal, IL

2:30 *Pseudomonas aeruginosa* in *Musca domestica* L.:
Temporospatial examination of bacteria population dynamics and house fly antimicrobial responses

**Mary Katherine Mills** mm02463@ksu.edu, C. Joyner and D. Nayduch
Kansas State University, Manhattan, KS

2:45 Using permethrin to reduce mosquito attack rate and improve health of nestling Barn Owls

**Caroline Efstatthon** cefstathion@ufl.edu and William Kern
University of Florida, Dept. of Entomology and Nematology,
Gainesville, FL

3:00 Behavioral responses of *Culex tarsalis* to fish-associated infochemicals in wind tunnel bioassays

**Adena M. Why** awhy001@ucr.edu, Emerson Lacey, Ring Cardé and William Walton
Dept. of Entomology, UC Riverside, Riverside, CA
3:15 Host specific response to DEET selection in *Anopheles coluzzi* and *Aedes aegypti*
*James D. Ricci* james.ricci@email.ucr.edu and Bradley J. White
Dept. of Entomology, UC Riverside, Riverside, CA

3:30 – 4:00 BREAK

4:00 – 5:30 SYMPOSIUM 6: MOLECULAR GENETIC APPROACHES TO THE STUDY OF VECTOR POPULATION BIOLOGY
Moderators: Greg Lanzaro gclanzaro@ucdavis.edu
Vector Genetics Laboratory, Dept. of Pathology, Microbiology and Immunology, School of Veterinary Medicine, University of California, Davis, CA
*Douglas Norris* douglas.norris@jhu.edu
Dept. of Molecular Microbiology and Immunology, Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

4:00 Adaptive introgression as a mechanism for the evolution of insecticide resistance in the *Anopheles gambiae* complex
*Greg Lanzaro* gclanzaro@ucdavis.edu, Yoosook Lee, Bradley J. Main and Travis C. Collier
Vector Genetics Laboratory, Dept. of Pathology, Microbiology and Immunology, School of Veterinary Medicine, University of California, Davis, CA

4:20 Molecular genetics and genomics for the study of vector populations
*Filiz Gunay* gunayf@gmail.com
Hacettepe University, Faculty of Science, Beytepe Ankara Turkey

4:40 Evidence for new subspecies of *Aedes aegypti* in Senegal, West Africa
*William Black IV* william.black@colostate.edu, Laura B Dickson, Corey L. Rosenberg, Karen L. Fleming, Alexandra Caspary, Saul Lozano-Fuentes, Punita Juneja, Francis M. Jiggins and Massamba Sylla
5:00 A genetic approach to understanding human host choice in
*Anopheles gambiae*
Michel Slotman maslotman@ag.tamu.edu, Giri Athrey, Luciano Cosme and Willem Takken
Dept. of Entomology, Texas A&M University, College Station TX; Laboratory of Entomology, Wageningen University, Wageningen, The Netherlands

5:15 A molecular genetics looking glass: insight to the mysteries of malaria transmission complexity
Douglas E. Norris douglas.norris@jhu.edu, Smita Das, Christine Jones, Mbanga Muleba, Jennifer C. Stevenson and the Southern Africa ICEMR Team
Dept. of Molecular Microbiology and Immunology, Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; PATH, Diagnostics, Seattle, WA; Tropical Disease Research Centre, Ndola, Zambia and Macha Research Trust, Choma, Zambia

5:30 BUSINESS MEETING:
Bulent Alten kaynas@hacettepe.edu.tr
President
Major S. Dhillon mdhillon@northwestmvcd.org
Secretary-Treasurer

**THURSDAY – OCTOBER 1, 2015**

8:00 – 10:10 SYMPOSIUM 7: FLIES AS VECTORS OF DISEASE
Moderators: Jerry Hogsette jerry.hogsette@ars.usda.gov
USDA-ARS-CMAVE, Gainesville, FL
8:00 Why flies are good vectors
Jerry Hogsette jerry.hogsette@ars.usda.gov
USDA-ARS-CMAVE, Gainesville, FL

8:10 House flies as potential mechanical vectors of animal pathogens
Alec Gerry alec.gerry@ucr.edu
Dept. of Entomology, University of California, Riverside, CA

8:30 Flourishing in filth: Fly-microbe interactions across life history
Dana Nayduch dana.nayduch@ars.usda.gov
USDA-ARS, Center for Grain and Animal Health Research, Manhattan, KS

8:50 Differential transmission of food-borne bacteria to leafy greens by blow flies and house flies
Astri Wayadande a.wayadande@okstate.edu
Dept. of Entomology, Agricultural Plant Science, Oklahoma State University, Stillwater, OK

9:10 Do horn flies and stable flies have a role in the transmission of bacterial pathogens?
Pia Olafson pia.olafson@ars.usda.gov
USDA-ARS, Center for Grain and Animal Health Research, Kerrville, TX

9:30 Transmission by calliphorids
Sonja Swiger slswiger@ag.tamu.edu
Texas A&M AgriLife Extension Service, Stephenville, TX

9:50 Tabanid mechanical transmission of pathogens and comparison of vector potential to other flies and iatrogenic vehicles
Lane Foil lfoil@agcenter.lsu.edu
Louisiana State University, Baton Rouge, LA

10:10 – 10:30 BREAK

10:30 – 12:15 SYMPOSIUM 8: DEVELOPMENT OF REPELLENTS AND INSECTICIDES FOR MOSQUITOES
Moderator: Ulrich R. Bernier uli.bernier@ars.usda.gov
Center for Medical, Agricultural, and Veterinary Entomology, USDA-ARS, Gainesville, FL
10:30  Mosquito ABC transporters: A pharmacological barrier to insecticide delivery
       **Troy D. Anderson** anderst@vt.edu
       Dept. of Entomology, Fralin Life Science Inst., Virginia Tech

10:45  Structure-activity and modeling of mosquito repellents
       **Ulrich R. Bernier** uli.bernier@ars.usda.gov
       Center for Medical, Agricultural, and Veterinary Entomology, USDA-ARS, Gainesville, FL

11:00  Impact of synergists on insecticide resistance in *Anopheles gambiae*
       **Jeffrey R. Bloomquist** jbquist@epi.ufl.edu
       Dept. of Entomology and Nematology, Emerging Pathogens Institute, University of Florida, Gainesville, FL

11:15  A phytochemical approach to insect repellents
       **Joel R. Coats** jcoats@iastate.edu
       Dept. of Entomology, Iowa State University, Ames, IA

11:30  Utilizing recent progress in USDA Spatial Repellent Program
       **Daniel L. Kline** dan.kline@ars.usda.gov
       USDA-ARS, Center for Medical, Agricultural and Veterinary Entomology

11:45  Laboratory and field evaluation of insect repellents against lone star ticks
       **Rui-De Xue** xueamcd@gmail.com, Jodi M. Scott, Whitney Qualls, Ali Fulcher, John Henzler and Mustapha Debboun
       Anastasia Mosquito Control District, St. Augustine, FL and Harris County Mosquito Control, Houston, TX

12:00  An update on the incidence of dengue gaining strength in Saudi Arabia and current control approaches for its vector mosquito
       **Abdulaziz Dakhellah Meqbel Althbyani** aalthbyani@ut.edu.sa
       Dept. of Biology, Faculty of Science, University of Tabuk

12:15  **CLOSING OF THE CONFERENCE**
       President Bulent Alten
2015 SOVE Sponsors

Central Life Sciences
Clarke
Dr. Mir Mulla
Valent BioSciences Corporation
AMVAC
ADAPCO
Bayer Environmental Science
MGK
Insect Control Solutions
Culinenx
FMC
Univar