

# **The 7<sup>th</sup> International Forum for Surveillance and Control of Mosquitoes and Vector-borne Diseases (IFSCMVD)**

**in Conjunction with the 13<sup>th</sup> Conference of Medical Entomology of the Entomological Society of China**

# **PROGRAM**



**China, August 15-18, 2021**

**Sponsors:** The Entomological Society of China  
State Key Laboratory of Pathogen and Biosecurity, China

**Organizers:** Medical Entomology Committee, ESC

**Cooperation:** Asian Society of Vector Ecology and Mosquito Control

**Partners:** The Society for Vector Ecology  
Insect Science  
Acta Parasitologica et Medica Entomologica Sinica



寄生虫与医学昆虫学报

Acta Parasitologica et Medica Entomologica Sinica

# The 7<sup>th</sup> International Forum for Surveillance and Control of Mosquitoes and Vector-borne Diseases (IFSCMVD)

in Conjunction with the 13<sup>th</sup> Conference of Medical Entomology of the Entomological Society of China

**China, August 15-18, 2021**

*Meeting Theme: Challenges and Control Efforts for Mosquitoes and Vector-borne Diseases during Covid-19 Pandemic*

## EXECUTIVE COMMITTEE

Dr. Rui-De Xue, Conference President  
Dr. Tong-Yan Zhao, Program Chair  
Dr. Chun-Xiao Li, Secretary General  
Dr. Isik Unlu, President of the SOVE  
Dr. Abu Ahmad, President of the ASVEMC  
Dr. Qi-Yong Liu, Past President of the ASVEMC

## **Conference Council:**

Abdul Althbyani	Abu Hassan Ahmad	Err-Lieh Hsu
Gang Dong	Graham B. White	Gunter C. Muller
Hoonbok Yi	Huaiping Zhu	Idefonso Fernandez-Salas
Jonas Schmidt-Chanasit	K. Murugan	Ken Linthicum
Le Kang	Major Dhillon	Mustapha Debboun
Paul Reiter	Randy Gaugler	Sekou F. Traore
Theeraphap Charconviryyaphap	Wu-Chun Cao	Yan-Song Sun

## **Program Committee:**

Dan Kline	Feng-Lin Song	Feng-Xia Meng
Gong Cheng	Herbert Nyberg	Hong-Liang Chu
James Clauson	Jerry Hogestte	Jia-Hong Wu
Jing-Xia Cheng	Liang Lu	Li-Feng Lin
Nan-Nan Liu	Pei-En Leng	Ren-jie Hu
Shan-Qing Wang	Tong-Yan Zhao (Chair)	Xiao-Guang Chen
Xiao-Long Zhang	Xiao-Peng Zeng	Xiao-Xing Meng
Xing-Ping Hu	Yi Sun	Yi Wang
Yong-Xing Jiang	Zhen Zou	Zhi-Kuan Jiang

## **Local Arrangement Committee:**

Da Xing	Heng-Duan Zhang	Ming-Yu Wu (Secretary)
Teng Zhao	Xiao-Xia Guo	Xin-Yu Zhou
Yan-De Dong (Chair)	Yu-Ting Jiang	

# Program

<p><b><u>August 16, 2021(Beijing Time)</u></b></p> <p><b>Zoom meeting ID: 951 4564 9228</b></p> <p><b><u>Passcode: 100793</u></b></p>	
<p><b>Moderator: Dr. Rui-De Xue</b></p>	
8:00 am	<p><b>Opening ceremony.</b> The 5<sup>th</sup> ASVEMC membership meeting. Presentation of the awards by the President of the ASVEMC. Install of the new ASVEMC Officers.</p>
8:10 am	<p><b>Welcome:</b> Dr. Le Kang, Academician of the Chinese Academy of Sciences, President of the Entomological Society of China, Beijing, China</p>
8:20 am	<p><b>Welcome:</b> Dr. Gang Dong, Leader of State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China</p>
<p><b>Moderators: Dr. Tong-Yan Zhao and Dr. Rui-De Xue</b></p>	
8:30 am	<p><b>Keynote Speaker: 8:30 pm (USA).</b> Dr. Michael Turell. Adjunct Senior Arbovirologist, Anastasia Mosquito Control District (AMCD), St. Augustine, Florida, USA. <b>How to recognize a vector and its importance</b></p>
9:20 am	<p>Dr. Rui-De Xue, Executive Director of Anastasia Mosquito Control District, St. Augustine, Florida, USA. <b>How has COVID-19 pandemic impacted on our mosquito surveillance and control program?</b></p>
9:40 am	<p><b>Guest speaker:</b> Dr. Wu-Chun Cao, Director of State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China. <b>Tracing of emerging tick-borne diseases: from tick genomes to tick microbiome</b></p>
10:00 am	<p><b>Guest Speaker:</b> Dr. Xiao-Nong Zhou, Director, National Institute for Parasitic Disease Prevention and Control, CDC, Shanghai, China. <b>The roadmap for malaria elimination in the People's Republic of China</b></p>
10:20 am	<p>Dr. Tong-Yan Zhao, Professor, State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China. <b>Integrated mosquito management in rice field in China</b></p>
10:40 am	<p>Dr. Qi-Yong Liu, Professor and Director, Department of Vector Biology and Control, National Institute for Communicable Disease Prevention and Control, CDC, Beijing, China. <b>Anopheles control strategy and technology for eliminating the malaria in China</b></p>
11:00 am	<p>Wendy Wei, MPH, MPA, Senior Program Officer, Health, Innovation &amp; Partnership, Bill &amp; Melinda Gates Foundation, Beijing. <b>Briefing BMGF China malaria program</b></p>

11:20 am	Dr. Err-Lieh Hsu, Professor Emeritus, National University of Taiwan, Taipei, China. Dr. Hsiu-Hua Pai, Professor & Vice Present of Kaohsiung University, Kaohsiung, China. <b>Vector surveillance in the COVID 19 pandemic</b>
11:40 am	Dr. Xiao-Guang Chen, Dean & Professor, College of Public Health and Tropic Medicine, Southern Medical University, Guangzhou, China. <b>Dog in the manger, <i>Aedes albopictus</i> represses the reproduction of <i>Aedes aegypti</i> by interspecific mating</b>
<b>12:00 noon Lunch Break</b>	
<b>Moderators: Dr. Qi-Yong Liu and Dr. Xiao-Guang Chen</b>	
1:30 pm	Dr. Chun-Hong Chen, Chief Executive Officer, NHRI, China. <b>Developing <i>Wolbachia</i> strain wAlbB to suppress Taiwan populations of <i>Aedes aegypti</i></b>
1:50 pm	<b>Geneva Time 7:50 am.</b> Dr. Xiao-Hong Li, Technical officer, Elimination Unit, WHO Global Malaria Program. Geneva. <b>Global update on malaria: progress and challenges</b>
2:10 pm	Dr. Si-Bao Wang, Professor, Institute of Plant Physiology and Ecology, CAS Center for Excellence in Molecular Plant Sciences, Shanghai, China. <b>Using mosquito gut symbiotic bacteria to interrupt malaria transmission</b>
2:30 pm	Dr. Gong Cheng, Professor, Tsinghua University, Beijing, China. <b>A human blood-derived microRNA facilitates flavivirus infection in fed mosquitoes</b>
2:50 pm	Dr. Zhen Zou, Institute of Zoology, Chinese Academy of Sciences, Beijing, China. <b>Hormone modulates disease vector metabolism and vectorial capacity</b>
3:10 pm	Dr. Xiao-Xia Guo, Associate Professor, State Key Laboratory of Pathogen Microbiology and Biosafety Beijing, China. <b>Vertical transmission of Zika Virus by Jiegao and Mengding <i>Aedes aegypti</i> (Diptera: Culicidae) strains in Yunnan Province in China</b>
3:30 pm	Dr. Ai-Hua Zheng, Professor, Institute of Zoology, Chinese Academy of Sciences, Beijing, China. <b>Dual-host adaption of mosquito-borne Flaviviruses</b>
3:50 pm	Dr. Jing-Wen Wang, Professor, Fudan University, Shanghai, China. <b>Inhibition of the TOR pathway increases refractoriness to pathogen infections in mosquitoes via promotion of immune activation</b>
4:10 pm	Dr. Jin-Bao Gu, Professor, College of Public Health and Tropic Medicine, Southern Medical University, Guangzhou, China. <b>Circular RNA aal-circRNA-407 plays an important role in the ovarian development in female <i>Aedes albopictus</i></b>
4:30 pm	Dr. Jia-Hong Wu, Professor, Dean of School of Overseas Education, Guizhou Medical University, Guiyang, China. <b>wAlbB <i>Wolbachia</i> modulates lipid metabolism of <i>Aedes aegypti</i></b>

4:50 pm	Dr. Yu-Ting Jiang, Assistant Professor, State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China. <b>Dengue virus genomic variance under selective pressure in mice and mosquito transmission</b>
<b>August 16 pm, Beijing (Night session)//August 16 am, USA</b>	
<b>7:00 pm Beijing Time//7:00 am East Time in USA</b>	
<b>Zoom meeting ID: 951 4564 9228</b>	
<b>Passcode: 100793</b>	
<b>Moderator: Dr. Rui-De Xue</b>	
7:00 pm	<b>7:00 am.</b> Dr. Whitney Qualls. Scientific Manager/Entomologist, Anastasia Mosquito Control District, St. Augustine, Florida, USA. <b>Overview of collaborating applied research projects and benefits at AMCD</b>
7:20 pm	<b>7:20 am.</b> Dr. Peter Jiang, Director, City of Gainesville Mosquito Control, Gainesville, Florida, USA. <b>The re-emerging of <i>Aedes aegypti</i> in north central Florida</b>
7:40 pm	<b>7:40 am.</b> Dr. Jerry A. Hogsette, Jr. Lead Scientist and Research Entomologist, USDA/Center for Medical, Agricultural and Veterinary Entomology, Gainesville, Florida, USA. <b>Update traps and trapping technology against biting flies</b>
8:00 pm	<b>8:00 am.</b> Dr. Ken Linthicum, Center Director, USDA/Center for Medical, Agricultural and Veterinary Entomology, Gainesville, Florida, USA. <b>Sterile Insect Techniques for mosquito control</b>
8:20 pm	<b>8:20 am.</b> Dr. Phil Koehler, Professor, Department of Entomology & Nematology, University of Florida, Gainesville, FL, USA. <b>Mosquito control and honey bees</b>
<b><u>August 17, 2021(Beijing Time)</u></b>	
<b>Zoom meeting ID: 951 4564 9228</b>	
<b>Passcode: 100793</b>	
<b>Moderators: Dr. Zhen Zou and Dr. Chun-Xiao Li</b>	
8:00 am	<b>5:00 pm (California, August 16).</b> Dr. Michelle Brown. Executive Director, Society for Vector Ecology & Manager, West Valley Mosquitoes and Vector Control District, California, USA. <b>Overview of the SOVE</b>
8:20 am	<b>5:20 pm (California, August 16).</b> Dr. Tianyun Su. Consultant, USA. <b>Insecticide resistance and its management</b>
8:40 am	Dr. Chun-Xiao Li, Professor, State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China. <b>Metagenome sequencing reveals the midgut microbiota</b>

	<b>makeup of <i>Culex pipiens quinquefasciatus</i> and its possible relationship with insecticide resistance</b>
9:00 am	Dr. Bo Shen, Professor, Nanjing Medical University, Nanjing, China. <b>Transcription factor FTZ-F1 regulates mosquito cuticular protein CPLCG5 conferring insecticide-resistance in <i>Culex pipiens pallens</i></b>
9:20 am	Dr. Qian Han, Professor, College of Life Sciences and Pharmacy, Hainan University, Haikou, China. <b>Functional analysis of genes related to cuticle formation and myelinization in the mosquito, <i>Aedes aegypti</i></b>
9:40 am	Dr. Qiang Wang, Associate Professor, Department of Preventive Medicine and Public Health Laboratory Science, School of Medicine, Jiangsu University, Suzhou, China. <b>Odorant receptors mediated spatial repellency of plant essential oils against mosquitoes</b>
10:00 am	<b>7:30 am India time.</b> Dr. Devi Shankar Suman. Scientist D, Zoological Survey of India, Kolkata-700053, India. <b>Surveillance of mosquitoes and its significance</b>
10:20 am	Dr. Mao-Qing Gong, Professor, Shandong Institute of Parasitic Diseases, Shandong First Medical University & Shandong Academy of Medical Sciences, Shandong, China. <b>Bionomics and insecticide resistance of <i>Aedes albopictus</i> in Shandong, a high latitude and high-risk dengue transmission area in China</b>
10:40 am	Dr. Ling-Ling Zhang, Professor, Fujian Agriculture and Forestry University, Fuzhou, China. <b>Function of yheN gene in Bt Resistance to UV stress</b>
11:00 am	Dr. Yu-Hong Guo, Professor, Department of Vector Biology and Control, China CDC, National Institute for Communicable Disease Prevention and Control, Beijing, China. <b>Genetic diversity of <i>Culex tritaeniorhynchus</i> in mainland China</b>
11:20 am	Dr. Gang Wang, Associate Senior Technologist. Hangzhou Customs, Hangzhou, China. <b>Studies on geographical population differentiation of <i>Anopheles sinensis</i> (Diptera: Culicidae) based on COI and ITS2 genes</b>
11:40 am	Dr. Heng-Duan Zhang, Assistant Professor, State Key Laboratory of Pathogen Microbiology and Biosafety, Beijing, China. <b>Study on population genetics characteristics of <i>Aedes albopictus</i> in the Yangtze River Basin of China</b>
<b>12:00 noon Lunch Break</b>	
<b>Moderators: Dr. Hong-Liang Chu and Dr. Feng-Xia Meng</b>	
1:00 pm	<b>8 am Greece time.</b> Dr. Alexandra Chaskopoulou, Research Entomologist, USDA/ Europe Biocontrol Institute, Greece. <b>Integrated west nile virus surveillance and vector control response in Greece</b>

1:20 pm	<b>7:30 am Italy time.</b> Dr. Asghar Talbalaghi. Freelance Entomologist/Founder of Italian Mosquito Control Association. <b><i>Ochlerotatus caspius</i>, the mosquito pestiferous of the biggest breeding site in Europe: approaches to the issue from Valenza Italy suffering by tremendous number of mosquitoes</b>
1:40 pm	Dr. Feng-Xia Meng, Professor, Department of Vector Biology and Control, China CDC, National Institute for Communicable Disease Prevention and Control, Beijing, China. <b>Epidemiological characteristics of imported dengue fever cases in Yunnan Province, 2005-2019</b>
2:00 pm	<b>8 am Cairo time.</b> Dr. Emad IM Khater, Associate Professor, Department of Entomology, Ain Shams University, Egypt. <b>Mosquito (vector)-borne diseases in the WHO-EMR/MENA (Egypt and Saudi Arabia): Ecology, molecular biology, control, and future research</b>
2:20 pm	Dr. Hong-Liang Chu, Director, Institute of Vector-borne diseases and disinfection, Jiangsu Center for Disease Prevention and Control, Nanjing, China. <b>Vector surveillance in Jiangsu Province, China</b>
2:40 pm	Dr. Yong Zhang, Researcher, Beijing Center for Disease Prevention and Control, Beijing, China. <b>Prediction and practice of mosquito bite index in cities</b>
3:00 pm	<b>8:00 am. Portugal time.</b> Dr. Peyman Ghaffari, Chair of COST Action CA 16227 (IMAAC). <b>Mathematical modelling of Textiles and Paints equipped with mosquito repellents on controlling mosquito transmitted vector-borne diseases (VBD): A brief overview of IMAAC</b>
3:20 pm	Dr. Yi-Bin Zhou, Associate Chief Physician Shanghai Center for Disease Prevention and Control, Shanghai, China. <b>A study of grid monitoring method for Mosq-ovitraps</b>
3:40 pm	Dr. Zong-Jing Chen, Technologist-in-charge, Guangdong Provincial CDC, Guangzhou, China. <b>Status of mosquito vector monitoring in Guangdong Province</b>
4:00 pm	Dr. Tian-Ci Yang, Technologist-in-charge, Zhejiang International Tourism Healthcare Center, Hangzhou Customs District, Hangzhou, China. <b>Species composition and phylogenetic analysis of the midges (Diptera: Ceratopogonidae) around West Lake, Hangzhou, China</b>
4:20 pm	Dr. Yuan Fang, Associate Professor, National Institute for Parasitic Disease Prevention and Control, CDC, Shanghai, China. <b>Monitoring mosquito-borne arbovirus in various insect regions in China in 2018</b>
4:40 pm	Dr. Ning Zhao, Assistant Professor, Department of Vector Biology and Control, China CDC, National Institute for Communicable Disease Prevention and Control, Beijing, China. <b>The surveillance of mosquito in Freetown, Sierra Leone, West Africa</b>