



**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

### Katrin Kohl

*Deputy Director Division of Global Migration and Quarantine*

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Biosketch Dr. Katrin Kohl Dr. Katrin Kohl is Deputy Director of the Division of Global Migration and Quarantine in the National Center for Emerging and Zoonotic Infectious Diseases at the U.S. Centers for Disease Control and Prevention. Dr. Kohl provides leadership to domestic and international programs that address health issues and threats related to international travel, importation of infectious diseases into the United States, and mobile populations through the Division's 5 organizational units: Quarantine and Border Health Services, Traveler's Health, Immigrant, Refugee and Migrant Health, Community Interventions for Infection Control, and a U.S.-Mexico Binational Unit. Dr. Kohl co-leads the implementation of the International Health Regulations at the Centers for Disease Control and Prevention in close collaboration with the World Health Organization, the Department of Health and Human Services, and the U.S. state health departments. Dr. Kohl was involved in leadership roles in numerous CDC-wide responses including the 2009 H1N1 influenza pandemic, the 2014 importation of MERS Coronavirus to the U.S., the 2014 Ebola virus disease outbreak in West Africa, and the 2015 Zika outbreak. Her primary focus is the mitigation of disease importation and exportation through travelers. Dr. Kohl obtained a medical degree and a PhD in Cardiology from the Free University of Berlin, Germany and a Master in Public Health and a Diploma in Tropical Medicine from Tulane School of Public Health and Tropical Medicine in New Orleans, USA. In 1997, Dr. Kohl joined the Centers for Disease Control and Prevention as an Epidemic Intelligence Services Officer based in Louisiana, completed a Preventive Medicine Residency at CDC in the Division of Sexually Transmitted Diseases, led a large vaccine safety team including building a global vaccine safety collaboration, and joined her current Division in 2006.