



# SOVE Newsletter

## 45th Annual Conference

The 45th Annual Conference of SOVE was held September 28 –October 2, 2014 in San Antonio, Texas. Except for the field-day trip, all conference activities were held at the Menger Hotel facilities. The conference attendees (140) mostly from different parts of the U.S. were joined by colleagues from Canada (1), Sweden (2), Turkey (1), Israel (1), Saudi Arabia (1), India (1), and Thailand (8), all sharing the same purpose of vector ecology and control. The conference offered a variety of opportunities to learn and share new research findings and new approaches/methods used in the ecology and control of disease vectors. The conference program had 9 symposia (including one for students and another for featured young stars in vector ecology), one poster session (35 posters), and an ecological field trip. The conference was announced open with a welcome and award presentations by vice president Daniel Kline (see pictures on page 7), followed by announcements by secretary/treasurer Major Dhillon and presidential address by SOVE president Douglas Norris. A keynote presentation, “Rough Riders against vector-borne diseases” was given by Joe Wiegand, impersonating Theodore Roosevelt, 26th President of the United States. Reports from overseas SOVE regions followed before the coffee break.

The conference symposia in the order presented were as follows:

- 1: Featured young stars in vector ecology
- 2: Studies of the chemicals and processes that mitigate vector-host contact
- 3: Department of Defense Rough Riders of the vector range
- 4: Higher Diptera: From the laboratory to the field
- 5: Student oral presentations
- 6: Behavioral ecology
- 7: Operational surveillance and control for dengue/chikungunya vectors
- 8: Ecology and prevention of tick-borne diseases
- 9: Worminators, foldscopes, kite patches, unmanned aerial systems and more inspiring inventions for controlling mosquitoes and reducing the global impact of vector-borne diseases



Besides symposia and poster session all offered indoors, there was a full day of an ecological field excursion to the Natural Bridge Caverns as well as to the Mission San Jose, a National Parks monument. The group was given a guided tour walking down to the bottom floor of the caverns, some 180 feet deep with amazing rock formations, both descending and ascending. After a sack lunch, the group visited the historical Mission San Jose for about an hour before returning to the hotel. (see conference picture on pages 5-7)

Conference sponsors:

Graham White, Mir Mulla, Central Life Sciences, Clarke Mosquito Control, Valent BioScience Corp., ADAPCO, Inc., AMVAC, Bayer environmental Sciences, MGK Company, Univar, Culinex, Dhillon Land Co.

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## Outgoing President 's Message



Colleagues

It is hard to believe that the year has passed by so quickly. It seems that I just took on the role as SOVE President, but just a few weeks ago handed the gavel over to Dr. Bulent Alten, your new SOVE President for the next year.

Over the past month I've had the opportunity to attend both the SOVE Conference in San Antonio, Texas and the E-SOVE Conference in Thessaloniki, Greece. Congratulations and thanks to Drs. Dan Kline, Major Dhillon and Eva Veronesi for organizing these fantastic conferences. These were two amazing meetings full of excellent presentations on virtually every component of vector-borne disease systems, interactions with superb researchers, operators and collaborators across the breadth of our specialties and social time to further develop the relationships within our family. I

continue to be impressed by our students, the newest members of our family, and hope we continue to encourage and support their participation. The many presentations I saw also remind me of our great strength in our diversity of which I have previously written.

I want to thank the membership and executive board for all the support I've received over the last year and certainly the participation from our membership, our SOVE family, which is what our society is all about.

Thanks again and best regards,

Doug Norris



Incoming president Bulent Alten  
thanking  
outgoing president Doug Norris

## Regional Reports



### SOUTHWESTERN USA

Steve Mulligan, regional director

“Invasions of the Blood Snatchers!” What in the name of Hollywood is going on in California? It can't be the water; there is none, as we are in a severe drought. As was reported last year, *Aedes aegypti* had been found in three counties, Fresno, Madera and San Mateo. After successfully overwintering, the mosquito has become established and is incrementally spreading in the cities of Madera and Clovis. More recently this year, *Ae. aegypti* has popped up in other areas over a much larger part of the Golden State, including Tulare and Kern Counties, and more recently Los Angeles and San Diego Counties. This invasive species has now truly become a statewide issue of major consequence. Especially so, considering the rampant spread of chikungunya virus throughout the Caribbean and the concomitant rise of travel-associated cases in California, as well as the entire US. While there have been locally acquired cases of CHK in Florida, so far none have been reported in California. Also dengue virus cannot be overlooked as a public health concern, with the presence of vectors in the State. California Department of Public Health reports 24 confirmed and 17 probable imported CHK cases and 10 confirmed and 44 probable imported DEN cases as of October 20, 2014.

Los Angeles County mosquito and vector

control districts also have been busy battling *Ae. albopictus* since it was first identified in El Monte and South El Monte in September 2011. It has since spread to ten neighboring cities despite intensive control efforts. Now, late this season, not only *Ae. aegypti* but *Ae. notoscriptus* have been found in Los Angeles County as well – the perfect trifecta of exotics! *Aedes notoscriptus* is an Australian native, backyard, container breeding mosquito that is a vector of Ross River and Barmah Forest viruses, as well as canine heartworm. Relevant questions arise as to how these exotic mosquito species are being transported or introduced and why now? Maybe genomic research on these populations will help enlighten us and assist us in preventing future introductions.

Not to be overlooked or neglected, West Nile virus is once again widespread in California with over 600 human cases and 20 fatalities reported by CDPH through October 24. Los Angeles and Orange Counties have been especially hard-hit with 160 and 216 cases, respectively. Both counties have reported five fatalities each. This year, a severe drought year, has become one of the most active WN seasons for CA. The correlation of drought conditions drawing together both birds and mosquitoes to limited water sources, and producing more WN activity seems evident this year. Thankfully the summer, and the mosquito season, is drawing to a close. Can't wait till next season; no, maybe I can.

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## ASIAN SOVE

### Tong-Yan Zhao Regional Director

The status of vector-borne diseases in Asian countries through September 2014: In China, there was a dengue outbreak (>10,000 cases) in Guangdong province (Guangzhou and Foushan) and Yunnan province (Ruili). *Aedes aegypti* distributed in Ruili and Xishuangbanna was probably imported from other southeastern countries. In July 2014, there was a plague-related death reported in Yumen, Gangsu province. Dengue appeared to be widespread in many other Asian countries. For example, Malaysia reported 62,860 cases with 126 deaths, concentrated in the capital city of Kuala Lumpur and surrounding areas; Singapore with 10,000 cases; Vietnam >10,000 with 5 deaths; Thailand 11,881 cases and 13 deaths; Philippines 16,000 cases 98 deaths; Saudi Arabia >4,000 cases; and Japan for the first time since World War II showing 141 autochthonous cases of dengue around the Yoyogi Park.

The Asian Society for Vector Ecology and Mosquito Control (ASVEMC) will be holding a Board meeting in Qingdao, China, on November 3. On the agenda, is the proposal to host the 7th International Congress of SOVE jointly with the 5th International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases. Other matters to be discussed at the Board meeting will include new member recruitment, election of officers, awards as well as other items that may be added to the agenda.

The ASVEMC will also sponsor the 5th International Forum for Sustainable Management of Disease Vector in Qingdao, China, November 2-6, 2015 ([www.chinavbc.cn/forum/](http://www.chinavbc.cn/forum/)) and the 4th International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases in Guangzhou, China, May 25-28, 2015. The meeting theme will be "Promotion of biorational and environmental control for mosquitoes and mosquito-borne diseases." The keynote speaker will be Dr. William Walton, Professor of Entomology, University of California, Riverside, CA. The topics will include: update on current biorational and environmental control situation for mosquito and mosquito-borne diseases; overview of future direction and challenges for the surveillance, biorational and environmental control; search for possible collaboration for research and development of surveillance, biorational and environmental control techniques; sharing information about possible funding resources for mosquito and mosquito-borne disease control; and promotion of new biorational and environmental techniques for the control of mosquitoes and mosquito-borne diseases.

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## Pictures from the Conference



Graham White receiving the Achievement Award from SOVE President Doug Norris



Min-Lee Cheng receiving the SOVE Distinguished Service Award



Doug Norris receiving a Teddy bear from Joe Wiegand



Major Dhillon receiving an ear from mentor Mir Mulla

### Pictures from the Conference



Mir Mulla, Bill Walton and Major Dhillon with the young investigators



S. Fred Mulligan Pash Dhillon and Jodi Holeman at the Alamo



The famous San Antonio River.

## Pictures from the field-day trip



Greg Williams, Lal Mian and Jodi Holeman



Valerie Montigny, Lal and Judy Mian



.... a SOVE-strong group inside the Cavens

*In Memoriam***Jorge Ramon Arias**

May 12, 1943 - September 12, 2014



On September 12, 2014 Dr. Jorge Arias left this world for his heavenly home where he can rest and find peace. We are grieved immensely by his early death. He was born on May 12, 1943 in Charlottesville, Virginia, to Teodoro and Una Scott Arias and grew up in Panama before returning to USA for advanced education.

The gifted scientist and Vector Ecologist, Dr. Arias earned a Bachelor's and Master's Degrees in Biology from Whittier College in California, and a PhD degree in Entomology specializing in medical entomology from the University of California, Riverside in 1973. Soon after getting his PhD, he was employed by the Brazilian National Research Council and stationed at the Instituto Nacional de Pesquisas da Amazonia the city of Manaus, the Amazonas region to work on vector biology and control. His scientific work took him into the jungles of the Amazon region where he set up research labs and identified 19 new species of insects. His research and critical studies on sand flies and leishmaniasis led to numerous publications, conferences and editorial works. In more than 30 years of scientific research, Dr. Arias received numerous accolades and dozens of honors and awards in the field of entomology, including 14 insect species named in his honor. After years of work in the Amazonas region, he was recruited by Pan American Health Organization (PAHO) and stationed in Brasilia. As an expert in PAHO he worked in Panama, Venezuela and finally in the USA, where he

retired in Washington, D.C. in 2003. Retirement did not stop his passion for entomology and control of vector borne-diseases and he continued his work creating and supervising programs for West Nile Virus and Lyme Disease prevention for the Fairfax County Health Department in Virginia until 2013.

He was a man who lit up every room he entered and left many as a best friend. He would make it a point to remember your name and learn how to greet you in your own language. He simply knew how to love and is loved deeply by many.

He married the love of his life, Kathy Arias, also a graduate of the University of California in 1971. She was his life partner, his research assistant and his best friend. They had many adventures together and created many memories as a family. They have four children, David, Ana, Sara and Tamara; three children-in-law Juliana, Phillip and Nate; and grandchildren Pedro, Daniel, Ricky, Samuel, Daniel, Jesse, Ariana and Jayni. He is also survived by siblings Teodoro and Joanna, nephews Trey and Donovan and his mother-in-law Barbara Cardin. He will be greatly missed not only by his family, but also missed by those with whom he worked all over the Americas. His research and professional accomplishments were so numerous that they cannot be enumerated here. He was a member of the professional organizations, SOVE, ESA, AMCA, Sigma XI (Research Society) and Lions Club. He impressed all of his associates with his scientific ability and intuition in conducting research on complex problems relating to vector-borne diseases.

Dr. Arias requested that in lieu of flowers, donations in his memory be made to the Collins Center in Harrisonburg, Virginia, a child advocacy center that works with abused children. He spent the last 10 years supporting their work through his own donations and volunteer service.

Doug Norris  
John Hopkins University  
Baltimore, MD

Mir S. Mulla  
University of California  
Riverside, CA

## For Your Calendar

5th International Forum for Sustainable Management of Disease Vectors to be held November 2-6, 2014 in Qingdao, Shandong, China. Visit [www.chinavbc.cn/forum/](http://www.chinavbc.cn/forum/)

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12<sup>th</sup> Annual Arbovirus Surveillance and Mosquito Control Workshop to be held in Anastasia Mosquito Control District (AMCD), St. Augustine, FL, March 24-26, 2015. Visit [www.amcdsjc.org](http://www.amcdsjc.org).

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4<sup>th</sup> International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases  
Organizers: Entomological Society of China, Asian Society of Vector Ecology and Mosquito Control, Beijing Institute of Microbiology and epidemiology  
May 25 – 28, 2015, Guangzhou, China  
Contact: xueamcd@gmail.com

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The International Symposium on Ectoparasites of Pets, the Livestock Insect Workers Conference, and the American Association of Veterinary Parasitologists (AAVP) will hold a joint conference in Boston, July 11-14, 2015. Visit [AAVP.org](http://AAVP.org) for deadlines and other information, or e-mail [NHinkle@uga.edu](mailto:NHinkle@uga.edu).

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## Jobs

*Vector Biology*. The Department of Entomology, University of California at Riverside invites applications for a tenure-track **Assistant Professor/Assistant Entomologist** position, 9-month appointment, available July 1, 2015. The position has 25% Instruction and Research and 75% Organized Research in the Agricultural Experiment Station <http://cnas.ucr.edu/about/anr/>. Applicants must hold a Ph.D. in Entomology or a related discipline; post-doctoral experience is preferred. The focus of this position will be on studying the behavior, ecology, evolution, genetics, molecular biology and/or physiology of insect vectors that transmit pathogens to animals, humans, and/or plants. Areas of research emphasis may include, but are not limited to, the ecology, epidemiology, evolutionary and comparative genomics, or innate immunity of vectors. Evaluation of applications will begin November 15, 2014, but the position will remain open until filled. For more information, go to <http://www.entomology.ucr.edu>.

*Associate Public Health Biologist:*  
California Department of Public Health

The Vector-Borne Disease Section (VBDS) is recruiting **Associate Public Health Biologist**. This position conducts activities relating to the prevention, surveillance, epidemiology, and control of vector-borne diseases in California, including West Nile virus, plague, hantavirus, and tick-borne diseases.\* Salary range: \$4521 to \$5889 per month.

Location: Richmond (SF Bay Area), Elk Grove (Sacramento), and/or Redding

For information about employment opportunities, please contact Vicki Kramer at (916) 552-9730 or [ki.kramer@cdph.ca.gov](mailto:ki.kramer@cdph.ca.gov). For information on the application process, contact Jesse Laxton at [jesse.laxton@cdph.ca.gov](mailto:jesse.laxton@cdph.ca.gov).

Information can also be found at the California Department of Public Health website: <http://cdph.ca.gov> under job opportunities (quick links), current open examinations, Associate Public Health Biologist.

APPLICATION DEADLINE: December 15, 2014

## Resources

**FREE Resources for Investigators** are available!

Please visit:

<http://www.niaid.nih.gov/labsandresources/resources/dmid/Pages/default.aspx> to see the full range of available services that provide access to research tools and technologies and preclinical and clinical services to facilitate product development.

Visit [Vector Biology Resources for Studying Vectors](#) for a listing of available resources. Key among the resources for studying vectors is provision of LIVE vectors and reagents and genomic materials offered through the [BEI Resources Repository](#). (See Vector Resources in the BEI [online catalog](#).) These resources are available free of charge to REGISTERED users in domestic and foreign institutions and NIH grant funding is not required. For information on all resources for researchers provided by DMID, visit the [DMID Resources for Researchers website](#).

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**We are on the Web!**  
[www.sove.org](http://www.sove.org)

### About SOVE . . . . .

The Society for Vector Ecology is a professional organization formed in 1968 by a group of individuals involved in vector biology and control programs in California. The membership has since grown to represent an amalgamation of diverse research and operational and extension personnel from all over the world. The Society is committed to solving many complex problems encountered in the field of vector biology and control. Among these are the suppression of nuisance organisms and disease vectors through integration of control elements, such as environmental management, biological control, public education, and appropriate chemical control technology.

The Society publishes the biannual Journal of Vector Ecology that contains research and operational papers covering many phases of vector biology, ecology, and control. The Society also distributes a periodic newsletter and holds an annual conference in the months of September/October.

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