SOVE Newsletter 55 (4), December, 2023



# **SOVE** Newsletter

## President's Message



Alexandra Chaskopoulou Dear Friends and Colleagues,

As my SOVE presidential journey is coming to an end, I cannot but express my sincere gratitude to my fellow board members, my long-time friends in the society as well as new colleagues, for making this journey an inspiring, creative, and productive experience. I, also, look forward to continuing to serve our society under the leadership of our upcoming president, Dr. Lyric Bartholomay, who has already brought a fresh perspective to our organization, and I can't wait to see all that she will achieve.

I am reflecting on the past 12 months, I am deeply grateful for having participated to some exciting SOVE initiatives that I believe shall help attract new and diverse voices in our society from across our US-based and international communities. During the last decade our society has achieved an unprecedent international reach by bridging together scientific communities not only across the US and Europe (our oldest branches) but also across China and more recently to India and Latin America. SOVE currently holds such a unique position to not only continue to foster and strengthen these connections from across the world but also to actively discover and attract new talent and diverse voices even from the most remote, under -represented areas. One of the main challenges in any modern scientific field is attracting and sustaining participation of a diverse group of scientists especially young talent from different cultural backgrounds. Scientific societies can play a major role towards that path by creating targeted opportunities for their active involvement and leadership. So, how do we go about

### In this issue

President's Message,: A. Chaskopoulou	1-2
Northeast: D. Norris; Southwest: L. Mian	3, 4
SOVE India: A. Kumar; Asian SOVEMC: H. Chu	5, 6
Overseas News, Member News: M. Dhillon	7, 8, 9
Survey; Annual Meeting Photos	10-11, 12-14
Announcements, Resources	15
About SOVE, Board, Staff, Editors	16
Overseas News, Member News: M. Dhillon Survey; Annual Meeting Photos Announcements, Resources About SOVE, Board, Staff, Editors	7, 8, 9 10-11, 12-14 15 16

as a society to attract and retain young scientific talent from across our international regions while also fostering cross-region collaboration? One of the first initiatives we implemented towards that direction was reaching out directly to our students and early career professionals to gain their perspectives about their needs and challenges during the early steps of their careers. With the help of the SOVE Board a survey was sent out and we have received valuable input (**check page 10 to learn about the survey results**) that shall lay the foundation for future, well-informed actions, aiming to enrich the educational experiences of students and early career members during SOVE conferences. New activities outside the conference context shall also be developed, such as international workshops or research internships, in order to further strengthen our links with our international communities. The SOVE Board has already assigned a committee - whose purpose will be to advise the design and implementation of such initiatives and if any of you would like to learn more or be involved, please reach out directly to me or any SOVE officer.

Another action towards allowing for greater diversity and promoting the growth of our society was modifying the format of our annual conferences to broaden opportunities for speaker participation. Starting next year all members of our community will be able to submit abstracts to be considered for full oral presentations (as opposed to by invitation only). A list of minimum requirements for the annual conference format with transparent rules and procedures for abstract submission and evaluation has been approved by the Board and our international regions. The purpose of this document is to maintain the high quality of scientific presentations during SOVE meetings while also promoting diversity, equity, and inclusion. Please, keep an eye on our website and social media platforms as we make announcements in 2024, and make sure to submit your abstracts for our upcoming conferences.

As another year is coming to an end, I hope you are all proud and grateful for your journey. Whatever your professional goals may have been (producing new knowledge in the field of vector ecology, managing a vector-borne disease outbreak, writing a book or publishing your research, defending your PhD, finding your dream job, helping your colleagues to finding their dream job, filing your first patent, teaching your first course or giving your first oral presentation...), no matter how big or small, I hope you accomplished most of them but most importantly I hope you shared many moments of joy, fulfillment, encouragement and inspiration with your teammates, your trusted colleagues and close collaborators. Thank you all for your commitment to our community and may 2024 bring many creative and joyful moments for all of you - both at a professional and a personal level.

Stay healthy,

Alex



#### SOVE Newsletter 55 (4), December 2023

### **Regional Reports**



Northeastern Region, USA Douglas Norris Regional Director

Dear Colleagues,

I don't have any huge reports from the northeastern region. Interestingly, according to CDC data, cases of tickborne diseases continue to be on the rise. In contrast to other tick-borne disease, cases of Lyme disease, which dramatically fell in 2020 coinciding with the COVID-19 pandemic, are now rebounding although case counts for 2021 have not yet returned to pre-pandemic levels.

The other thing to note is the open position that is attached.

Best

D-

#### Tenure Track Faculty Position Lyme and Tickborne Diseases Research and Education Faculty

The recently established Lyme and Tickborne Diseases Research and Education Institute (LTBDI) in the Department of Molecular Microbiology and Immunology in the Johns Hopkins Bloomberg School of Public Health invites applications for a full-time, tenure track research and teaching faculty position. We are seeking a candidate engaged in laboratory-based research on tickborne diseases, including but not limited to research on ticks, including tick-environment interactions, the microbiology of tickborne pathogens (including pathogen biology, genetics, pathogenesis and detection of viruses, bacteria and/or parasites that can affect public health), as well as host defense, including immunology, vaccinology and host genetic and epigenetic impacts on tickborne diseases.

We are seeking to hire at the Assistant Professor level. The individual must hold a doctoral degree (e.g., PhD, MD, DVM), documented post-doctoral research training, including publications in any of the above areas, as well as a desire to advance public health, and a passion for contributing to the educational mission of the LTBDI and the department. Successful candidates will demonstrate a solid record of scholarship, the potential for developing an independent, extramurally-funded research program, and strong skills with which to contribute to advancing the field of tickborne diseases and its teaching. Candidates must be committed to fostering principles of justice, equity, diversity, and inclusion throughout their research, teaching, and mentoring activities. They will also embrace conducting collaborative science including within the LTBDI to support our goals for the institute to become a leader in tickborne diseases research and education and to positively impact public health.

The LTBDI is embedded within the Department of Molecular Microbiology and Immunology, which also hosts the Malaria Institute. Over 50 faculty are engaged in the broad range of research on infectious diseases and its impact on public health. Excellent collaboration opportunities exist within the Department and throughout the top ranked Johns Hopkins Schools of Public Health, Engineering and Medicine. Faculty will have access to functional research space and state-of-the-art core facilities, as well as newly constructed ABSL2/3 research space and a "tickery". Faculty work with a cadre of outstanding trainees, including undergraduate and graduate students attending a variety of departmental-based and interdisciplinary graduate programs. Please visit https://publichealth.jhu.edu/departments/molecular-microbiology-and-immunology.

We will receive applications beginning on October 15,2023 and continue until the position is filled. For full consideration, applications should be submitted before December 15, 2023. Applications must be submitted using Interfolio http://apply.interfolio.com/133621 and include: Cover letter addressed to David J Sullivan, MD, Chair of Faculty Search Committee, Curriculum Vitae, a 2 page statement outlining research, a half page statement of teaching interests, and names and contact information of three references. In addition, applications should include a statement of demonstrated commitment to the principles of inclusion, diversity, anti-racism, and equity (IDARE) in scholarship, teaching, policy, and practice, and ways to continue to foster and promote these principles as a member of the Bloomberg School faculty.

\_\_\_\_\_



Dear Friends and Colleagues,

This is an updated version of our September report. As mentioned earlier, during 2023, our region had experienced some catastrophic weather phenomena in recent years, affecting California, Hawaii and most recently Nevada. California, known for its wildfires and earth quacks, has its drought spell of several years broken by a record El-Nino-like wet weather in last winter and spring, resulting in flooding and mud slides in areas especially those previously affected by wildfires. Then came in the tropical storm Hillary that dumped some inches of rain with strong winds and floods, which resulted in some loss of life and property. Most recently in Hawaii, we saw hurricane speed winds, resulting in devasting fires that swept through the Island of Maui especially Lanai, causing a tremendous loss of life and property. Not too long ago, in Nevada, the monsoonal flooding had affected property as well as human activity in some areas. Arizona also reported flooding from monsoonal rains during last summer. So, will all these unfamiliar weather phenomena have an impact on the activity of vectors and the pathogens they transmit to humans and animals? Based on the available data thus far, there is a substantial increase in mosquito-borne diseases as compared with last year's data.

Mosquito and Vector Control agencies in most state and local jurisdictions in the Region have been active in their routine disease surveillance and vector control operations. Using the CDC and state sources, a brief report on vector-borne disease surveillance in the Region is presented as follows:

**Arizona** (www. Azdhs.gov). As of 12/12/2023, the Arizona Department of Health Services reported 258 vector-borne and zoonotic diseases (VBZDs) in 2023. Mosquito-borne diseases caused by West Nile virus (WNV), dengue, and malaria accounted for 82 (7 deaths), 29, and 47 human cases, respectively.

# Southwestern Region, USA

### Lal S. Mian

### **Regional Director**

Other VBZDs updated as of 12/1/2023, included Rocky Mountain spotted fever 26, Lyme disease 18, brucellosis 3, babesiosis 3, anaplasmosis 8, tularemia 2, Chagas disease 8, Colorado tick fever 1, ehrlichiosis 1, relapsing fever 1, and hantavirus 6. The WNV cases of 82 in 2023 thus far are higher than 73 in 2022, with Maricopa county alone reporting 73 cases in 2023.

California (www.cdph.ca.gov). As of 12/1/2023, California updated the 2023 distribution of two invasive mosquito species, Aedes aegypti and Ae. albopictus —the former species was found in 28 counties from San Diego and Imperial counties in the south to Shasta County in the north; the latter species has maintained its presence in 5 counties—Orange, Los Angeles, San Bernardino, Sacramento and Shasta. Regarding vector-borne diseases in the state, WNV activity was reported in 357 human cases (11deaths), 849 dead birds, 4,512 positive mosquito pools, 187 seropositive sentinel chicken samples, and 31 horse cases, all higher than 2022 figures. Also, Saint Louis encephalitis activity has been reported in 18 counties, with nine counties collectively showing 17 human cases in 2023. The WNV activity was reported from 35 out of 58 California counties reporting human cases. Since its arrival in California in 2003, WNV has resulted in >7.5K human cases with >300 deaths.

*Nevada* (<u>https://snhd.org</u>). As of 12/1/2023, Clack County reported 5 mosquito pools (219 mosquitoes) positive for WNV.

*New Mexico* (https://nmhealth.org). As of 12/1/2023, New Mexico reported 88 cases of WNV from 18 counties and 7 hantavirus cases in 3 counties.

*Hawaii* (www.health.hawaii.org), As of 12/1/2023, Hawaii had 5 dengue cases (possibly travel-related) with no report of other vector-borne diseases.

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

Stay healthy and safe! Cordially,

Lal



SOVE Indian Chapter marks milestones in Vector Ecology and Disease Control- reminisces and future poised for progress. In a significant stride towards the advancement of vector ecology and the control of vector-borne diseases, the Society for Vector Ecology (SOVE) established its Indian Chapter during the 47th annual SOVE conference in Anchorage, Alaska, USA. The formation of the 'Society for Vector Ecology, Indian Region' was officially registered on July 27, 2017, under the Indian Societies Registration Act, 1860. The core objectives of the society encompass a global focus on vector ecology and vector-borne diseases, with a particular emphasis on the Indian subcontinent. These objectives include promoting research and management of disease vectors, developing technical and administrative skills, disseminating crucial information, and involving students and research scholars in the field. The Indian SOVE aims to foster scientific research, dialogue, and collaboration among students, researchers, teachers, and professionals. It strives to bridge gaps between the scientific world, academia, program managers, industry, regulatory bodies, and policymakers for the effective management of vectors and vector-borne diseases.

*Events and Activities:* The Indian SOVE has been actively organizing events since its inception, with a significant highlight being the First Inaugural International Conference held in 2019. The conference, themed 'Lab to public health setting: Control of vectors for elimination of vector-borne diseases,' witnessed international

# SOVE–Indian Chapter Ashwani Kumar Regional Director

participation, with guests of honor including prominent figures from organizations like WHO and CDC.

Notable awards were conferred during the conference, recognizing outstanding contributions in vector bioecology and control, excellence in vector biology, outstanding research in medical entomology, and distinguished work in public health. Special awards were also presented for journalism on science and vector-borne disease reporting.

In response to the dwindling entomological strength in the country, the society organized a National Workshop for Entomological Capacity Building/Strengthening in 2020. This workshop, held in collaboration with Indian Council for Malaria Research-Vector Control Research Center (ICMR-VCRC) and the National Academy of Vector Borne Diseases, aimed to update the knowledge and skills of state entomologists to meet the challenges of emerging vector-borne diseases.

SOVELect: A Digital Platform for Knowledge Exchange: In the wake of the COVID-19 pandemic, the SOVE Indian Chapter launched a video lecture series, 'SOVELect,' to continue its mission of promoting scientific research and dialogue. The series covers various topics related to vector -borne diseases, featuring experts in the field. This initiative has garnered attention on platforms like WhatsApp, Twitter, and Facebook/Youtube.

Second International Conference (iSOVECON2023): The recent milestone for the SOVE Indian Chapter was the Second International Conference, held from March 13-16, 2023, at the Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), Puducherry. With the theme "Vector-Borne Diseases: Galvanizing & harmonizing old and new tools & technologies for containment of vectors and sustained control/elimination of VBDs," the conference saw over 170 delegates in attendance. Keynote addresses were delivered by experts from WHO, Curtin University, and the European Biological Control Laborato-

### Asian Society of Vector Ecology and Mosquito Control

The Asian Society of Vector Ecology and Mosquito Control (ASVEMC) had a board meeting on October 23, 2023 in Beijing, China. During the meeting some staff changes were made as follows: President: Dr. Xiao-Guang Chen; Vice President: Theerphap Charconviryyaphap; Executive Director: Hong-Liang Chu; Coordinator: Rui-De Xue; and Secretary: Ye Tian. Please note that Xiao-Guang Chen now replaces me. Thank you! Hong-liang Chu

*Kumar cont'd. from page 5*. :The conference covered diverse thematic areas, including the impact of COVID-19 on vector-borne diseases, biosecurity, cutting-edge approaches, arboviral diseases, and socio-economics of VBDs.

Awards were presented to recognize outstanding contributions to academic research, furthering the commitment of the SOVE Indian Chapter to promote excellence in the field.

Membership Surge and Future Endeavours: The SOVE Indian Chapter has experienced a remarkable surge in membership, reaching 151 members, including regular members, retirees, students, and sustaining members. The society is dedicated to expanding its reach across the nation, aiming for a PAN India presence and extending its efforts to welcome members from neighbouring countries in the region starting 2025. As the SOVE Indian Chapter continues to grow, its focus remains on fostering a diverse, inclusive, and dynamic network for knowledge exchange and collaboration in the realm of vector ecology and disease control. The ongoing commitment of the society reflects a shared dedication to advancing understanding and collaboration in the field, setting the stage for a vibrant community of vector enthusiasts and professionals.

In a recent development, the Indian Council of Medical Research (ICMR), a key player in health research in the country, has appointed 18 medical entomologists to fill existing vacancies in 9 institutes across India. Three of these entomologists have now joined the ICMR-Vector Control Research Centre (VCRC) in Puducherry. This strategic move by the ICMR is a significant boost, addressing the shortage of entomologists in centres focusing on vector-borne diseases. As President of SOVE and Director SOVE (Indian Chapter) convinced the Director General to build national entomological capacity and these positions were opened and filled up.

Recently retired as the Director of ICMR-VCRC on September 30, 2023, I had the privilege of leading a dedicated team during my short tenure of 4 years and 3 months, providing a truly enriching experience. I've now taken on the role of Pro-Vice-Chancellor (Global Collaboration) and Scientific Advisor to the Chancellor at Saveetha University (SIMATS) in Thandalam, Chennai, India. The Pro-Vice-Chancellor, a pivotal figure in academia, collaborates closely with the Vice-Chancellor to shape the institution's strategic direction and elevate its academic standing.

Responsibilities include leadership, strategic vision, academic oversight, program development, and maintaining quality standards. In governance, the Pro-VC contributes to financial management and human resources leadership. External engagement with communities, businesses, and international partners is key to strengthening the institution's reputation. Emphasizing student experience, diversity, and inclusion, the Pro-VC fosters a positive learning environment. Public relations, advocacy, and continuous improvement efforts are integral to the institution's success and growth

Looking ahead, our vision includes conducting webinars on contemporary themes within the domain of vectorborne diseases. The goal is to create an environment where researchers can thrive, resources are shared, and knowledge is disseminated. This approach not only advances research within our institution but also contributes to the broader scientific community.

### **OVERSEAS NEWS**

### PAN AFRICAN MOSQUITO CONTROL ASSOCIATION REPORT

The 9th Pan African Mosquito Control Association (PAMCA ) Annual Conference & Exhibition was held at the historic, magnificent, and vibrant city of Addis Ababa, Ethiopia, from September 17-21, 2023. The conference was themed, "Reorienting Surveillance and Management in the Context of Emerging Threats of Disease Vectors." The opening ceremony was attended by PAMCA delegates from over 40 countries around the world, including 28 countries in Africa and 12 countries from Europe, USA, Japan, China, Australia and New Zealand. A total of 810 participants attended the annual conference. We also had a large diverse sector representing mosquito and mosquito-borne disease researchers, representatives of National Malaria Control Programs (NMCPs), policy makers and several partners (both national and international). The opening remarks were delivered by Delenasaw Yewhalaw (PAMCA Country Chapter Chairperson for Ethiopia), Emma Orefuwa (PAMCA Ag. Executive Director) accompanied by Prosper Chaki (PAMCA Executive Director), and finally by the PAMCA President, Charles Mbogo. They all commended this year's turnout, extended a warm welcome to all participants, and encouraged them to embrace this year's annual meeting proceedings in the beautiful setting of Ethiopia's Skylight Hotel. They also highlighted the need to search for and implement innovative solutions to eradicate vector-borne diseases (VBDs) such as malaria in the African continent. This was done in a friendly atmosphere accompanied by light refreshments. Group photo of some of the participants during the conference

The Keynote address was delivered by Beyene Petros (Policy Study Institute, Ethiopia). Petros' address delved into the conference theme of "Re-orienting Surveillance and Management in the Context of Emerging Threats of Disease Vectors". He commended the PAMCA secretariat for bringing together different stakeholders whose main work is focused on the eradication of VBDs in Africa. Petros discussed the current threats VBDs pose, from emergence to re-emergence and resurgence. He highlighted the challenges in vector control such as the development of insecticide resistance and the invasion of new invasive mosquito species, *Anopheles stephensi* and further recommended that PAMCA to remain steadfast in addressing these challenges. He further noted that PAMCA has reinforced its capacity to support African countries in their efforts to eliminate malaria and other VBDs. He then concluded by encouraging everyone to continue to promote the one health approach in the control of VBDs, taking climate change, integrated VBDs surveillance, and capacity development of African scientists in data analysis and interpretation into account.

Our PAMCA Annual Conference normally lasts 3 days but due to an unprecedented number of abstract and symposia submissions this year, we extended the conference to four days. Our pre-conference events have also increased and span a diverse range of topic areas that not only tackle the science and policy aspects of vector control, but also issues that enable a conducive work environment for all stakeholders to flourish. Some of the Pre- conferences workshops held this year include short course training in Gene Drive, vector genomics, women in vector control, and surveillance workshops to name a few. Participants during the training course on Gene Drive technology for the control of *Anopheles* mosquitoes took advantage of this course to advance their knowledge.

Charles Mbogo President PAMCA

Major S. Dhillon Executive Director, Emeritus, SOVE

#### EUROPEAN MOSQUITO CONTROL ASSOCIATION REPORT

The European Mosquito Control Association (EMCA) conference was held at the University of Balearic Islands (UIB) in Palma de Mallorca, Spain on Nov.5-11, 2023. The theme of the conference was "Shaping the Future of Vector Control in Europe." A total of 194 people attended the conference from 23 countries. Of which, 87% of the attendees were from Europe and the other 13% from other continents. The conference was preceded by a training course with the thematic "Identification of Non-target Fauna in Trapping" and also "Mosquito Rearing and Repellent Testing." The training course was very informative and practice-oriented and attended by 25 trainees. Also, two additional side-events were hosted by the EMCA and UIB consisting of "WHO-TDR Workshop on Developing Terms of Reference for Reference Centre's in Medical Entomology Training and Vector Control" and the 2nd Workshop by the EMCA Working Group on "Best Practices for Mosquito Control in Built Areas," which was also supported by WHO-TDR.

In total, there were 117 presentations at the conference, 4 keynote lectures, 59 oral presentations and 54 posters presented in eight different sessions. The main topics were: Surveillance and management of invasive mosquito species; best practices for mosquito control and biocide management; vector control in the context of disease outbreaks; citizen science and community involvement in mosquito surveillance and control; one health: Challenges and perspectives; surveillance and management of black flies, sand flies, ticks, and others; mosquito control in the Mediterranean Region and wetland conservation and new technologies and practices in vector control.

The scientific program was accompanied by multiple social events, which gave the opportunity to taste the local cuisine including exploration of historical monuments of Palma. During the excursion the local mosquito control operator demonstrated mosquito surveillance and control actions including drone applications in the city center of Palma

During the four days, an intense exchange of knowledge and views about groundbreaking findings, innovative strategies, and best practices in the field of vector control took place among scientists, vector control professionals and administrative representatives of the public health sector. Participants discussed the latest advancements in vector surveillance, novel vector control technologies, and community engagement strategies. With a focus on sustainable and effective vector control measures, the conference aimed to contribute significantly to the global efforts to reduce the burden of vectors and vector-borne diseases and therefore, enhancing public health on an international scale.

WE HOPE TO SEE YOU AT THE NEXT EMCA CONFERENCE IN 2025!

Sandra Gewehr, President EMCA Eleonora Flacio, Vice President Francis Schaffner, Past President Major S. Dhillon, Executive Director, Emeritus, SOVE

\_\_\_\_\_



### **MEMBER NEWS**

### **NEWS FROM INDIA**

SOVE India Chapter not only provides local governments and entomologists new knowledge and experience through workshops and meetings, it also encourages networking and bonding across countries and continents. SOVE helps entomologists in their advancement as well. One of the examples worth sharing is of Ashwani Kumar, Past Director ( July 2019-September 2023) of Vector Control Research Center (VCRC) in Puducherry (formerly Pondicherry), India. After retiring from VCRC, Kumar has recently assumed the prime position of Vice to Pro Chancellor of the famous Saveetha University in Chennai, India. Kumar also serves as Director of the Indian SOVE Chapter. In his new role at Saveetha, he is responsible for global collaborations whilst serving as Scientific Advisor to the Chancellor. He is credited with establishing the International Centre of Excellence for training in Medical Entomology (ICETIME) at the VCRC, Puducherry, which will train young entomologists from India and from across the globe. He was also instrumental in the recruitment and placement of much needed 18 young entomologists in the nine institutes of the Indian Council of Medical Research last month. This will strengthen efforts in research and control of vector-borne diseases in India.

### NEWS FROM BRAZIL

Since August of this year, Paulo Pimenta who is a Senior Researcher at the Brazilian National Research Council (CNPq), is enjoying his sabbatical leave, working hard in Germany at Heidelberg University on a project titled, "Comparative analysis of the antennal sensilla of *Aedes albopictus* originating in Germany and Brazil." He will explore immunocytochemistry associated with confocal laser microscopy to locate and identify serotonin neuroactive sensilla. This study should promote taxonomic and phylogenetic analyses, contributing to the evolutionary understanding of *Ae. albopictus*. He hopes to conclude his project next year in January before he returns to Fiocruz University at Belo Horizonte, Brazil.

Both these gentlemen were pioneers in the establishment of SOVE Chapters in their regions. We thank them for their dedication and contributions to the SOVE family.

Major S. Dhillon Executive Director, Emeritus, SOVE

### Insights from the SOVE Student and Early-career Professionals Survey

Androniki Christaki,<sup>1</sup> Karen Poh<sup>2</sup>, Ayat Abourashed Ayat,<sup>3</sup> Christina McCarthy,<sup>4</sup> Gunay Filiz<sup>5</sup> and Alexandra Chaskopoulou<sup>1</sup>

1USDA-ARS Greece, 2USDA-ARS Washington State USA, 3Erasmus MC Netherlands, 4National University of La Plata Argentina, and 5University of Florida USA

Students and early-career professionals (S&ECPs) represent the next generation of emerging professionals that will be tasked with addressing the biggest questions and challenges in their field of work. These individuals, however, encounter a number of barriers as they begin their careers including social, cultural, and institutional challenges among many others (Avolio et al. 2020, Berhe et al. 2022). Studies and surveys have been conducted globally to better understand, identify, and overcome these challenges which can vary depending on the country, but, also on the field of work (Amano et al. 2023, Valenzuela-Toro and Viglino, 2021). The Society for Vector Ecology (SOVE), a scientific community of global presence with members from many countries and diverse cultural backgrounds, is actively trying to create opportunities and support its S&ECPs members.

In an effort to gain a better insight on the needs of students and early career professionals, a survey was conducted during 2023, aiming to a) identify common challenges to career development in the field of vector ecology and control and b) determine potential professional development activities that could be organized by SOVE to address some of those challenges. The survey touched upon many factors that influence S&ECPs' experiences such as gender, country of origin, field of studies/work, and factors that guide their choices. The survey identified more than 10 challenges affecting these young professionals at varying levels, and established a list of SOVE-organized activities that could benefit S&ECPs. In this report we present some of the key findings that emerged from the survey that can be utilized to further support our community.

The survey was completed by 80 S&ECP members from 21 countries (Argentina, Brazil, China, Chile, Colombia, Czech Republic, Ecuador, France, Germany, Greece, India, Italy, Mexico, Morocco, Netherlands, Perú, Serbia, Spain, Turkey, USA, Uruguay). Of the participants, 67% were PhD students, post-docs, or recent graduates, with the majority specializing in applied/operational fields of vector ecology, such as vector surveillance (57%) and control (49%) versus basic research fields such as vector behavior (30%), taxonomy (33%), and biology/physiology (47%). At the time of the survey many of the participants were at the stage of beginning or already actively seeking employment, particularly careers in Academia (46%) or in Government (35%), such as in public health agencies or vector control districts (Fig. 1).



or in government sectors such as public health or vector control districts.

Of this group of emerging professionals more than 90% believe that finding a job in the area they aspire to work in is moderately (46.8%) to very challenging (45.6%). The biggest challenges that young professionals seem to face during their career development in the field of vector ecology and control are lack of financial support (either for international travel or research funding) and limited job and research opportunities in their country of residence (Fig. 2).

—————-Survey cont'd. on page 11

Figure 2. Top four obstacles voted as "very challenging" by young professionals:



Interestingly, S&ECPs from different regions are variably affected by these challenges. Limited job and research opportunities in their country of residence and lack of funding for research are the biggest challenges for S&ECPs in Europe and Latin America. Funding for international travel seems to be the biggest challenge for members from India, whereas for US young professionals, the biggest challenge is lack of a support system to help manage stress related to being a S&ECP and pursuing career aspirations. Among other concerns were lack of resources (equipment, infrastructures, etc.) and knowledge on job/research opportunities in their country of residence and internationally.

The challenges identified through this survey are very informative and can help advise SOVE educational initiatives both at a regional and international level. When the participants were asked to choose from potential career development activities that SOVE could organize to support them, the majority of S&ECPs were interested both in improving practical skills (grant funding applications, lab management skills, manuscript writing) but also in improving their interpersonal skills and their progression in the field (building networks and collaborations, mentoring programs, gaining international experience, defining career options). A list of the activities most members were interested in is shown below (Fig. 3).



Perhaps one of the most exciting findings of this survey was the primary factor that influenced students to choose their field of study and consequently their field of work. For the majority of S&ECPs, interactions with inspiring professors and mentors, and participation in motivating experiences determined their decision (Fig. 4). This finding highlights the importance of global scientific communities like SOVE and the role they could play not only in attracting young minds in the field of vector ecology, but also to continue to support them as they advance in their career. In that light and based on the top voted activities by the S&ECPs, SOVE will be organizing targeted activities during our upcoming meetings, so please, keep an eye out for future announcements.

Figure 4. The majority of young professionals selected their field of study because of inspiring people and motivating experiences.





Michelle receiving the Outstanding Service Award from Alex



Alex accepting the Presidential Gavel from Lyric



Michelle and board member getting ready for the meet-



Marc and Ann



Lal and Judy at the break.



Denise and friends

### Field Ecology Day: A Visit to Charlston's Historical District



### At the Breaks: Members Socializing with Friends and Colleagues













### RESOURCES

### Here is some NIAID-related information that may be of interest to SOVE members:

### NIAID Data Ecosystem Discovery Portal

Users can search the NIAID Data Ecosystem Discovery Portal for infectious and immune-mediated disease (IID) data across the ecosystem of NIAID-supported data and the larger IID community. The Discovery Portal searches within NIAID-funded repositories to promote the discovery of IID resources, enhance open science, and align with findable, accessible, interoperable, and reusable (FAIR) data practices.

The Portal does not contain data but features descriptions about each dataset and information about each dataset (metadata). The Discovery Portal provides external links that allow users to access the data directly from each repository. Several NIAID-sponsored repositories are already available in the initial release including: AccessClinicalData@NIAID, ClinEpiDB, ImmPort, and VEuPathDB. More details about data types and data access are found in the <u>About section on the Discovery Portal</u> website.

### Getting Started with the NIAID Data Ecosystem Discovery Portal

To search for IID data within the Discovery Portal, navigate to the <u>Discovery Portal homepage</u> and enter keyword(s) into the search bar. You can also search with custom queries in <u>Advanced Search</u> or pre-built queries for common IID searches. With the Discovery Portal, you can: Rapidly search millions of datasets across both IID and generalist repositories from the <u>Search</u> or <u>Advanced Search</u>. Use filters to identify research data by metadata categories including funding source, repository, conditions of access, and more. Learn more about the Discovery Portal from the <u>About The NIAID Data Ecosystem</u> page and read documentation in the <u>Knowledge Center</u>.

### Adriana Costero-Saint Denis, (NIH/NIAID) [E] <acostero@niaid.nih.gov>

### Harnessing the Power of Vector Control:

A Key Strategy for Eliminating Lymphatic Filariasis, ET HealthWorld at

https://health.economictimes.indiatimes.com/news/industry/harnessing-the-power-of-vector-control-a-key-strategy-for-eliminating-lymphatic-filariasis/103847142 [health.economictimes.indiatimes.com]

#### \_\_\_\_\_

#### Announcement

**Lee County Mosquito Control District in Florida** will be conducting an Aerial Pesticide Application Workshop 2024 on April 15– 18, 2024. For details, please check with Sabina Vilarchao, Phone: (239) 694-2174 ext. 2110, Email: Vilarchao@lcmcd.org.

#### Survey cont'd. from page 11.

Acknowledgments: A big thank you to all of our students and early career professionals for taking the time to respond to this survey.

### **References Cited**

Amano T, Ramírez-Castañeda V, Berdejo-Espinola V, Borokini I, Chowdhury S, Golivets M, González-Trujillo DJ, Montaño-Centellas F, Paudel K, White RL, Veríssimo D. 2023. The manifold costs of being a non-native English speaker in science. PLoS Biology 21(7): e3002184. doi: 10.1371/journal.pbio.3002184

Avolio B, Chávez J, Vílchez-Román C. 2020. Factors that contribute to the underrepresentation of women in science careers worldwide: a literature review. Social Psychology of Education 23: 773-794. doi: 10.1007/s11218-020-09558-Berhe AA, Barnes RT, Hastings MG, Mattheis A, Schneider B, Williams BM, Marín-Spiotta E. 2021. Scientists from historically excluded groups face a hostile obstacle course. Nature Geoscience 15: 2-4. doi: 10.1038/s41561-021-00868-0

Valenzuela-Toro AM, Viglino M. 2021. Latin American challenges: Cumulative barriers can hold researchers back. Nature 598: 374-375.



### Society for Vector Ecology

1295 E. Locust St Ontario, CA 91761 USA

> Phone: (909) 635-0307 admin@sove.org

> > Newsletter Editor Lal S. Mian, PhD Imian@csusb.edu

We are on the Web! www.sove.org

### 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.

### 2023 SOVE Board Members, Editors

#### President

Alexandra Chaskopoulou, PhD achaskopoulou@ars.ebcl.org

President-Elect Lyric, Bartholomay, PhD Lyric.bartholomay@wisc.edu

Vice-President Denise Bonilla, PhD Denise.l.bonilla@usda.gov

Immediate Past-President Steve Mulligan, MS mozziestew@gmail.com Executive Director Michelle Brown, PhD admin@sove.org

Executive Director Emeritus Major S. Dhillon, PhD pintailmd@gmail.com =========

Regional Directors Northeastern Region, USA Doug E. Norris, PhD douglas.norris@jhu.edu

Southeastern Region, USA Rui-De Xue, PhD xueamcd@gmail.com North Central Region, USA Nicole Achee PhD nachee@nd.edu South Central Region, USA Steve Presley, PhD steve.presley@ttu.edu Northwestern Region, USA & Canada Ben Beard, PhD cbb0@cdc.gov Southwestern Region, USA Lal S. Mian, PhD Imian@csusb.edu **Asian-SOVE Region** Hong-Liang Chu, PhD medchu@vip.163.com **European-SOVE Region** Filiz Gunay, PhD gunayf@gmail.com **SOVE-Indian Chapter** Ashwani Kumar, PhD ashwani07@gmail.com

Latin American-SOVE Region Christina McCarthy, PhD cmccarthy@conicet.gov.ar

Student Director Bianca Rendon bianca.rendon@ttu.edu

# EDITORS

Journal Editor Marc J. Klowden, PhD mklowden@uidaho.edu

> Newsletter Editor Lal S. Mian, PhD Imian@csusb.edu

