PMAC PRINCE MAHIDOL AWARD CONFERENCE 2018

PARALLEL SESSION 3.4

SHIFTING LANDSCAPES – REAL AND FIGURATIVE: UNDERSTANDING HOW ALTERED LAND USE IS DRIVING DISEASE EMERGENCE

| BACKGROUND

From urban growth to natural resource extraction and agricultural intensification, anthropogenic land use change is leaving an indelible mark on the planet. Globally, from 2000 – 2012, net forest cover loss totaled 1.5 million square kilometers, 32% of which occurred in tropical rainforest ecosystems. This radical alteration in our natural environment is contributing to an acceleration in the pace and diversity of vector-borne and zoonotic disease emergence, as humans, their livestock, and wildlife are placed into increasingly greater contact. This session will provide a forum for exploration of the mechanics of land use change-associated zoonotic disease emergence and novel, practical solutions to address this challenge.

| OBJECTIVES

- Understanding the various pathways that are transforming landscapes—from agricultural intensification to extractive industries and infrastructure development—as economically driven
- Enhanced understanding of the mechanisms through which land use change enables infectious disease emergence and/or re-emergence, including inter-related factors of biodiversity and human population change dynamics
- Reviewing the data on how various land use scenarios—including fragmentation of wildlife habitats—are linked to both vector-borne and non-vector-borne zoonotic disease transmission dynamics
- Highlighting proven models for addressing land use-associated disease emergence

Moderator

Jonathan Epstein

Vice President

EcoHealth Alliance
United States of America

Speaker

Chadia Wannous

Coordinator and Senior Advisor

Towards a Safer World Network for Pandemic Prepardness (TASW)
Sweden

Chadia Wannous Coordinator and Senior Advisor Toward A Safer World Network for Pandemic Preparedness (TASW) Dr. Chadia Wannous is the Coordinator of the Toward A Safer World Network for Pandemic Preparedness (TASW), which aims to contribute to increased societal resilience in the face of pandemics and other comparable threats to health through sharing of knowledge and best practices in Promoting Multi-Sector and Whole of Society Approaches to Pandemic Preparedness. Dr. Wannous has served in the UN system as Senior Policy Advisor for the past decade to optimize UN work on global initiatives related to pandemic preparedness and response. Most recently in 2015-2017 Dr. Wannous worked at the UN Office for Disaster Risk Reduction (UNISDR) in Switzerland, coordinating the implementation and advocacy for the health components of the Sendai Framework for Disaster Risk Reduction and the Science and Technology Partnership. Prior to this Chadia served as a Senior Policy Advisor to the UN Secretary General Special Envoy on Ebola in West Africa (2014-2015) and the UN System Influenza Coordination (2011-2014). Previous experience also includes working as a Technical Officer at the WHO Regional Communicable Disease Surveillance and Response sub-unit based in Thailand, and then as a Senior Advisor to the UN Resident Coordinator in Egypt and as the Regional Coordinator for the UN System Influenza Coordination (UNSIC) in the Middle East and North Africa region. In these roles Chadia led strategic planning and technical support to countries for the development and implementation and testing of pandemic preparedness and response plans and for strengthening partnerships and alliances at country, regional and global levels. Dr. Wannous is a public health professional with a doctorate degree in International Health and Development and more than twenty-five years of experience in program management, coordination, and research with particular focus on emergency preparedness and response and risk reduction of health threats.

Speaker

Lilis Heri Mis Cicih

Senior Researcher, Lecturer

University of Indonesia
Indonesia

Dr. LILIS HERI MIS CICIH. Since 2017, Dr. Lilis is a senior researcher in Universitas Indonesia, and she also as a lecturer in Public Health Faculty and Economic and Business Faculty in Universitas Indonesia. Dr Lilis has worked extensively in INDOHUN (Indonesia One Health University Network), which is working as a Co-investigator of the DEAL (Disease Emergence and Economic Evaluation of Altered Landscape) project funded by USAID - a project that aims to prevent disease emergence in Indonesia with quantify how changes to landscapes, particularly forests, contribute to disease emergence, with particular emphasis on zoonotic disease threats. Also to estimate the economic costs of the human health effects due to deforestation and land use change. This translated from the USAID Infectious Disease Emergence and Economics of Altered Landscapes (IDEEAL) project with the focus interests of the Indonesian government and be specific for the Indonesian context. Dr. Lilis received her bachelor's degree (nutritionist) from Bogor Agricultural University, Bogor, Indonesia and worked as a demographic researcher before continuing studies at the Universitas Indonesia, where she earned a master’s degree in economic demography in 1999. In 2015 she received her Doctoral Degree from the Public Health Faculty, Universitas Indonesia. Dr. Lilis has several background study are agricultural, economic, and public health

Speaker

Ohnmar Aung

Project Coordinator

Smithsonian Institution
Myanmar

I, Dr Ohnmar Aung, completed my Bachelor of Medicine & Science in 1994 at the Institute of Medicine 1, Yangon, after which I went on to pursue my Masters in Health Social Sciences at Mahidol University in Thailand from 2003 to 2005. During my 20 years as a medical doctor and public health specialist at Ministry of Health & Sports, international NGOs including the UNICEF and UNAIDS, I was given several opportunities to participate in short-term and long-term leadership and supervising workshops, such as “Coaching as Supervisor”. The skills I learnt from completing such workshops benefited me, especially in managing grants and funding amounting to 2 million per year for a number of respected international NGOs. Since 2003 when I was pursuing my Masters at Mahidol University, I have conducted several studies with the help of government ministries and a number of remarkable mentors I met throughout my career. For my Masters thesis, I conducted the “Youth Lifestyles, Sexuality and Cultural Beliefs related to Unsafe Sexual Practices among Selected Youth in Peri-urban Yangon, Myanmar” study, which investigated unsafe sexual practices across different youth populations in Yangon and the factors that might be influencing them. From 2008 to 2011, I assisted in conducting several studies which focused on the prevalence and prevention of HIV/AIDS in early infants, children, and the adult population. In 2013, I was given a special opportunity to co-conduct and co-author the “Opportunities and Challenges towards “Getting to Three Zeros” target: Lessons learned from Rapid Assessment of ASEAN Cities getting to Zero in Mawlamyine City, Myanmar” study. I am currently the Project Coordinator of the USAID/PREDICT project, Myanmar, by the Smithsonian Institution. With the co-operation of the Livestock Breeding and Veterinary Department and the Department of Medical Research, Myanmar, the PREDICT project is currently conducting research on the transmission of zoonotic diseases across human populations that are living near wildlife to assess the level of risk and spread of zoonotic diseases from animals to humans.

Speaker

Serge Morand

Faculty Veterinary Technology

Kasetsart University
Thailand

Serge Morand focuses his research on the evolutionary ecology of disease transmission and health ecology. Field parasitologist, he is concerned at the role of biodiversity as risks and insurance for zoonotic emerging infectious diseases and antimicrobial resistance raise. During the last 10 years he conducted more than 30 field trips in Southeast Asia (Thailand, Cambodia, Laos, Vietnam, Philippines). He is conducting several projects on the impacts of global changes, including climate and land use changes, on the links between biodiversity, health and societies in Southeast Asia, using rodent-borne diseases as a model, CERoPath and BiodivHealthSEA, with the last one FutureHealthSEA. He published articles and edited special issues and books on this topic, with the last ones “Socio-ecological Dimensions of Infectious Diseases in Southeast Asia” (2015 Springer Singapore); “Biodiversity Conservation in Southeast Asia: Challenges in a Changing Environment” (2017 Routledge London) and “Biodiversity and Health: Linking Life, Ecosystems and Societies” (2017 Elsevier, London). Serge Morand belongs to the French CNRS and CIRAD, he is based in Thailand at the Faculty of Veterinary Technology (Kasetsart University), and also Invited Professor at the Faculty of Tropical Medicine (Mahidol University).

Speaker

Xianyan Tang

Asso. Prof., School of Public Health

Guangxi Medical University
China

Dr. Xianyan Tang, an associate professor of epidemiology & biostatistics at Guangxi Medical University in China, has worked as a visiting scholar in University of Franche-Comté and French Center for Disease Surveillance with the funding of XU Guangqi Program in 2011. During 2013-2016, he received the scholarship from China Medical Board (CMB) Rural PhD Training program to pursue the degree of Doctor of Philosophy (Epidemiology) at Prince of Songkla University in Thailand. He mainly focuses on the fields of Spatio-temporal epidemiology and Eco-epidemiology. Particularly, he conducts researches on the impact of eco-environmental factors on the spread of emerging & re-emerging infectious diseases. So far, he has worked as principal investigators (PIs) of the Open Competitive Research Grant of China Medical Board (CMB-OC), the Young Scientists Fund of National Natural Science Foundation of China (NSFC) and the Young Scientists Fund of Guangxi Provincial Natural Science Foundation, etc. Currently, he is the director of research & education department and the executive director of geographic information systems (GIS) research laboratory at Public Health School of Guangxi Medical University. Additionally, he is the peer-reviewer of several international and regional journals.