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# MERONG ONE HEALTH INNOVATION PROGRAM (MOHIP)

### Health Impacts of Air Pollution: A One Health Perspective



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Wayne is a physician/scientist who earned a B.A. from Johns Hopkins University, and an M.D. from the University of Maryland and is a cardiologist. Over 24 years in academia at the University of North Carolina at Chapel Hill and East Carolina University, he engaged in clinical, research, teaching, and administrative activities. At the US Environment Protection Agency (EPA), he continues to be engaged in the study of the health effects of environmental pollutants for the purpose of informing risk assessment, risk-management decisions, and improving public health and quality of life through increased environmental health communication and literacy most notably for the topic of wildfire smoke and health.

#### **Topics: Introduction**

Air pollution is ubiquitous and generally composed of a mixture of water vapor, gases, particulate matter, and air toxics. The sources, the proportion of air pollution's components and concentrations are largely determined by the human activities at a specific location or geographical region. Principal sources of air pollution in Southeast Asia include vehicular exhaust, biomass burning, sea salt aerosol, power plant, industrial emissions, and agricultural burning. Of the pollutants in the air pollution mixture, extensive scientific evidence demonstrates that both short-term and long-term exposures to particulate matter and ozone can detrimentally impact human health and ecological integrity, with additional evidence that other pollutants such as SO2 and NO2 can also have detrimental impacts. Government led regulations have been an important and effective way to reduce the harmful emissions, lower exposures to pollutants and protect public health and ecological integrity. However, the factors driving emissions are varied, and lasting solutions will require greater understanding of the interrelationship among these factors both human and ecological. The One Health perspective provides a holistic framework from which to design research that might guide more durable solutions.

Date/Time: August 31, 2023; 9 AM Eastern Time (New York Time); August 31, 2023; 8 PM Indochina Time

Use this link to register: <u>https://msu.zoom.us/webinar/register/WN\_3Nkz1KaCT3WqLEkhOhBWxw</u> For questions, email: mohip@msu.edu









## MERINAR #8

### **Research on Air Pollution in Thailand**

Chomsri Choochuay, PhD Faculty of Environmental Management Prince of Songkla University, Kho Hong Hat Yai, Songkhla 90112 THAILAND



Speaker's Info:

2005-2009: Bachelors of Science in Microbiology, Prince of Songkla University

2009–2012: Master of Science in Environmental Management, Prince of Songkla University

2017-2020: Ph.D. in Environmental Management, Prince of Songkla University

Research Interest: Air Pollution, the carcinogenicity of gaseous and airborne fine particulate persistent organic

pollutants (POPs), especially polycyclic aromatic hydrocarbons (PAHs), climate change, water soluble ionic species

(WSIS), and carbonaceous compositions

**Topics: Introduction** 

#### Dr. Choochuay's talk focuses on research on the carcinogenicity of

gaseous and airborne fine particulate persistent organic pollutants (POPs), particularly polycyclic aromatic hydrocarbons (PAHs), watersoluble ionic species (WSIS), and carbonaceous compositions.

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