



PMAC | PRINCE MAHIDOL
AWARD CONFERENCE **2018**



PARALLEL SESSION 1.2

**STRATEGIC INFORMATION AND THE EVOLUTION OF EMERGING INFECTIOUS
DISEASES: LESSONS FROM THE PAST AND NEW OPPORTUNITIES**



| BACKGROUND

The last century has witnessed an increase in the frequency of emerging infectious diseases (EID) and antimicrobial resistance (AMR). Climate change, environmental pressure, population movement, population growth and increasing overlaps between human and animal livelihoods have contributed to an acceleration of novel infectious diseases. In addition, the increasing pace of human and animal pathogens resistant to antibiotic therapies raises serious concerns about treatable infections becoming life threatening, raising the death toll and the economic cost to potentially unsustainable level within decades.

In this context, early warning systems and strategic information play a key role in preventing, detecting and responding adequately to emerging zoonosis and antimicrobial resistance. More surveillance systems are needed. New technologies, electronic health records, internet and social media have the potential to provide timely information on emerging infectious diseases and antimicrobial resistance that can supplement traditional surveillance systems. With these new tools, individuals and their communities can play a new role in participatory syndromic surveillance. Nevertheless, there are important caveats that need to be addressed, such as ensuring data privacy, underrepresentation of some categories such as infants, the elderly, or people lacking access to these new technologies.

| OBJECTIVES

This session will look at the recent changes in strategic information and how can they contribute to current surveillance systems in order to identify appropriate actions and interventions for preparedness and response to emerging infectious diseases and antimicrobial resistance.



Panelist / Panelist

Mark Smolinski

President

Ending Pandemics
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Mark Smolinski, MD, MPH brings 25 years of experience in applying innovative solutions to improve disease prevention, response, and control across the globe. Mark is leading a well-knit team—bringing together technologists; human, animal, and environmental health experts; and key community stakeholders to co-create tools for early detection, advanced warning, and prevention of pandemic threats. Community health workers, village volunteers, farmers, and interested public citizens in Albania, Brazil, Cambodia, Europe, Laos, Myanmar, Tanzania, Thailand, and the United States are among those using their own solutions to address pressing local needs. Since 2009, Mark has served as the Chief Medical Officer and Director of Global Health at the Skoll Global Threats Fund (SGTF), where he developed the Ending Pandemics in Our Lifetime Initiative in 2012. His work at SGTF created a solid foundation for the work of Ending Pandemics, which branched out as an independent entity on January 1, 2018. Prior to SGTF, Mark developed the Predict and Prevent Initiative at Google.org, as part of the starting team at Google's philanthropic arm. Working with a team of engineers, Google Flu Trends (a project that had tremendous impact on the use of big data for disease surveillance) was created in partnership with the U.S. Centers for Disease Control. Mark has served as Vice President for Biological Programs at the Nuclear Threat Initiative, a public charity directed by CNN founder Ted Turner and former U.S. Senator Sam Nunn. Before NTI, he led an 18-member expert committee of the National Academy of Medicine on the 2003 landmark report "Microbial Threats to Health: Emergence, Detection, and Response." Mark served as the sixth Luther Terry Fellow in Washington, D.C., in the Office of the U.S. Surgeon General and as an Epidemic Intelligence Officer with the U.S. Centers for Disease Control and Prevention.