SOVE
Society for Vector Ecology

SOVE Newsletter

President's Message

Fred Steve Mulligan III

My Dear Friends and SOVE Family members,

Who do you think you are? Why are you here? Where did you come from? Why don't you go back where you came from? Some of us may have overheard similar comments directed with invective and venom by bullies toward unfortunate individuals, maybe even toward one of our family. Empathy often seems not a ubiquitous human trait. However, maybe these questions, directed inward, can yield positive consequence. Who do we think we are and why are we in this profession, as researchers and public health practitioners, as SOVE members? What do we think of SOVE as a society and why does it exist? On a foundational level, from where did SOVE come, what is our genesis?

An outstanding source of reference of the history of SOVE was published in our own Journal of Vector Ecology Vol. 30, no.1, in June 2005, authored by the late SOVE members Minoo Madon and Cluff Hopla. It references Harvey Magy, a public health biologist with the California Department of Public Health, Bureau of Vector Control (BVC), who is credited with being the principal founder. Mr. Magy also presented a paper at the 39th Annual Conference of the California Mosquito Control Association (now MVCAC), January 25-27, 1971, on "The genesis and goals of the Society of Vector Ecologists." All three individuals were past Presidents of SOVE. It would do our current members well to read these articles.

Mr. Magy and others felt there was an unfilled void for an association which could embrace public health biologists working with different vectors but wishing to align underlying principles of the biology and control of vectors and vector-borne diseases.

President's message cont'd on p. 2.

In this issue

President Message *cont'd from P.1*

In the words of Richard Husbands (BVC), "a society…dedicated…to bring together a professionally diverse group of people inspired by a common purpose." "…whereby vector problems are solved by the use of inter-disciplinary knowledge based on the application of sound ecological principles."

I find it most significant that this group first came together in discussion on April 19, 1968 to found the California Association of Vector Ecologists and to hold its first annual meeting in Fresno on March 20, 1970. These were turbulent times, yet foundational in terms of awareness and activism, not just in the political sphere; but a new, grander environmental consciousness was evolving.

I was 18 that summer of '68, fresh out of high school, headed for college and concerned about the draft and Vietnam. Martin Luther King, Jr. and Bobby Kennedy had been assassinated. A year earlier, release of the Kerner Report exposed the underlying racial bigotry, inequity and oppression that led to the 1967 race riots in Detroit and Newark, and that yet lingers.

With that backdrop, on the environmental front an awakening was happening. Rachel Carson's book "Silent Spring" was published in 1962. The Clean Air Act passed in 1963, followed by early legislation regarding water quality (Water Quality Act of 1965) and endangered species (Endangered Species Act of 1966). Environmental catastrophes occurred to focus and galvanize the need for action. A Santa Barbara oil well blowout spilled hundreds of thousands of gallons of oil into the ocean for eleven days in 1969, and then, that same year, Ohio's Cuyahoga River burst into flames from oil and chemicals floating on its surface. Youthful activism and Earth Day, April 22, 1970, helped to converge awareness of the need for environmental protections and pushed for federal legislation, leading to establishment of the Environmental Protection Agency and the National Oceanographic and Atmospheric Administration in 1970, the Clean Water Act in 1972 and the Endangered Species Act in 1973.

There is no doubt in my mind why the SOVE founders considered ecology as the core principle and sought to attract "people of diverse training—entomologists, mammologists, engineers and general biologists—who shared our dedication." Further that SOVE "will take a more active role in enhancing the environment through the diligent use of sound ecological principles."

This then is my take on the backstory of who we are and from where we came. Beyond that, we have always taken pride in considering SOVE as a Family. Major Dhillon first coined the term "the Family of SOVE" at a Euro SOVE meeting in Lisbon in 1998, and it remains an apt description of who we are. This concept is derived from familial and familiar feelings, a kind of intimacy that is not found in larger organizations. Yes, we can have disagreements, and many will think I'm full of it. But our focus on the public health and bettering the human environment, while protecting our physical environment and the ecology, the oikos…the house, are pure.

I hope to see all of you in September in Hawai'i at our Congress, our own vector ecology island.

Steve

NORTHWEST REGION, USA

Ben Beard
Regional Director

Dear Colleagues and Friends,

Even though September often marks the end of the summer and a prelude to cooler fall temperatures, it's important to remember that the peak of West Nile virus (WNV) infections in the U.S., occurs from July to September, with human cases sometimes occurring into December (for more information see: https://www.cdc.gov/mmwr/volumes/70/wr/mm7032a1.htm#T1_down). In 2022, CDC organized an open modeling challenge to predict the number of West Nile virus neuroinvasive disease (WNND) cases (e.g., encephalitis, meningitis, and acute flaccid paralysis) expected to occur in each of the counties in the contiguous U.S. An interactive app has recently been developed (Credits to Karen Holcomb, Mike Johansson, Chris Barker, and vectorsur.org) that visualizes the forecasts from the 2022 West Nile Virus Forecasting Challenge and provides details on participating teams' methodologies (https://forecast.vectorsurv.org/kholcomb/WNV/). The app allows users to visualize the predicted median number of WNND cases per county for 2022, using either an ensemble model or a historical data model (i.e., negative binomial model). To provide context for the predicted case numbers, a user can visualize the forecasted probability that the count exceeds the 10-year median or maximum for each county. Clicking on a county displays a plot of the team's forecasts (median count and 90% prediction interval). The 10-year median and maximum number of cases are also shown on the plot. A link on the page to CDC's ArboNET map (https://wwwn.cdc.gov/arbonet/maps/ADB_Diseases_Map/index.html) makes it possible to view the number of cases reported currently and historically to CDC from state and local public health departments.

In other news, CDC's Division of Vector-Borne Diseases in Fort Collins, CO recently announced the award of $40 million over the next five years to four universities to establish regional centers of excellence (COEs) in vector-borne diseases. CDC awarded approximately $2 million to each COE the first year and will award $2 million to each COE the following four years. The awardees include the University of Massachusetts Amherst, University of California-Davis, University of Florida, and University of Wisconsin-Madison.

These COEs will provide regional capacity to enhance public health prevention and response for vector-borne diseases, pushing technology out closer to sites of potential transmission. Given significant regional differences in vector ecology, disease transmission dynamics, and resources, these COEs will help generate much needed research and Information, as well as strengthen capacity to enable appropriate and timely local public health action for vector-borne diseases throughout the country. Specific goals of the four COEs include: (1) conducting research on ways to prevent tick and mosquito bites or suppress populations of regionally important ticks and mosquitoes and their associated human disease pathogens, (2) training a new generation of public health entomologists to serve as experts in vector-borne diseases at state and local levels, and (3) strengthening

. . . . . .***Beard*** *cont'd on p. 10.*

SOUTHWEST REGION, USA

Lal S. Mian

Regional Director

Dear Colleagues and Friends,

As it turns out I was over optimistic about the breaking point of successfully fighting the SARS-Cov-2 in my post last year. We are still not completely out of the woods—there are still COVID-19 cases (in the hundreds, not thousands though), but with proper vaccination and precautionary measures i.e., use of masks, keeping social distance, hand washing etc., hopefully, we will come out of it in the foreseeable future. The good news this year is that in-person workforce activities have reached to almost normal levels, at least on our campus. This could also be reflected in the vector-borne disease surveillance data in 2022, notwithstanding drought, extreme summer temperatures, and fires impacting our region. Using the CDC and state sources, a brief report on VBD surveillance in Southwest Region is presented here.

Arizona (www. Azdhs.gov). As of August 31, 2022, Arizona Department of Health Services reported 385 (1507 in 2021) vector-borne and zoonotic disease (VBZD) in 2022. Mosquito-borne diseases caused by West Nile virus (WNV), dengue, and malaria accounted for 26 (1,433 with 96 deaths), 3, and 8 (travel-related) cases, respectively. Other VBZDs reported in 2022 with 2021 numbers in parenthesis included Rocky Mountain spotted fever 8 (13), Lyme disease 6 (6), brucellosis 1 (5), babesiosis 2 (3), anaplasmosis 2 (2) tularemia 1, Chagas disease 3, Colorado tick fever 1, hantavirus 2, and typhus 1 (1). The WNV cases of 26 in 2022 are much lower than last year (1,433 with 96 deaths), but higher than 2020 (10) and lower than 2019 (174 with 19 deaths).

California (www.cdph.ca.gov). As of August 23, 2022, California updated - the distribution of two invasive mosquito species, *Aedes aegypti* and *Ae. albopictus* — the former species was found in 23 (21 in 2021) counties from San Diego and Imperial counties in the south to Shasta County in the north; the latter species maintained its presence in 5 counties—San Diego, Orange, Los Angeles, San Bernardino and Shasta. Regarding other vector-borne diseases in the state, as of September 2, 2022, WNV activity continued with 35 (192) human cases, 113 (341) dead birds, 2136 (2,678) positive mosquito pools, 28 (143) sentinel chickens and 5 (20 horses. As compared with the 2021 numbers in parenthesis for each category, virus activity was significantly lower in 2022. Also, there were 4 cases of St. Louis encephalitis as well as 5 and 18 travel-related cases of chikungunya and dengue virus, respectively. The virus activity was reported from 26 (38) out of 58 counties with 12 (24) reporting human cases. The 35 human cases reported in 2022 were much lower than last year (192) and well below the state 5-year average (425). Since its arrival in California in 2003, WNV has resulted in >7K cases with 309 deaths.

Hawaii (www.health.hawaii.org). The Hawaii Health Department reported no new cases of dengue in 2022. They had 5 dengue cases in 2020; and in 2015-2016 there was a dengue outbreak that sickened 264 cases.

Nevada (https://dhhs.nv.org). The Nevada Department of Health and Human Services reported 3 imported cases of dengue. There was no WNV activity reported in mosquitoes and birds.

New Mexico (nmhealth.org). In 2022, the New Mexico Health Department reported 3 imported cases of dengue fever, I chikungunya, and I malaria . There was one hantavirus case reported this year.

In closing, I would like to remind our regional members to please send me (lmian@csusb.edu) any news about your employment, professional recognition, or any significant accomplishment that you would like to see published in the newsletter. Thanks!

Stay healthy and safe!

Cordially,

Lal

South Central Region, USA
Steve Presley
Regional Director

Greetings colleagues and friends,

As I prepare to travel to the 8th International Congress of the Society for Vector Ecology in Honolulu, I reflect on the challenges we as the collective global SOVE community have faced since our last pre-COVID-19 in-person meeting in San Juan, Puerto Rico during September 2019. The pandemic has touched each of us individually, whether through the loss of family, friends, and colleagues, or through restrictions/prohibitions on travel, financial loss, and the overall disruption of our daily lives. The pandemic has been a long and painful reminder of the truly devastating effects a novel (zoonotic?) virus may have on our modern healthcare and public health infrastructure. But as the COVID-19 pandemic appears to be slowly waning, and growing concern regarding the pandemic potential of the Monkeypox virus develops, we can be grateful that neither pathogen is arthropod-vectored (at least not yet!).

Most of the Southcentral Region has experienced severe to extreme drought over the past two years, with many areas of Kansas, Oklahoma and Texas experiencing exceptional drought conditions. Recent rains in late July and early August throughout the region have helped reduce the intensity of drought conditions, particularly in Arkansas and Louisiana. The recent rains have also facilitated a significant increase in mosquito populations, particularly many of the floodwater species. As a result of these recent rains we are likely to see a significant increase in arbovirus-positive mosquito populations, particularly West Nile virus, in northern Texas and western Oklahoma.

As of the 30th of August, reported arboviral disease activity in the Southcentral Region during 2022 has been somewhat limited compared to previous years. Louisiana and Texas are the only states in the Southcentral Region that have reported any human arboviral illnesses. There have been nine confirmed cases of West Nile virus infection from three Louisiana parishes, while Texas has reported seven cases from three counties. Surveillance screening of mosquitoes has detected West Nile virus in specimens from more than 20 Louisiana parishes, two Oklahoma counties, and nine Texas counties. St. Louis encephalitis virus has been detected in mosquitoes from two Louisiana parishes and from one county in Texas. Additionally, Eastern equine encephalitis virus has been reported in mosquitoes from one parish in Louisiana.

I am eagerly looking forward to the outstanding platform and poster presentations, and the outstanding Field Ecology Day that is planned, but most of all an opportunity to meet in-person and catch-up with friends and colleagues in Hawaii. I wish you all safe travels and good health, and I hope to see you in Honolulu.

EUROPEON SOVE REGION
Filix Gunay
Regional Director

Dear Friends and Colleagues,

It is the end of summer, and we'll have the 22nd ESOVE [EuroSOVE] Conference in Sofia very soon. I want to highlight my deep appreciation to Major Dhillon and Michelle Brown for their constant support in making this Conference happen. We've put together a great program with the help of the ESOVE Scientific Committee, consisting of Alexandra Chaskopolou, Andrei Mihalca, Bruno Mathieu, Claire Garros, Gregory L'Ambert, Ozge Erisoz Kasap, Vit Dvorak along with all the participants who've sent their outstanding abstracts! Here's an update on the program.

During the Conference on October 11-14, we will listen to some intriguing research about "Vector Phylogeny, Taxonomy and Biogeography", "The Role of Citizen Science and Outreach for the Surveillance of Vector Species", "Host-Pathogen-Vector Interactions", while most of the oral presentations will be about "Vector Ecology and Behavior" and "Surveillance and Management of Vector-Borne Diseases". Brilliant poster presentations will await the participants as well on all these subjects.

The ESOVE Conferences have always been a famous platform for exchanging ideas and creating long-lasting collaborations. This year I'm eager to present you the session "New Projects & Updates from Different Networks" as it's been a very long time since we last met. We'll find out the details about new projects such as CLIMOS - towards better understanding of climate and environmental drivers of sand fly borne diseases in Europe, RIVOC - a regional collaborative research project and network to enhance innovative research on emerging and main vector-borne pathogens in plants and vertebrates through a One Health approach, and INOVEC - a research and innovation partnership for enhancing the surveillance and control of mosquito vectors of emerging arboviruses. RIVOC has supported the Conference greatly this year, coming to us with excellent keynote speakers and students. In this session, we will also hear essential updates from VectorNet and some impressive AIM surveillance and control records out of 22 years from Switzerland.

In Sofia Balkan Hotel, right before the Conference on October 10th, the AIM-COST Action (www.aedescost.eu) will have a face-to-face training on "Finding, using and interpreting maps and models of invasive mosquitoes". I highly recommend it to all of you who are interested in invasive *Aedes* mosquitoes.

While globalization, the pandemic and war affect every aspect of research and induce issues about vector-borne diseases, many scientists have worked with increased enthusiasm. Vector-borne infections persist, the last example being the reports of 11 deaths related to the West Nile virus from Greece. It's obviously about time for us to meet again.

On this, I'll briefly try to convey the thoughts and feelings of our Scientific Committee. The Society has been a welcoming scientific environment for those of us who have been attending ESOVE Conferences since we were students. Today the efforts of our students who have been working towards gaining superior knowledge about their research subjects are significant for us. We're now proud to create this atmosphere where students meet junior and senior scientists from different disciplines and countries. We look forward to inspiring and challenging each other and sharing our laughter again.

I sincerely hope many will benefit from the upcoming Conference. Stay healthy, and I hope to see you soon.

Filiz

SOVE–Indian Region

Ashwani Kumar
Regional Director

Dear Colleagues,

The SOVE (Indian Chapter) is in pursuit to promote scientific research, dialogue, discussion, exchange of ideas and training for better understanding of vector ecology and for effective control of vectors and vector borne diseases (VBDs). A meeting of the local executive meeting was held by virtual mode on 16th August 2022, to discuss the dates for the International Conference of SOVE Indian Region from 13th to 16th March, 2023 at ICMR-VCRC, Puducherry. The meeting chaired by Ashwani Kumar, President/Director, was attended by Deeparani Prabhu, Member, Nandini Korgaonkar, Member, Sandeep Garg, Treasurer, Ajeet Mohanty, Secretary and A. N. Shriram, Scientist "D" from ICMR-VCRC, Puducherry.

The members were unanimous in their opinion that arboviral diseases such as dengue (DEN), Japanese encephalitis (JE), West Nile virus (WNV), chikungunya fever (CHIK), ZIKAV, Crimean-Congo haemorrhagic (CCHF) fever, Kyasanur forest disease virus (KFDV), etc. are on the rise and should be discussed in the light of the rapidity at which the ill effects of the climate change inter-alia are impacting vector-borne disease eco-epidemiology around the globe and especially in South East Asia and India.

As we move into the recovery phase, in the post-COVID scenario, we thought it worthwhile to seize the opportunities emerging in the recovery. Therefore, because of the prevailing scenario, we are optimistic that the proposed 2nd International Conference would be a resounding success. We will keep you updated about the developments leading to the conduct of the conference and the agenda. We extend a very warm welcome to the members of SOVE Family from across the globe to block the dates and attend the Indian SOVE Meeting. We assure you that it will be scientifically and culturally a rich feast for the attendees.

Fortunately, as of August 30, 2022, the COVID-19 pandemic has relented in India. With the total cases of 44, 418,585 as on 30th August 2022, the COVID-19 case load in India has descended to 65,732 active cases, 43,825,024 cured/discharged and 527,829 deceased. COVID-19 Vaccination stands at 2,121,741,962 (>2.12 Billion) in India, the second most populous country of the world as on date. Precaution dose is now available for fully vaccinated citizens. Currently, new vaccines for children (12-17 years) are available. The Ministry of Health & Family Welfare, Govt. of India, is empowering the citizens by providing for COVID-19 vaccination of children between 12-14 years of age, guidelines for international arrivals, clinical guidance for management of adult COVID-19 patients, advisories and precautions to be taken for preventing the spread of the virus. The active cases in the Union Territory of Puducherry, is 342. The territory reported 71 fresh cases on the 30th of August 2022.

The Indian Council of Medical Research-Vector Control Research Centre at Puducherry, India is currently the 2nd home for the SOVE Indian Chapter. All the field projects/ research activities, have picked up momentum. There is a growing need for entomologists in the field of Public Health in view of emerging and re-emerging vector-borne diseases in India and other tropical countries. Apart from the State Health Departments, National Centre for Vector-Borne Diseases Control (NCVBDC), National Centre for Disease Control (NCDC), National

. . . . .***Kumar*** *cont'd on p. 8.*

Kumar *cont'd from p. 7.* Health Mission (NHM), and ICMR Institutes working on VBDs require trained personnel with knowledge and expertise in entomology, epidemiology and prevention/control of VBDs for their programs pertaining to vector-borne diseases. Keeping this in perspective, from this academic year, we have initiated a National Public Health Entomology Program and M.Sc. PHE will be offered besides the Vector Control Research Centre, at four of our sister Institutes viz., Regional Medical Research Centre, Dibrugarh, Assam, Regional Medical Research Centre, Gorakhpur, Uttar Pradesh, ICMR-National Institute for Research in Tribal Health, Jabalpur, Madhya Pradesh and ICMR- Rajendra Memorial Research Institute of Medical Sciences, Patna, Bihar, India.

As a country, I believe we have used the social and behavioral science, ramped testing and a robust vaccination program to tackle the three waves of COVID 19 upsurges. I surmise, that India is on the path to defeat the COVID and all my fellow Indians are contributing their might towards realizing this goal. Undoubtedly as in other walks of life elsewhere, the pandemic has been a serious obstacle in VBDs research and mitigation measures of VBDs.

As an optimist, I believe, there is now a real hope that vaccines will help end the pandemic soon. But until it is over, we must stay vigilant and continue to protect our loved ones by wearing masks, social distancing, washing our hands, and ensure that eligible people in our contact are vaccinated. With the Covid-19 crisis relenting, there is no need to panic, but meticulous planning is the need of the hour. We must avoid knee-jerk reactions that could impact the gains achieved, as we emerge from a difficult period.

Good News! The membership of SOVE Indian Chapter, in the recent times, has swelled from 99 to 133. Currently, there are 81 regular, 12 retired, 39 students and 1 sustaining member. Efforts, are underway to increase the membership further to cover the length and breadth of the country, with an ultimate aim of PAN India presence. Following which efforts shall be made to enroll members from the neighboring countries of the region.

In the end, here is good news to share with all the SOVITES! At the ICMR-VCRC, the construction of International Centre of Excellence for Training in Medical Entomology (ICETIME) has begun and hopefully this 6 storey state of the art building will be ready by the end of 2023. It will offer certificate, diploma, Masters and PhD in Medical/Public Health Entomology courses to trainees from Asia, Africa and possibly beyond in years to come to meet the growing demand for the skilled professionals to provide entomological critical mass to the national, regional and district public health programs.

Last but not the least, my gratefulness and sincere gratitude for the SOVE award bestowed on me for Lifetime Achievements and Services at the forthcoming International Conference at Honolulu, Hawaii. I am very excited to be there and meet all of you and am looking forward to this exciting meeting and the learnings from the global experiences on Vector Borne Diseases. Thanks to the President Steve Mulligan, Ex. Director Dr Michelle Brown and SOVE stalwarts of the SOVE Board especially, Major S. Dhillon for the recognition and honor.

Friends! Stay focused, stay safe and healthy and we shall soon overcome this pandemic and say it a good bye never come again! The Key to Safety is in our own Hands!

Ashwani Kumar,

IN MEMORIUM

About Dr. Bob

Robert John Novak
June 5, 1947 – August 4, 2022

Dr. Bob, our dear friend and colleague passed away on August 4, 2022 at the age of 75, in Tampa, Florida. A lot can be said about his academic credentials and accomplishments and the many hats he wore during his career. He was a respected professor with multiple appointments in several academic departments of medicine, microbiology, and public health. He served as a consultant and advisor for numerous national and international organizations, including the Environmental Protection Agency, World Health Organization, the Chinese Academy of Sciences, U.S. Fish and Wildlife Service, National Center for Supercomputing Applications, Illinois Governor's Office and Pollution Control Board, Vector Control Division of the Puerto Rico Department of Public Health, the Ministry of Health of U.S. Virgin Islands, the United States Agency for International Development in Honduras, the U.S. Army Medical Virology Institute in Fort Detrick, Maryland, the Pan American Health Organization *Aedes aegypti* biology and control, and the Pueblo Board of Water Works, Colorado.

Bob was a world-renowned medical entomologist with his research focus on mosquito biology and control. He was also member of many professional organizations among which the American Mosquito Control Association (AMCA) and the Society for Vector Ecology (SOVE) stood so dear to him that he seldom missed their annual meetings. For his service and dedication, Bob received several AMCA awards: Presidential Citation (1993), Memorial Lecture Award (1998), Medal of Honor (2003), while he also served as the AMCA President in 1996-1997. Bob also served the SOVE President in 2007 and received the Society's Distinguished Service Award in 2013. While his many notable accomplishments and contributions can be addressed by others, to me and many others, he was known as Dr. Bob, or simply Bob.

We all know he loved Colorado more than anything else; almost as much as he loved his wife, Lorraine. His stories about his upbringing on a cattle ranch and how that influenced his decision to enter the field of public health are legendary. The funny thing is that he loved animals but found the connection between these "dumb animals" and the bugs that fed on them as fascinating. . . . .***Novak*** *cont'd on p. 10.*

Novak *cont'd from p. 9.* This happens to the vast majority of those of us working in medical and livestock entomology, so we all accepted his comments as par for the course, never odd.

Bob was a great man. It's been said that you can gauge a person's greatness according to his/her degree of commitment. A person is great when he/she speaks directly to you and lives according to what he/she says, when he treats you with affection and respect, or when she looks into your eyes and smiles innocently. Conversely, a person is not so great when he only thinks about himself while making others believe that he thinks of them, when he behaves in an unkind way, when she seldom provides support, or when she leaves you stranded when you most need her to demonstrate what is most important between two people: friendship, companionship, affection, and respect.

Bob was a giant. He was always interested in your life and looked for alternatives for your personal and professional growth. He dreamed with you and explored areas outside the conventional box with you, especially when it meant doing things everyone else thought were so farfetched and impossible. His project with the satellite imagery for mosquito surveillance and control are perhaps the best example.

Dr. Bob was blunt and direct, but he was huge. He always tried to understand you even when he didn't see things the same way you did. He always placed himself in your position and judged you on what he expected from himself under whatever circumstance.

Bob never allowed himself to be governed by clichéd behaviors and cared little for how he looked in front of others. He abhorred being manipulated or handling people like a puppeteer. He dealt with most disappointments with grace and deference and shared his opinions clearly and with certainty. Not always, of course. We all have at least one instance where his bluntness was clearly manifested to be washed off later with an adult beverage or a beer.

Bob enjoyed fine and exotic dining. Very seldom can one witness a person enjoy the pleasure of a new dish the way he enjoyed fried crickets and sauteed scorpions at a roadside gourmet diner in Cambodia or a bowl of mystery porridge served in a crusty bowl as he did at gourmet diner in Eritrea close to the border with Sudan.

Dr. Bob was a consummate field entomologist who could not be judged through centimeters, meters, or wealth. He was defined by his actions, honesty, and decency. He was kind and respectful of the feelings and interests of others. Dr. Bob was a great man. His memory and joy for living will remain vibrant in the hearts of many. For his sensitivity and how he treated others, Dr. Bob was a giant.

Manuel F. Lluberas, MSc IDHA
Public Health Entomologist
lluberas@hdhudson.com

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Beard *cont'd from p. 3.* collaboration between the academic community and state, territorial, and local public health organizations, vector management programs, and other potential partners to develop, evaluate, and implement strategies that suppress ticks and mosquitoes and the pathogens they spread.

CDC's COE program was established in 2017 through funding provided to CDC under the Zika Response and Preparedness Appropriations Act of 2016, completed their commitments and the funding period ended June 2022. The highly successful COEs at universities in California, Florida, New York, Texas, and Wisconsin made significant contributions to local and state health departments, local vector control agencies, entomology students, and the scientific community. Their successes made it possible for CDC to re-announce a notice of funding opportunity for the award period from 2022 through 2027. Additional information on the program is posted at the following url: https://www.cdc.gov/ncezid/dvbd/coevbd/index.html.

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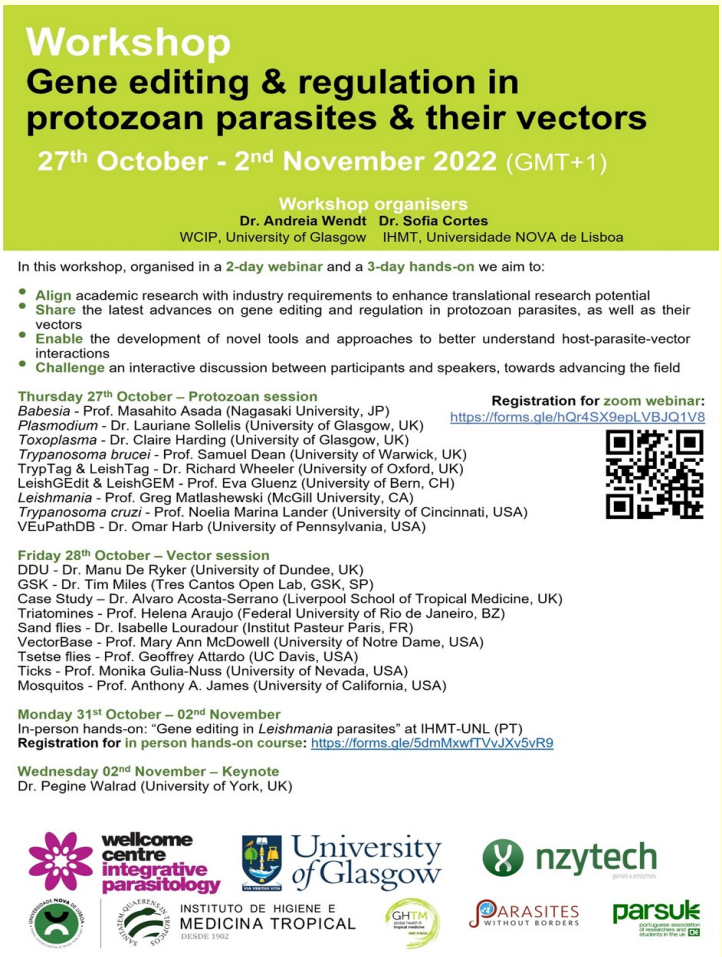

NIH Funding Opportunities

and Seminar Series

CCH Initiative home page: https://www.nih.gov/climateandhealth

Funding Opportunities: https://www.nih.gov/climateandhealth#funding-opportunities

Seminar Series: https://www.nih.gov/climateandhealth#seminar-series

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Students'

From: Kyndall Dye-Braumuller, Bianca Rendon

To: Students: Are you attending SOVE in 2022 in Hawaii?

If yes, we are so excited to see you in person!! We are having our second-ever student competition for the Student Symposium, scheduled for **Thursday, 9/22 from 3:30-5:30pm**. We have 10 amazing student talks lined up in fields from vector ecology, biology, control, and disease transmission dynamics. Like last year, the best student presentation (judged by three experts in the field of medical entomology) will be awarded the Dan Strickman Memorial Student Award, graciously sponsored by the Bill and Melinda Gates Foundation. The current students presenting will sincerely appreciate your support in showing up to the Symposium!

Are you interested in participating in future Student Symposia? Look out for the call for abstracts next year, and we look forward to highlighting all of our amazing students contributing to this field.

In addition, we would like to formally call for more involvement from the students in SOVE. As life returns to normal following the pandemic and we regain the ability to attend conferences live, we as students need to become more involved. We are the future of the field. It is our responsibility to interact with old and new members. It is our responsibility to interact with each other as well, so we know our peers and all the great research being conducted. To help get to know each other and get re-acquainted again, **we plan to have an informal student mixer one of the evenings in Hawaii.** We value networking and building relationships that last after the annual meeting—and what better way to do this than to meet up for some drinks and food? More details are coming as are still in the planning process—but we will announce the date and location at the meeting!

Looking forward to seeing y'all in Hawaii!

Kyndall and Bianca

Resources

BEI Resources for Vector Biology Research
(www.beiresources.org)

The NIAID's BEI Resources program provides Vector Biology resources for free to registered, approved researchers in domestic and foreign institutions with appropriate facilities and containment procedures for vector research. Our widely requested holdings include LIVE arthropod vectors of human disease, including anopheline and culicine mosquitoes, reduviids, ticks and sand flies, associated reagents and genomic materials for entomological research, along with insectary protocols. For the cost of nothing, recipients are only required to acknowledge the use of the individual resources in publications and presentations of the research in which the materials are used.

BEI Resources arthropod colonies are made available by the deposit contributions of investigators throughout the world. Deposited materials undergo review by NIAID prior to acceptance. Please notify BEI Resources through the Suggest A Reagent Form if you have a request for inclusion or the Deposit Inquiry Contact Form if you have a unique strain for consideration.

Vector Biology resources available through BEI Resources will remain available throughout the current coronavirus pandemic. Orders and/or shipping of certain live vectors may be delayed or temporarily on hold depending on the current operating status of individual insectaries for mosquitoes, ticks, reduviids and sand flies. BEI Resources is pleased to announce the upcoming availability of black fly life stages through a partnership with the University of Georgia Black Fly Rearing and Bioassay Laboratory, which has operated the only known colony of black flies (Diptera: Simuliidae) for over 20 years. Since its establishment, the *Simulium vittatum* colony has been used for a variety of research projects, including vector transmission studies, environmental monitoring, vector control and larval feeding studies. For mor information contact:

Adriana Costero-Saint Denis, PhD
Vector Biology Program, NIH,
Phone: 240-292-4284
Email: acostero@niaid.nih.gov
https://www.niaid.nih.gov/research/vector-bio

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MCEVBD

The Midwest Center of Excellence for Vector-Borne Disease (MCEVBD), a Cooperative Agreement between the Centers for Disease Control and Prevention and the University of Wisconsin-Madison, was awarded 5 more years of funding this July. The MCEVBD, directed by Susan Paskewitz and Lyric Bartholomay, joins academic, public health and vector control professionals with the common goal of preventing vector bites and vector-borne disease. To get there, the MCEVBD will focus efforts on applied research to control ticks and mosquitoes, maintaining and growing communities of researchers and practitioners, and training the next generation of public health entomologists. The MCEVBD encompasses partnerships in midwestern great lakes states including Minnesota, Iowa, Wisconsin, Illinois, Indiana and Michigan.

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The Tick App

The Tick App project was developed for the study of Lyme disease, a vector-borne illness spread through tick bites. The data gathered through the Daily Log and the Report-A-Tick feature in the app allow researchers to access information on a personalized level, and to better target public health responses to groups or locations where risks are higher. Researchers at the University of Wisconsin-Madison, Columbia University, and Michigan State University, with support from the Centers of Excellence for Vector-Borne Diseases, seek to identify activities, locations, and behaviors that affect the risk of exposure to tick bites and tick-borne pathogens. The app includes many features: - The Report-A-Tick feature allows users to submit photos and descriptions of a tick they find, while also describing the activities done before the tick was found. Ticks are identified by the research team and then prevention messaging is provided to the sender. - The Daily Log feature encourages users to record regular outdoor activities, to gather data about which activities cause the highest risk for tick bites. - The Tick Activity feature informs users about the activity level of blacklegged ticks (which transmit Lyme Disease pathogen) in their area. - The Tick 101 and Tick Prevention pages allow users to better understand and practice tick prevention strategies. Specific tick identification techniques and instructions on how to safely remove a tick are provided. The Tick App is providing data that is vital to the development of more effective tick bite prevention strategies. Be part of the study-download the app today!

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Society for Vector Ecology

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About SOVE . . . . .

The Society for Vector Ecology is a nonprofit 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, 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 the integration of various control options, such as environmental management, biological control, public education, and appropriate chemical or non-chemical control strategy.

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 issues a quarterly newsletter and holds an annual conference in September/October.

2022 SOVE Board Members, Editors