



SOVE Newsletter

President's Message



Dan Kline

Dear Colleagues,

They say if we don't learn from the past that the mistakes which we have made will be repeated. This saying was reinforced in my mind last week (March 13) when I attended the "Summit on *Aedes aegypti* Crisis in the Americas: Joining Together to Address a Grand Challenge" in Maceio, Brazil. This meeting was co-sponsored by the Entomological Society of America (ESA) and the Sociedade Entomologica do Brasil (SEB) to map out a plan for successfully managing *Aedes aegypti*, the vector of Zika virus, yellow fever, dengue, and chikungunya and that is currently causing so much public health concern in the western hemisphere. As I sat listening to the various presenters, I wondered what Fred Soper would be thinking if he were alive today. Soper had developed and executed a brilliant plan to eradicate this vector from much of Central and South America. It

took quite a few years to complete his plan, but by 1962 this vector had been "eradicated" from 18 countries plus several islands in the Caribbean. Unfortunately, it has been well documented that it took far less time for the programs to "eradicate" *Aedes aegypti* to become victims of their own success. As these efforts succeeded, this vector and the diseases it vectored carried less political importance, received diminished attention, and funding to continue and the maintenance of this "eradication" was eliminated. The lesson we should have learned from history is that efforts to "eradicate" mosquitoes, or any vector species, are not all that matters, but it is what happens after success has been achieved that really makes the difference. But do we ever learn? Think about the recent history of West Nile virus. I guess we will never learn from history.

Back to the Summit, the overall goal of the Summit was to develop a new action plan to manage *Aedes aegypti* in the western hemisphere, defining the project's development and implementation, suggested partnerships, required resources, outreach, communications, and timeline. An additional goal of the summit was to bring together all the entomological societies in the western hemisphere to collectively develop and participate in the implementation of this plan. We were asked to define the role of the societies we represent might play. Thus, I am asking the membership of SOVE to comment on what role you think that SOVE should and/or can play in this Grand Challenge.

Dan

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Regional Report



NORTHEASTERN USA

ISIK UNLU, regional director

Twenty-eight travel related Zika virus cases have been reported in our region including New York (17), New Jersey (1), Pennsylvania (4), Massachusetts (2), Maryland (3), and Delaware (1), based on the CDC website. We have received our first service request on February 17, which is pretty early for New Jersey. Because of the mild winter and Zika virus in the headlines almost every day, residents have concerns. Since tires are one of the most preferred habitats of *Aedes albopictus* in the area, we have been spending more time on tire recycling compared to previous years. Zika is transmitted primarily by *Ae. aegypti*, a species not present in New Jersey. However, *Ae. albopictus* also might transmit the virus, and this species is well established throughout the state.

Center for Vector Biology, Rutgers University collaborations will continue with SpringStar as Jaydon Bailey, Rebecca Heinig, and Geoffrey Kemble visit to work with the Center's team toward improving the design of the pyriproxyfen autodissemination system. Using 3D printers and precise measurements, the group is moving closer to resolving issues that will maximize pyriproxyfen applications onto gravid female mosquitoes seeking to lay eggs. Mercer County mosquito control will be testing the new devices in the field this summer.

If you have any issues or concerns that you would like the SOVE Board of Directors to discuss, please contact me (iunlu@mercercounty.org).

Central Massachusetts Mosquito Control Project
(Timothy D. Deschamps)

Mild winter weather has allowed our field crews to continue water management work well past typical end dates. Beaver mitigation projects continue to keep us busy, with water level control device installations, culvert protections, and dam breaching projects. Our tire recycling program ended 2015 with a total of 17,278 tires recycled since its inception in 2011. Our

goal is to reach 25,000 by Earth Day 2017. As one may expect, Zika virus is causing quite a stir here, with several non-member communities inquiring not only about the virus, but possible membership with our program. Member communities have also expressed concern about Zika, and we have participated in press interviews and public meetings to answer questions and ease concerns. Spring will be along shortly, and field crews will once again switch over to survey and treat wetlands for mosquito larvae. Field trials of spinosad (*Saccharopolyspora spinosa*) for pre-hatch control of spring brood species such as: *Ae. albopictus*, *Ae. excrucians* and *Ae. canadensis*, along with treatment of cattail areas for *Cq. perturbans* control, will continue this year. The Asian tiger mosquito surveillance will resume to determine if this exotic species has become established in our service area.

Personnel

* Maryland Department of Agriculture initiated a search for Program Manager position in MDA Office of Plant Ind & Pest Mgmt - Mosquito Control. <http://www.jobaps.com/MD/sup/bulpreview.asp?R1=15&R2=005478&R3=0004>

* New Jersey Department of Environmental Protection recently posted an administrator position in Mosquito Control Office. <http://www.nj.gov/dep/jobs/nhr02-2016.pdf>

* Center for Vector Biology, Rutgers University has initiated a search for the long desired Microbiologist position.

* Robert Lucien May, Jr. passed away peacefully at the age of 86 in Parsippany, NJ. He worked for 30 years as a mosquito expert and field technician for the Essex County Mosquito Commission, befitting his expertise in insects and birds.

Congratulations to Scott Crans for finishing his MS on "Spinosad: Efficacy and persistence against container-inhabiting mosquitoes" under Dr. Robson and to Alexandra Villiard for finishing her Ph.D. on "The influence of carbohydrate requirements on Asian tiger mosquito behavior and fitness" under Dr. Gaugler.

Regional Report



NORTHEASTERN USA

Rui-De Xue, regional director

Zika virus infections (imported cases) have been reported in our region including Alabama, Florida, Georgia, North Carolina, Tennessee, and Virginia based on the CDC report. There are 26 imported Zika cases (until Feb 24, 2016) in Florida. Florida Governor Rick Scott has declared a state emergency about Zika infection. State Department of Health, Department of Agricultural and Consumer Service, and local mosquito control agencies have collaborated to work out response plans to control the spread of Zika virus infections.

Georgia colleagues successfully hosted the American Mosquito Control Association annual meeting in Savannah, Feb 7-11, 2016. Kenneth Linthicum, President of the AMCA from USDA/CMAVE, Gainesville, FL provided an excellent service for the association during the past year and Wayne Gale of Lee County Mosquito Control District, FL has been elected as the President-Elect of AMCA. Long term members of SOVE, Graham White received the Medal of Honor award and Rui-De Xue received the meritorious service award of AMCA. Richard Weaver of Anastasia Mosquito Control District, Pat Morgan of Indian River Mosquito Control District both received the Boyd-Ariaz Grass Roots award of AMCA meeting, Lin Zhu, University of Miami and

Casey Parker from University of Florida each received the student paper competition award.

Florida Mosquito Control Association offered the Dodd Short Course on Mosquitoes in Orlando from January 25-28, 2016 and had the legislation meeting in Tallahassee, Feb 22-23. Anastasia Mosquito Control District's new facility construction project has progressed smoothly and the district plans to host the 13th Annual Arbovirus Surveillance and Mosquito Control Workshop in conjunction with Northeast 1443 project annual meeting at the new facility, March 29-31, 2016. The workshop proceedings have been published in the Technical Bulletin of the Florida Mosquito Control Association, volume 10, 2016 (new release) and can be accessed at www.floridamosquito.org TBFMCA or www.amcdsjc.org under workshop proceedings.



Regional Report



NORTHWESTERN USA

David G. Sullivan, regional director

It is still winter in most of the Northwest, with snow and moisture at or above normal. Currently the west coast is being hit with an El Nino weather event which is expected to increase the mountain snow pack by a number of feet. News in the Northwest is hard to come by with many mosquito districts on a winter schedule.

The Northwest Mosquito and Vector Control Association had their annual meeting in Oswego, British Columbia, Canada on Oct 8-9, 2015.

The Montana Mosquito and Vector Control Association held their annual meeting on Jan 14-15, 2016 in Great Falls Montana.

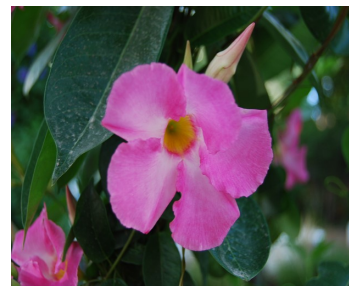
The West Central Mosquito Association meeting was held in Colorado Springs on Feb 25-26, 2016

Imported Zika virus YTD

Colorado 2, Montana 2, Oregon 5, Washington 1

West Nile virus in 2015

State	Neuro-invasive	Total	Deaths
Colorado	52	101	2
Idaho	5	13	0
Montana	2	3	0
Pregon	1	1	0
Utah	5	8	0
Wyoming	3	8	0



News from Europe

by

Marija Zgombi and Dusan Petric

The European Centre for Disease Prevention and Control (ECDC) is an EU Agency aiming at strengthening Europe's defenses against communicable diseases. Since 2008, ECDC has been actively working on the threat of vector-borne diseases and notably West Nile fever.

In recent years, several vector-borne disease outbreaks have occurred in Europe and it is to be expected that there will be an increasing trend for novel and unusual outbreaks of vector-borne diseases. For instance, the epidemiology of West Nile virus infection in humans in Europe appears to be changing. Following the first large outbreak in Europe in Romania in 1996, infection in humans and/or horses have been reported in several EU Member States. Similarly, cases were reported in several neighboring non-EU countries stressing the regional dimension of this threat.

To address the threat of vector-borne diseases and notably West Nile fever, ECDC started a series of initiatives, including threat and risk assessments, expert meetings and the development of tools notably for West Nile fever preparedness. However, in order to address the regional dimension of this threat it is necessary to integrate a regional perspective in those activities.

In this context and in accordance with ECDC's objectives to develop technical cooperation with non-EU neighboring countries, ECDC organized its first regional meeting on West Nile fever real time surveillance and good practices on vector-borne diseases in Belgrade, Serbia on December 2-3, 2015. In order to strengthen regional cooperation regarding West Nile fever and other vector-borne diseases, the meeting brought together representatives from EU Member States and non-EU neighboring countries with the overall objectives to:

1. Support the exchange of experience between EU and non-EU neighboring countries on the surveillance of West Nile fever and the lessons learnt since 2011;
2. Share experiences and lessons learnt on other vector-borne diseases of common interest (e.g., leishmaniasis, sand fly fever) within the Mediterranean region;
3. Identify the perspectives of West Nile fever surveillance and assess whether it can be used as a model for other vector-borne disease real time surveillance; and
4. Provide specific TESSy training. The system of direct country reporting and validation into one integrated EU database-TESSy at ECDC for all the diseases under EU-wide surveillance should ensure that a stronger database is available for the analysis at an earlier stage, training to make easier and quicker real time reporting of West Nile fever cases).

In accordance with this regional dimension, ECDC invited to the Blgrade Meeting representatives from:

- EU Member States: 26 experts from Austria, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Portugal, Romania, Slovenia, Spain and the United Kingdom
- EU pre-accession countries: 14 from Albania, Bosnia and Herzegovina, Kosovo, Montenegro, the former Yugoslav Republic of Macedonia, Serbia, and Turkey
- European Neighborhood Policy (ENP) partner countries: 20 from Southern ENP i.e., Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia and observers from Ukraine, and Georgia.

In addition, representatives from relevant EU and/or ECDC funded projects and relevant stakeholders were also invited to share their expertise, experience and contribution.

This meeting was organized through a conference format composed of plenary and parallel sessions relying on country presentations and active panel discussions. The parallel sessions allowed for in-depth discussions among the participants on technical subjects related to the general and specific objectives of the meetings as follows:

West Nile fever real-time surveillance

- sharing experience about the challenge of real time reporting of West Nile fever;
- presenting the solutions found by the countries to implement real time reporting;
- identifying the specific needs of the countries to implement real time reporting;
- discussing the usefulness of weekly end-products delivered by ECDC during the transmission season (West Nile fever atlas, high resolution maps, synthesis);
- discussing perspectives of West Nile surveillance for the next years and the use of this model for timely reporting of vector-borne diseases when needed.

Sharing best practices at regional level on other vector-borne diseases of a common interest

- sharing information on respective activities on vector-borne diseases and challenges for surveillance and control of vector-borne diseases of common interest such as West Nile Fever, leishmaniasis and sand fly fever;cont'd as Europe on p.7

Commentary from Brazil

IS A GOOD MOSQUITO A DEAD MOSQUITO?

Denise Nacif Pimenta and Paulo FP Pimenta

Email: denise.pimenta@cpqrr.fiocruz.br; pimenta@cpqrr.fiocruz.br

Research Center René Rachou/Fiocruz Minas (Fiocruz-MG), **Brazil**

Is a good mosquito a dead mosquito? The current *Aedes* control policies seem to strongly affirm so. On February 1, 2016, the World Health Organization declared the current Zika virus outbreak to be a Public Health Emergency of International Concern. Brazil's president, Dilma Rousseff, acknowledged that the country was losing the battle. "As long as [the mosquitoes] are reproducing, we are all losing the battle". Later on, Dr. Tom Frieden, chief of the Centers for Disease Control and Prevention, cried out: "there is the enemy," as he alerted the US Congress and called for a massive effort "to combat the danger."

In Brazil, the epicenter of the Zika epidemics, a war has been declared against *Aedes* mosquitoes, with combat strategies and zero tolerance programs with the slogan: "a mosquito is not stronger than a nation." Martial war verbs and metaphors again fill the headlines, blogs, social media and mainstream media in the country all tend to reproduce this notion of war against the *Aedes* mosquitoes. But what/who are we really fighting? The idea of battle and war refers to something external, distant and alien to us, an enemy. But is this the case of *Aedes* mosquitoes and the diseases they transmit?

In Brazil, the Ministry of Health has militarized its control strategy by mobilizing the army, navy, and marines to kill mosquitoes and distribute pamphlets. We are living in a political, economic and health crisis. Panic has been raised in the media and in the population. The arboviruses now in fashion, dengue, chikungunya and Zika have become business opportunities in a health system where the disease is the focus and the vector "public enemy number one". *Aedes* politics, *Aedes* wars.

But why transform mosquitoes into an enemy? Why deposit all the blame on them? One might question still, what is gained by doing this? Funding for research and P&D into "new alternative technologies" for vector control are gained. Publication of articles, project approvals and more visibility in academia and the media are increased. Threat to tourism, international travel and the Olympic Games are minimized. Massive sale of repellents, selling of headlines and newspapers are increased. Criticism—positive or negative are directed towards the government at the global, federal, state and municipal levels. Ultimately, the use of political and economic interests masked as "tools" for mosquito control are utilized.

Looking back into history one can see that this process is not new. *Aedes* mosquitoes over the last few centuries have shaped and continue to shape the social and political history of the Americas. In *Mosquito Empires*, J. R. McNeill explores the role of mosquito-borne infections such as yellow fever and malaria in shaping the history of the American hemisphere. Dengue and yellow fever started to shape history in the Americas at the end of the 17th century. The Zika virus followed dengue, which arrived in the western hemisphere over decades and became more aggressive in the 1990s, West Nile virus which emerged in 1999 and chikungunya which emerged in 2013.

Among diseases emerging in the 21st century, Zika is raising one of the greatest amounts of concern for public health globally. Zika virus has presented as outbreaks since 2007; however, more recently, it has become the main suspected cause of an unusual and completely unexpected microcephaly epidemic, exposing the urgent need for knowledge about this disease.

With the exception of West Nile virus, which is predominantly spread by *Culex* mosquitoes, the arboviruses that recently reached the western hemisphere have been transmitted by *Aedes* mosquitoes, especially the yellow fever vector *Aedes aegypti*. The yellow fever, dengue, and chikungunya viruses evolved entirely new maintenance cycles of human–*Ae. aegypti*–human transmission. Now, 5000 years later, the worst effects of this evolutionary cascade observed in emergence of arboviruses into new ecosystems involving humans. First isolated from a forest mosquito (*Aedes africanus*), ZIK virus is said to be transmitted by nine *Aedes* species as well as some *Anopheles* species. The relative role of these mosquitoes in future emergence and persistence needs further study.

Historically, disease control has consisted primarily of mosquito control, which relies on either insecticides or breeding habitat reduction. However, both approaches prove to be insufficient, considering the rapid spread of mosquito borne-diseases in recent years. Since 2010, a total of 60 countries have reported resistance to at least one class of insecticide, with a total of 49 of those countries reporting resistance to two or more classes.see **Brazil** cont'd on p. 7

.....**Brazil** continued from p. 6

A perspective from Social Sciences towards *Aedes* on the battlefield:

However, the human and social sciences can contribute to a critical reflection of this historical problem. If we look at the history of prevention and control policies in the world and in Brazil, we would see a much more complex relationship between humans and vectors, showing a multifaceted reality of the "battle" against these mosquitoes. Starting with Tropical Medicine, then International Medicine and now Global Health (some even might say One Health), it is known that diseases are socially constructed and determined. It is essential in the way we live and in the type of society we build.

It is the way we consume, discard (or stock) our garbage and manage our water. It is in the difficulty of managing large cities and agglomerations which have become increasingly claustrophobic. It is also in the models of sanitation and unequal distribution of water. In relations to exploitation of other people's work, it is the basis of our capitalist society and the current development model by which we live. It is in the growth of international migration processes by attracting large enterprises whose workers are finding themselves in precarious sanitary conditions in areas around industrial centers. It is in property speculation and lobbying of contractors who finance campaigns. It's in our relationship with nature and our lack of understanding of the multiple environmental implications in the dynamics of disease transmission and vector lifecycles. It is implemented and made tangible in our health policies.

But to fully be able to look at this reality is much more difficult than simply electing an enemy. Because it puts into question a whole way of life that we are not willing to question or even look at. Thus, what are we really targeting in this supposed war against *Aedes*? Are we eventually shooting in the dark?

Some authors have been advocating against this "desocialization phenomenon" of the questions in science, namely the tendency to raise only technical or biomedical problems of what in fact, are social and political issues. What are our "blind spots"? What problems or issues that our own scientific paradigms do not let us see or name? In the case of arboviruses and *Aedes* mosquito control, human and social sciences can provide some clues and perhaps even serve as a compass.

It is important to note that reality is socially constructed. If we do not reflect on the causes behind these phenomena they will continue to repeat themselves, as they have done throughout the history of public health in Brazil and worldwide. It is essential to face the systemic problems that have caused the current endemic and epidemic diseases.

Thus, it is necessary not only to "eliminate" disease and "battle" a supposed "enemy" but also to comprehend the more general processes which contribute to maintaining the situation as it is. What good (even hypothetically) will it do to just eliminate the mosquito or put an end to their breeding sites, if people continue to live for decades in poor health and life conditions?

If we assume that the process is also social, if we understand that dengue, chikungunya and Zika are a collective phenomenon, then we may start to appreciate that the problem is, in a way, in ourselves, in the way we live, get sick, work, consume, and finally ... in the way we construct and conduct our lives.

It is also in the way we look and create answers to these same questions. And this can be very uncomfortable and difficult to assimilate. It requires radical changes that we are not always willing to put into action or even grasp. It shows power forces and struggles which compete for the broader definition of what constitutes health and disease intervention.

The problem is deep-rooted and extends far beyond the arboviruses and *Aedes* mosquitoes. We need to understand how we think about health and disease as a whole. There is no ready answer! However, it is in the process of questioning that we may envision new answers and, perhaps, new realities.

.....**Europe** cont'd from p. 5

--exchanging lessons learnt and good practices on vector-borne disease surveillance, reporting and communication;

--reviewing challenges and perspectives for surveillance of vector-borne diseases of common interest.

Providing specific TESSy training for real time reporting of West Nile fever cases

--presenting practical tools and procedures to make real time reporting into TESSy easier and quicker;

--providing information/support to any issue experienced by the users while reporting into TESSy.

The sessions included:

Plenary session 1 – West Nile Fever (WNF) as a model for vector-borne diseases surveillance

Working group session 1 – Challenges of WNF real time surveillance

Working group session 2 – Perspectives of real time surveillance

Plenary session 2 – Debriefing from groups on the perspectives of real time surveillance

Plenary session 3 –Sharing experiences on vector-borne diseases of a common interest

Plenary session 4 – Lessons learnt, perspectives for future cooperation and next steps based on experiences from other EU initiatives: Vmerge (Jordi Figuerola) VectorNet (Dusan Petric) and MediLabSecure: (Lobna Gaayeb)

Meeting conclusions included:

WNF surveillance roadmap: Perspectives of real time surveillance for the coming years for WNF and

Other vector-borne diseases surveillance: perspectives for future cooperation, especially for enlargement countries and European Neighborhood Policy countries.

SOVE ANNUAL FINANCIAL STATEMENT

January 1—December 31, 2015

Society for Vector Ecology - Annual Financial Statement JANUARY - DECEMBER 2015

BANK BALANCES- DEC 31, 2014:	\$278,697.42	
		Certificates of Deposit
Funds invested in Certificates of Deposit, May 2006:		\$100,000.00
Interest Earned on Certificates of Deposit thru 2014		\$11,857.54
Interest Earned Jan-Dec 2015		\$21.60
Certificates of Deposit December 31, 2015	\$111,879.14	

	<u>INCOME</u>	<u>EXPENSES</u>
Dues/Membership	\$23,725.00	
Donation	\$0.00	
Page Charges	\$20,221.00	
JVE Editing Charges	\$395.00	
Interest	\$186.65	
Other Income	\$22,678.93	
Total Income: Jan -Dec 2015	\$67,206.58	

General:	Visa/MC Merchant Fees	\$1,720.55
	Bank Service Charges	\$340.00
	PayPal Charges	\$714.56
	Business Lunches/Entertainment	\$111.80
	Office Supplies	\$1,911.72
	Misc.	\$1,450.21
Total General Expenses:		\$6,248.84

Computer:	Software	\$179.88
	Network Solutions Webhosting	\$158.49
		\$338.37

2015 - 46th Annual Conference		
Registration	\$39,320.00	
Sponsorship	\$6,350.00	
Hotel		\$4,485.28
Excursion		\$13,492.79
Poster Boards		\$675.28
Audio Visual		\$0.00
Student Stipend		\$3,356.10
Petty Cash/Tips		\$953.00
Travel		\$1,139.69
Programs		\$329.40
Awards		\$152.28
Badges/Bags/Pens		\$370.06
Supplies		\$803.72
Honorarium		\$600.00
Hospitality/Dinner		\$15,480.73
Misc.		\$1,640.00
	\$45,670.00	\$43,478.33

Taxes:	2015 FTB Filing Fee	\$35.00
	2015 Tax Prep	\$400.00
Total Taxes Expenses:		\$435.00
Postage:	Misc. Postage	\$31.50
Total Postage:		\$31.50
Services:	Mark Klowden-Editor	\$5,000.00
	Anne Klowden	\$8,680.00
	Valerie Montigny-Secretarial Services	\$12,000.00
	Webmaster	\$3,000.00
Total Service Expenses:		\$28,680.00

TOTALS FOR Jan -Dec 2015	\$112,876.58	\$79,212.04
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FUND RECONCILIATION

CBB Bank - 5207 Bal. Fwd 12/31/14	\$168,637.06
CBB Bank - 3688 Bal. Fwd 12/31/14	\$109,958.62
Paypal - Bal Fwd 12/31/14	\$101.74
Income	\$112,854.98
Expenditures	\$79,212.04
Bank Balance 12/31/15	\$312,340.36
Certificate of Deposit	\$111,879.14
TOTAL FUNDS	\$424,219.50

Ending Bal from Bank Statements	December, 2015
CBB - 5207	\$200,809.24
CBB - 3688 (Savings)	\$110,123.67
Paypal	\$1,337.45
Undeposited Funds	\$70.00
	\$312,340.36
Variance	\$0.00

Submitted by
Major S. Dhillon
SOVE Secretary-Treasurer

OBITUARY

Alan Jon Magill

1953—2015

Dr. Alan Jon Magill, 61, passed away Saturday September 19, 2015 near his home in Woodway, Washington. He was born November 26, 1953 in Craig, Colorado. Alan is survived by his wife of 31 years, Janiine Babcock, his daughter Lara Magill and her husband Jonathan Krynsky, his daughter Sarah Magill, and his brother Donald Magill.

Alan served for 26 years in the U.S. Army Medical Corp building the foundation for his career as an infectious disease doctor and medical researcher. He retired as a Colonel, after leading the military's program to develop drugs and diagnostics to fight malaria and other tropical diseases. In 2012, Alan was honored to join the Bill and Melinda Gates Foundation as its Director of Malaria Programs. He was inspired by the exceptional individuals at the Foundation who helped him build his vision for a malaria-free world. The only thing surpassing his passion for global health was his love of family. Alan's tenderness, goofiness, and unconditional love grounded us. His uncanny ability to see into our hearts made him an incredibly compassionate man who would always listen and always hold us. His strength and drive made him unbeatable at board games, miniature golf, and poker, while his love for adventure and the great outdoors took him to some of the most wild and beautiful places in the world.

Alan was a great friend to vector control and entomology, sometimes remarking that "I should have been an entomologist." The very complexity of entomology attracted his intellect, at the same time as he was professionally cautious of entomological research for research sake. Officially, he saw vector control as one of the theoretical ways to prevent transmission, coupled with vaccines as the other method. Of course, he knew that the kind of vaccine needed for practical prevention does not yet exist and that vector control was the only realistic way to bring malaria transmission down to a level that supported parasite elimination from the human population. He also saw the great promise in the future of vector control for malaria elimination and he was especially fascinated by our field's ability to innovate and utilize multiple methods to achieve its aims. Many of us had the pleasure of hearing a detailed and inspiring explanation of his thoughts on these areas at the meetings of the American Mosquito Control Association in February 2014 and at the meetings of the American Society for Tropical Medicine and Hygiene, of which he was President, in November 2014. These talks met with great acclaim and rightly so, as he showed how the public health community could keep focus on malaria eradication. During the year I worked for him at the Gates Foundation, he was always willing to listen to the "bug guy" and also willing to change his own opinions in response to the realities of entomology. The vector control community has lost a champion who was in the right place at the right time.

Dan Strickman

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Bill & Melinda Gates Foundation

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GLEN CALVIN COLLETT 1926 - 2016

Glen Calvin Collett, 89 years old, of Salt Lake City, Utah, passed away January 5, 2016, following a rapid infection due to his long decline from Alzheimer's disease. He was born on November 3, 1926, in Roosevelt, Utah, the eighth child of Charles Capper Collett and Effa Rebecca Seeley Collett and married Marvis Featherstone on June 7, 1950, being a caring, thoughtful husband for almost 66 years.

Learning from an early age to work hard, he graduated from South High in 1944 then worked to put himself through college, earning a BS degree in Zoology in 1949, followed by MS degree in Entomology from the University of Utah in 1951. For both of his undergraduate and graduate work, Dr. Don M. Rees was his major professor. The title of Glen's thesis was 'On the Biology of *Aedes niphadopsis*.' During his college years, Glen worked as a seasonal employee at the Salt Lake City Mosquito Abatement District (SLCMAD). Upon receiving his MS he was hired as the district entomologist at the Tulare Mosquito Abatement District. He worked there just one year before he went to the US Army and off to Korea. Upon returning he was hired as the Field Supervisor of the SLCMAD in 1954. He took over as the district's manager in 1955 and remained in that position until December of 1987.

During his professional years, Glen authored/co-authored 47 scientific publications, including "An Identification Guide to the Mosquitos of Utah" and "Natural Overwintering Hosts of the Virus of Western Equine Encephalitis." During Glen's university and employment years, he belonged to The Society of the Sigma Xi scientific research association, the Phi Sigma Biological Society, the Military Preventative Medicine Association, the California Mosquito and Vector Control Association (CMVCA), the Utah Mosquito Abatement Association (UMAA), the Society for Vector Ecology (SOVE), and the American Mosquito Control Association (AMCA).

After his retirement, Glen was the executive director of the UMAA for 18 years. He continued to serve on the SLCMAD's supervisory board for many years. He also served on the board of the Magna Mosquito Abatement District. During his many years of work in mosquito control, he was well known throughout the United States, speaking at conferences held in many states.

For his service and professional recognition, Glen received a number of honors and awards. These included President of the UMAA (1962), AMCA West Central Regional Director (1963), 32nd President of AMCA (1972), First recipient of the Dr. Don M. Rees Award from the UMAA (1987) Honorary Life Member of the CMVCA now Mosquito and Vector control Association of California – only out of state member ever to receive this award (1988), AMCA Medal of Honor (1989), President of SOVE (1990), Honorary Member of AMCA (1998); the UMAA Meritorious Service Award was renamed the Glen C. Collett Meritorious Service Award (2007)

Glen served in the Korean war as a preventative medicine technician and was awarded the Korean Service Medal, the United Nations Service Medal, and the National Defense Service Medal. The stories of his time in Korea were shared many times and will always be remembered as well his kindness to the people of that county that he served.

A former Bishop in the Church of Jesus Christ of Latter-Day Saints, Glen was active for many years in the Young Mens program as a leader, teacher, and father. He served faithfully in many positions in his High Priests groups. Garrulous, friendly, and caring, he always enjoyed his home teaching assignments. Whatever his outside concerns were, however, his main focus was his home and family. A loving husband and father, he attended every baseball, basketball, and tennis game his children took part in. He enjoyed taking his family hiking, camping, on vacations, and doing yard work with them. He taught his children his philosophies of hard work and commitment, stressing his basic precepts that any job worth doing is worth doing well and that if you are not five minutes early, you are late. He was always supportive of his wife in all her endeavors and they worked unitedly together in running their home. After his retirement, they became world travelers visiting Russia, Egypt, Italy, Peru, China, and many other countries. However, no matter how fascinating the journey, he always looked forward to returning to garden in his own backyard.

Glen is survived by his wife, Marvis; his children Robin Collett of Salt Lake City, Steven Collett of Tualatin, Oregon, Gordon Collett of Billings, Montana, Jill Filicetti of Boise, Idaho; 13 grandchildren; and his sister Veva Andersen of Murray, Utah.

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For Your Calendar

IX International Symposium on Phlebotomine Sandflies will be held June 28 – July 1, 2016 in Reims, France. For more information, visit <http://www.isops9.org>

From: Sinval Pinto Brandão Filho
[mailto:sinval@cpqam.fiocruz.br]

The SOVE annual conference will be held in Anchorage, Alaska at the Sheraton, September 11-15, 2016. The room rates are @\$110.00/night.

We hope to see you there.

American Mosquito Control Association annual meeting will be held February 12-16, 2017 in San Diego, CA.

Jobs

POSTDOCTORAL RESEARCH FELLOWSHIPS

The Division of Vector-Borne Diseases (DVBD) of the Centers for Disease Control and Prevention (CDC) has posted at their website a variety of fellowship opportunities in the four branches of DVBD. The purpose of the fellowship program is to provide opportunities for recently graduated scientists to gain experience at the forefront of vector-borne disease research. Equally important it is a means for DVBD staff to benefit from the fellows' fresh skills and perspective. For detailed information on funding, eligibility, pre-application requirements, and application package, go to: <http://www.cdc.gov/ncezid/dvbd>.

Deadline: April 30, 2016.

Resources

For **FREE resources for Investigators**, 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](#).

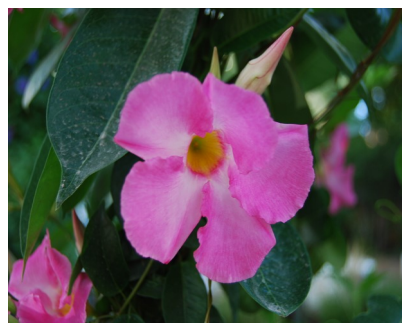
Below are two items that may be of interest to some of our membership, dealing with NIAID research interest and funding opportunities for Zika vector research:

<https://grants.nih.gov/grants/guide/notice-files/NOT-AI-16-026.html>

<http://grants.nih.gov/grants/guide/pa-files/PAR-16-106.html>

[Adriana Costero, PhD](#)

[Email: acostero@niaid.nih.gov](mailto:acostero@niaid.nih.gov)



mark your calendar and get set for

**The 47th Annual Conference
SOCIETY FOR VECTOR ECOLOGY
Sheraton Hotel
Anchorage, Alaska
September 11—15, 2016**

**keep checking for updates at
www.sove.org**





Society for Vector Ecology

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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

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