



PMAC | PRINCE MAHIDOL
AWARD CONFERENCE **2018**



PARALLEL SESSION 2.4

**CHANGING DYNAMICS: EMERGING INFECTIOUS DISEASES AND ANTIMICROBIAL
RESISTANCE IN AN ERA OF EXPANDING GLOBAL HUMAN POPULATION
GROWTH AND MOVEMENT**



| BACKGROUND

The global human population is projected to peak at over 11 billion this century. Accelerated human population growth and corresponding changes in demography, along with associated food and companion animal population increases, are altering disease dynamics and will continue to drive emerging infections and transmission over the course of the next century. This session will explore the connections among infectious disease emergence, antimicrobial resistance (AMR), and changing human and animal population dynamics. We will explore the state-of-the-art in emerging disease and AMR detection and forecasting and answer the question, “How can we minimize emerging disease and AMR risks linked to changing demography.”

| OBJECTIVES

This session aims to explore and address the impacts of growing human and animal populations and unplanned mega-cities and peri-urban settlements on disease emergence, amplification, and global distribution. Accordingly, presenters will also tackle the risks associated with surging global trade and travel and illustrate how forecasting can inform risk mitigation.
Specific Objectives:

- Explore projected demographic trends over the 21st century and their impact on expected zoonotic disease emergence and AMR
- Enhance understanding of how trends in demography will differ regionally; how differences in agricultural productivity and marketing practices will impact emerging disease risk, including spread of AMR; and how purchasing power and animal protein demand will have global supply chain impacts and associated emerging disease risk
- Highlight practical, evidence-driven approaches to defining, forecasting, and mitigating human demographic-driven emerging disease risk



Panelist

Thuy Bich Hoang

Country Program Director

Wildlife Conservation Society
Viet Nam

Thuy Bich Hoang has a Master degree in Public Management and Economics. She is the director of the Wildlife Conservation Society (WCS)'s Viet Nam program, which is working on the implementation of the USAID EPT-PREDICT - a project that aims to prevent, detect, and rapidly respond to the spillover of novel infectious pathogens from wildlife to humans. Thuy has extensive experience working in partnership with local Government in the human and animal health sectors, including on the prevention of avian influenza and emerging pandemic threats, and wildlife farming and conservation. She is familiar with participatory and competence-based capacity building, behavior change communication interventions to promote more protective practices and mitigate zoonotic risks in human and animals, using these as public health evidence to empower enforcement officers including police, forest rangers, customs, and prosecutors to combat wildlife trafficking. Thuy had also worked with USAID EPT1-PREVENT where she has engaged with different ministries and local partners in Lao PDR, Cambodia and Viet Nam to institutionalize policy change e.g. monitoring biosecurity practices for market improvement and at captive breeding farms.