

## ***iCOMOS 2019***

***“One World, One Medicine, One Science: the Way Forward for Better Health”***

### **CONFERENCE SCIENTIFIC PROGRAM**

#### **SUNDAY, FEBRUARY 10, 2019**

**15:00–18:00** Registration **Convention Foyer (2<sup>nd</sup> Flr.)**

#### **MONDAY, FEBRUARY 11, 2019**

**07:30** Registration Open **Convention Foyer (2<sup>nd</sup> Flr.)**

**08:30–08:40** **Conference Welcome** **Chiang Mai 1-5**  
*Niwes Nantachit*, President of Chiang Mai University, Thailand  
*Trevor Ames*, Dean, College of Veterinary Medicine, University of Minnesota,  
United States

**08:40–09:00** **Opening Statement** **Chiang Mai 1-5**  
*Srirama Rao*, Chair of the International Conference on One Medicine One Science,  
United States

**09:00–10:00** **Keynote Speech, Sufficiency Economy toward One Health; Human-Animal-Environment** **Chiang Mai 1-5**  
*M.L.Panadda Diskul*, Assistant Minister to His Excellency the Prime Minister of Thailand

**10:00–10:30** Coffee Break and Networking **Convention Foyer (2<sup>nd</sup> Flr.)**

**10:30–12:00** **Plenary Presentation 1** **Chiang Mai 1-5**  
**Strengthening Capacities for Surveillance, Response, and Control of Infectious Diseases in Developing Countries**

**Co-Chairs:** *Khuanchai Supparatpinyo*, Research Institute for Health Science, Chiang Mai University, Thailand and *Katey Pelican*, College of Veterinary Medicine, University of Minnesota, United States

**The Power of One Health: Innovating an End to Pandemics**  
*Mark Smolinski*, Author, Ending Pandemics, United States

**Malaria Outbreaks Related to Climate Variability in Africa**  
*Noboru Minakawa*, School of Tropical Medicine and Global Health, Nagasaki University, Japan

**GHSA/IHR as Platforms to Strengthen National One Health Capacity**  
*Khanchit Limpakarnjanarat*, Global Health Security Agenda (GHSA) Coordinating Office, GHSA, Thailand

12:00–13:00	Lunch	Convention Lobby
13:00–14:30	<b>Panel Discussion 1</b> <b>Interface of Human, Animal, and Environmental Health: How to Move It Forward More Effectively</b>  <b>Co-Moderators:</b> <i>Tongkorn Meeyam</i> , Faculty of Veterinary Medicine, Chiang Mai University, Thailand and <i>Beth Virnig</i> , School of Public Health, University of Minnesota, United States  <b>Interface of Human, Animal, and Environmental Health: the Natural Focality of Vector-Borne Diseases</b> <i>Michael Kosoy</i> , Global Health Asia Institute, Bangkok, Thailand, and KB One Health, Fort Collins, Colorado, United States  <b>Asian Zoonotic Schistosomiasis in the Philippines</b> <i>Shin-Ichiro Kawazu</i> , Obihiro University of Agriculture and Veterinary Medicine, Japan  <b>Emergence of Ebola Virus in Humans: A Representative Model of Animal-Human-Environment Interface</b> <i>Eric Leroy</i> , International Centre for Medical Research, Institute of Research and Development (IRD), France  <b>Ending Rabies in Thailand: Will It Be Mission Possible?</b> <i>Anupong Sujariyakul</i> , Department of Disease Control, Ministry of Public Health, Thailand	Chiang Mai 3-5
14:30–15:30	<b>Poster Session 1</b> with Coffee Break and Networking	Convention Foyer (2 <sup>nd</sup> Flr.)
15:30–17:30	<b>Panel Discussion 2</b> <b>Fostering Interdisciplinary Approaches Towards Sustainable Food System</b>  <b>Moderator:</b> <i>Peter Black</i> , International Animal Health and Disease Control Expert, Food and Agriculture Organization (FAO), Thailand  <b>Trends and challenges to ensure food security in developing countries”</b> <i>Budsara Limnirankul</i> , Faculty of Agriculture, Chiang Mai University, Thailand  <b>Economics, antimicrobial resistance (AMR) and the development of sustainable food systems</b> <i>Michael Ryan</i> , The Organization for Economic Cooperation and Development (OECD), France  <b>Livestock scenarios for sustainable development in the long term</b> <i>Olaniran Alabi</i> , Federal Republic of Nigeria, Nigeria  <b>Interdisciplinary approaches to address infectious diseases and ensuring a safe food supply</b> <i>Jeff Bender</i> , U.S. Agency for International Development’s One Health Workforce Project, United States  <b>Private sector views on the need of inter-disciplinary approaches for sustainable food systems</b> <i>Vasit Taepaisitphongse</i> , CEO and President, Betagro Group, Thailand	Chiang Mai 3-5
	<b>Oral Presentation 1</b>	Chiang Mai 2
	<b>Contribution to Building Sustainable Surveillance Systems</b> <b>Co-Chairs:</b> <i>Akeau Unahalekhaka</i> , Faculty of Nursing, Chiang Mai University, Thailand and <i>Sarah Hoffman</i> , School of Nursing, University of Minnesota, United States	
	<b>Oral Presentation 2</b>	Chiang Mai 1
	<b>The Public Health Impact of Antimicrobial Resistance and Food Safety</b> <b>Co-Chairs:</b> <i>Usanee Anukool</i> , Faculty of Associated Medical Science, Chiang Mai University, Thailand and <i>Scott Wells</i> , College of Veterinary Medicine, University of Minnesota, United States	

17:30	<b>Traditional Lanna Food Market</b>	Convention Foyer (3 <sup>rd</sup> Flr.)
18:00–21:00	<b>Reception Dinner</b>	Empress Grand Hall (3 <sup>rd</sup> Flr.)

## TUESDAY, FEBRUARY 12, 2019

08:00 Registration Open Convention Foyer (2<sup>nd</sup> Flr.)

08:30–10:00 **Plenary Presentation 2** Chiang Mai 1-5  
**The Thai Cave Rescue: What We Learned for Effective Health Management and Crisis Communications**

**Co-Chairs:** *Terapatt Vannaruemol*, Faculty of Mass Communication, Chiang Mai University and *Connie Delaney*, School of Nursing, University of Minnesota, United States

**Incidence Command System in Emergency System in Emergency Operation Centre During Cave Rescue: How to Make It Effective**  
*Supachoke Maspakorn*, Chiang Rai Prachanukroh Hospital, Thailand

**Emerging Infectious Disease (EID) Response from the Cave: Lesson Learnt and Way Forward**  
*Rome Buathong*, Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health, Thailand

**Crisis Communication: How to Make It Effective**  
*Suthichai Yoon*, Senior Journalist, Thailand

10:00–10:15 Coffee Break and Networking Convention Foyer (2<sup>nd</sup> Flr.)

10:15–12:00 **Plenary Presentation 3** Chiang Mai 1-5  
**Ecosystem and Environmental Health to Community Development: Scientific Challenges and Policy Implications**

**Co-Chairs:** *Tippawan Prapamontol*, Research Institute for Health Science, Chiang Mai University, Thailand and *Kimberly Thigpen Tart*, National Institute of Environmental Health Sciences, NIH, United States

**Environmental Health: Human Health as a Critical Component of One Health**  
*William Suk*, National Institute of Environmental Health Sciences (NIEHS), NIH, United States

**Early Warning System Based on Climate Prediction**  
*Noboru Minakawa*, School of Tropical Medicine and Global Health, Nagasaki University, Japan

**Working and Living: The Environment and One Health**  
*Bruce Alexander*, School of Public Health, University of Minnesota, United States

12:00–13:00 **Lunch** Convention Lobby

13:00–14:30 **Panel Discussion 3** Chiang Mai 1-2  
**Impacts of Pollution on Environmental Health**

**Co-Moderators:** *Bruce Alexander*, School of Public Health, University of Minnesota, United States and *Chalerm Liwrsisakun*, Faculty of Medicine, Chiang Mai University

**The Environment and Child: Next Generation's Health**  
*Shoji Nakayama*, Center for Health and Environmental Risk Research, National Institute of Environmental Studies, Tsukuba, Japan

**Evaluating Health Outcomes Related to Prenatal Chemical Exposures**  
*Dana B. Barr*, Rollins School of Public Health, Emory University, United States

**Air Pollution in Northern Thailand: Biomass Burning Emission and Health Risk Assessment**

*Somporn Chantara*, Environmental Science Research Center (ESRC), Faculty of Science, Chiang Mai University, Thailand

**14:30–15:30**    **Poster Session 2** with Coffee break and Networking                      **Convention Foyer (2<sup>nd</sup> Flr.)**

**15:30–17:00**    **Oral Presentation 3**                                                                      **Chiang Mai 1**  
**Global One Health Initiative and Environment and Climate Change**  
**Co-Chairs:** *Fred Unger*, International Livestock Research Institute, Vietnam and *Warangkham Chaisowong*, Faculty of Veterinary Medicine, Chiang Mai University, Thailand

**Oral Presentation 4**                                                                                      **Chiang Mai 2**  
**Infectious Diseases**  
**Co-Chairs:** *Aksara Thongprachum*, Faculty of Public Health, Chiang Mai University, Thailand and *Patricia Walker*, School of Medicine, University of Minnesota, United States

**13:00–17:00**    **Concurrent Interactive Session 1**                                                              **Chiang Mai 3-5**  
**New Interventions Against Infectious Disease**

Organizer: National Institute of Allergy and Infectious Diseases (NIAID), NIH, United States  
(Note: Program Details and speakers listed under **Concurrent Interactive Sessions**)

**17:00**              Free Time (on your own)

## **WEDNESDAY, FEBRUARY 13, 2019**

**08:00**              Registration Open                                                                                      **Convention Foyer (2<sup>nd</sup> Flr.)**

**08:30–10:00**    **Plenary Presentation 4**                                                                                      **Chiang Mai 1-5**  
**Food Safety Perspectives in the 21st Century: Policy Development and Implementation**  
**Co-Chairs:** *Khwanchai Kreausukon*, Faculty of Veterinary Medicine, Chiang Mai University, Thailand and *Trevor Ames*, College of Veterinary Medicine, University of Minnesota, United States

**Rapid and Reliable Detection Methods for Food-Borne Diseases**  
*Hisao Kurazono*, Obihiro University of Agriculture and Veterinary Medicine, Japan

**Value Chain Food Safety: From Farms to Forks**  
*Nikom Sitthi-oad*, Bird Security and Regulation Senior Manager at Cargill Meats Thailand, Thailand

**Food Safety and Shifting Global Pressures: Are We Ready?**  
*Jennifer van de Ligt*, College of Veterinary Medicine, Food Protection and Defense Institute, University of Minnesota, United States

**10:30–10:45**    Coffee Break and Networking                                                                      **Convention Foyer (2<sup>nd</sup> Flr.)**

- 10:45–12:15**      **Panel Discussion 4**      **Chiang Mai 1-5**  
**Climate Change and Disaster Research to Improve Disaster Management**
- Co-Moderators:** *Sampan Singharajwarapan*, Faculty of Science, Chiang Mai University and *Shailey Prasad*, Center for Global Health and Social Responsibility, University of Minnesota, United States
- Empowering Vital Research to Address Disasters and Emerging Threats**  
*Aubrey Miller*, National Institute of Environmental Health Sciences (NIEHS), NIH, United States
- Heat Early Warning Systems and Other Predictive Models**  
*Juli Trtanj*, National Oceanic and Atmospheric Administration, United States
- Disaster Management: Experiences in South East Asia**  
*Pornpitak Panlar*, Division of Disease Control in Emergency Situation, Department of Disease Control, Ministry of Public Health, Thailand
- 12:15–13:15**      **Lunch**      **Convention Lobby**
- 13:15–14:45**      **Panel Discussion 5**      **Chiang Mai 3-5**  
**Inappropriate Use of Antibiotics in Human, Animal, and Agriculture: The Major Link to AMR and Environmental Impact in 21st Century**
- Co-Moderators:** *Penkarn Kanjanarat*, Faculty of Pharmacy, Chiang Mai University, Thailand and *Ned Patterson*, College of Veterinary Medicine, University of Minnesota, United States
- Global Antimicrobial Stewardship Efforts**  
*Jeff Bender*, USAID One Health Workforce Project and School of Public Health, University of Minnesota, United States
- Reducing Antimicrobial Use in Livestock - Will it Reduce Antimicrobial Resistance? The German Experience**  
*Bernd-Alois Tenhagen*, The Group for Epidemiology, Zoonoses, and Antimicrobial Resistance, Department of Biological Safety, German Federal Institute for Risk Assessment, BfR, Germany
- Collateral Damage of Antibiotic Use on Emergence of AMR: Lessons Learned from Thailand**  
*Visanu Thamlikitkul*, WHO Collaborating Centre for AMR Prevention and Containment and Faculty of Medicine, Siriraj Hospital, Mahidol University, Thailand
- 14:45–15:00**      Coffee Break and Networking      **Convention Foyer (2<sup>nd</sup> Flr.)**
- 15:00–17:00**      **Panel Discussion 6**      **Chiang Mai 3-5**  
**Migrant and Minority Health: Someone Still Left Behind**
- Co-Moderators:** *Debra Olsen*, University of Minnesota, United States and *Suwat Chariyalertsak*, Faculty of Public Health, Chiang Mai University, Thailand
- Migration Medicine As A Young Science: Challenges and Opportunities**  
*Patricia Walker*, HealthPartners Travel and Tropical Medicine Center, Medical School, University of Minnesota, United States
- Gender and Migration: The Unique Intersections Between Gender, Health, and War**  
*Sarah Hoffman*, Population Health and Systems Cooperative Unit, School of Nursing, University of Minnesota, United States
- Improve Migrant Health Accessibility through Sustainable Complementary Migrant Health Funds**  
*Nyunt Naing Thein*, Manager in M-Fund (Migrant Health Insurance Project), Thailand

- 13:15–17:00**    **Concurrent Interactive Sessions 2**    **Chiang Mai 1-2**  
**Disaster Research Response: Critical Capacities in One Medicine One Science**
- Organizer: National Institute of Environmental Health Sciences (NIEHS), NIH, United States  
 (Note: Program Details and speakers listed under **Concurrent Interactive Sessions**)
- 17:00**    **Free Time** (on your own)

## **THURSDAY, FEBRUARY 14, 2019**

- 08:00**    Registration Open    **Convention Foyer (2<sup>nd</sup> Flr.)**
- 08:30–09:15**    **Plenary Presentation 5**    **Chiang Mai 1-5**  
**Infectious Diseases—World Without Borders: Boosting Your Immunity**
- Chair:** *Suwat Chariyalertsak*, Faculty of Public Health, Chiang Mai University, Thailand
- Dennis Carroll*, Director, Emerging Threats Program, Bureau for Global Health, U.S. Agency for International Development, United States
- 09:15–10:00**    **Plenary Presentation 6**    **Chiang Mai 1-5**  
**Workforce Migration, Mobility, and Sustainability: Ensuring a Competent Workforce Within and Beyond Borders**
- Chair:** *Wipada Kunaviktikul*, Faculty of Nursing, Chiang Mai University, Thailand
- Global Migration and Mobility: Ensuring Competent and Sustainable Workforce**  
*Franklin Shaffer*, Chief Executive Officer, Commission on Graduates of Foreign Nursing Schools (CGFNS) International, United States
- 10:00–10:15**    Coffee Break and Networking    **Convention Foyer (2<sup>nd</sup> Flr.)**
- 10:15–11:45**    **Panel Discussion 7**    **Chiang Mai 3-5**  
**Global One Health Initiative: Challenges and Opportunities for Tackling Infectious Diseases in Developing Countries**
- Co-Moderators:** *Suwat Chariyalertsak*, Faculty of Public Health, Chiang Mai University, Thailand and *Susana Mendez*, National Institute of Allergy and Infectious Diseases, United States
- One Health Capacity Building in Southeast Asia**  
*Le Thi Houng*, Chairperson of South East Asia One Health University Network (SEAOHUN) and Dean of the Institute for Preventive Medicine and Public Health, Hanoi Medical University, Vietnam
- One Health game changers: Strengthening multisectoral prevention, detection and response to infectious disease threats through university-government partnerships and collaboration**  
*Katey Pelican*, Co-Director of the One Health Workforce Project and College of Veterinary Medicine, University of Minnesota, United States
- OIE Initiatives in Strengthening One Health Collaboration in South-East Asia**  
*Ronello Abila*, OIE Sub-Regional Representation for Southeast Asia, Thailand

**10:15–11:45**    **Panel Discussion 8**    **Chiang Mai 1-2**  
**Climate Change and Mental Health Effects**

**Moderator:** *Monoj Potapohn*, Faculty of Economics, Chiang Mai University, Thailand

**Mental Health System in Thailand: Current Situation and New Challenges**

*Phunnapa Kittiratanapaiboon*, Bureau of Mental Health Service Administration,  
Department of Mental Health, Ministry of Public Health, Thailand

**Climate Change, Mental Health and Wellbeing**

*Varoth Chotpitayasunondh*, Department of Mental Health, Ministry of Public Health, Thailand

**Mental Health Professions Coping with Changing Climate in Taiwan**

*Duujian Tsai*, Professor and Director of Institute of Humanity in Medicine, Taipei  
Medical University, Taiwan

**11:45–12:00**    **Overview of iCOMOS 2020**    **Chiang Mai 3-5**  
*Fernando Mardones*, Pontificia Universidad Católica de Chile, Santiago, Chile

**12:00–12:30**    **Conference Summary**    **Chiang Mai 3-5**  
*Sampan Singharajwarapan*, Chiang Mai University, Thailand and  
*Ned Patterson*, College of Veterinary Medicine, University of Minnesota, United States

**12:30–13:30**    **Lunch**    **Convention Lobby**

**13:30–16:30**    **Concurrent Interactive Sessions 3**    **Chiang Mai 3-5**  
**Climate Action and Mental Health Education**

Organizer: Mental Health Research Cluster, Chiang Mai University, Thailand  
(Note: Program Details and speakers listed under **Concurrent Interactive Sessions**)

# Concurrent Interactive Session 1

## New Interventions Against Infectious Disease

**13:00-17:30**

**Tuesday, February 12, 2019**

**Location: Chiang Mai 3-5**

**Organizers** *Hortencia Hornbeak, Peter Jackson, and Susana Mendez, National Institute of Allergy and Infectious Diseases (NIAID), NIH, United States*

### Program

- 13:00–13:30** **Advances in Countermeasures for Lassa Fever**  
*Luis Branco, Managing Director & Co-Founder Zalgen Labs, LLC*
- 13:30–14:00** **Monoclonal Antibodies for Addressing Infectious Disease Threats**  
*Larry Zeitlin, President, Mapp Biopharmaceutical, Inc.*
- 14:00–14:30** **Toward a Universal Influenza Virus Vaccine**  
**Adolfo Garcia-Sastre**, Professor, Department of Microbiology and Director of the Global Health and Emerging Pathogens Institute, Icahn School of Medicine at Mount Sinai
- 14:30–15:00** **Discovery, Development, and Clinical Evaluation of Antibacterial Human Monoclonal Antibodies to Treat Hospital Acquired Pneumonia**  
*Truong Vu, Founder, Chief Executive Officer and Director, Aridis Pharmaceuticals, Inc.*
- 15:00–15:30** **Making Sense of Antisense: New Approaches to Pathogen Specific Antibiotics**  
*David Greenberg, Associate Professor, Department of Internal Medicine – Infectious Disease, UT Southwestern Medical Center*
- 15:30–16:30** **NIAID Mechanisms and Initiatives Supportive of OMOS Research**  
*Hortencia Hornbeak, Peter Jackson and Susana Mendez, NIAID*
- 16:30–17:30** **Small Group Meetings with NIH Administrators and Other Federal Staff**



## Concurrent Interactive Session 2

### Disaster Research Response: Critical Capacities in One Medicine One Science

**13:15–17:00**

**Wednesday, February 13, 2019**

**Location: Chiang Mai 1-2**

**Organizers:** *Kimberly Thigpen Tart and Aubrey Miller, National Institute of Environmental Health Sciences (NIEHS), United States*

**Overview:** Disasters and public health emergencies continue to arise from changes in global climate, commerce, conflict, and cohabitation of the planet. This workshop will explore One Medicine One Science issues related to disasters and public health emergencies, and describe the Disaster Research Response (DR2) framework of the U.S. National Institutes of Health is supporting and facilitating critical research in the aftermath of such disasters to inform preparedness and response to future events. Case studies will describe environmental health issues and relevant DR2 tools and resources. A concluding session will discuss potential use of a similar approach in the Southeast Asian region in coordination with the Consortium on One Medicine One Science.

#### **Program:**

**13:15–13:30 Welcome and Overview**

**Moderator:** *Kimberly Thigpen Tart, National Institute of Environmental Health Sciences, United States*

**13:30–13:50 NIH Disaster Research Response (DR2) Program: Local to Global Partnerships**  
*Aubrey Miller, National Institute of Environmental Health Sciences, United States*

**13:50–14:10 Disaster Research Response in Japan and Beyond**  
*Shoji Nakayama, National Institute for Environmental Studies, Japan*

**14:10–14:30 Global Environmental Health Training and Capacity for Disaster Research**  
*Luz Claudio, Icahn School of Medicine at Mount Sinai, United States*

**14:30–14:45 Early Warning System Advances in Thailand**  
*Paskorn Champrasert, Chiang Mai University, Thailand*

**14:45–15:00 Break**

**15:00–16:15 Case Studies: Health Issues and Application of DR2 Tools and Resources**

1. Extreme Heat  
*Wattasit Siriwong, Chulalongkorn University, Thailand*  
*Juli Trtanj, National Oceanic and Atmospheric Administration, United States*
2. Typhoon/Flood  
*Paskorn Champrasert, Chiang Mai University, Thailand*  
*Aubrey Miller, National Institute of Environmental Health Science, United States*
3. Wildfire/Air Pollution  
*Tippawan Prapamontol, Chiang Mai University, Thailand*  
*Shoji Nakayama, National Institute for Environmental Studies, Japan*
4. Chemical Exposure/Poisonings  
*Pornpimol Kongtip, Mahidol University, Thailand*  
*Dana Barr, Emory University, United States*
5. Mental Health  
*Kulvadee Thongpibul, Chiang Mai University, Thailand*  
*Shoji Nakayama, National Institute for Environmental Studies, Japan*

**16:15–17:00 Q&A and Discussion of DR2 Needs, Priorities, Opportunities in Southeast Asia**  
**Moderators:** *Aubrey Miller, National Institute of Environmental Health Science, United States, Bruce Alexander, School of Public Health, University of Minnesota, United States*

## **Concurrent Interactive Session 3** **Climate Action and Mental Health Education**

**13:30–16:30**

**Thursday, February 14, 2019**

**Location: Chiang Mai 3-5**

**Organizers** Mental Health Research Cluster, Chiang Mai University, Thailand

### **Program**

**13:30–14:45 Part 1: Roundtable Discussion on "Evidences to Support Climate Action Plan"**

*Phongtape Wiwatanadate*, Faculty of Medicine, Chiang Mai University, Thailand

*Manoj Potapohn* Faculty of Economics, Chiang Mai University, Thailand

*Damian Tago Pacheco*, UN Food and Agriculture Organization, Regional Office for Asia and the Pacific

*Michael Shafer*, Founder, Warm Heart Worldwide

**15:00–16:30 Part 2: Capacity Building on Mental Health Education**

**Moderator:** *Penkarn Kanjanarat*, Faculty of Pharmacy, Chiang Mai University, Thailand

**Mental Health Education and Training, Using Interdisciplinary Approach**

*Penkarn Kanjanarat*, Chiang Mai University, Thailand

**Mental Health Education and Training Models for Urgent MH Service Needs:  
Experience from European Countries**

*Manfred Cramer*, Professor, Munich Institute of Mental Health, Germany

**Berlin Crisis Intervention Centre – Concept and Experiences**

*Olaf Neumann*, Alice Salomon University, Berlin, Germany