



**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

### Osama Ahmed Hassan

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Dr. Osama (MSc, MBA, PhD) is an infectious disease epidemiologist with main interest and expertise on the "One Health approach" to study and tackle emerging and re-emerging infectious diseases with epidemic or pandemic threats. His fields' expertise focused on prevention and control including outbreak investigations and response, the One Health surveillance, risk analysis, as well as International Health Regulations (IHR) related to transboundary emerging diseases. Tackling antibiotic resistance from One Health perspectives as a related problem to emerging and re-emerging infectious diseases is at the core of his research and activity. Since he has expertise in Rift Valley Fever (RVF), he has worked earlier as UN/FAO consultant epidemiologist in expert mission in west Africa to advise on control of RVF outbreak. He also gives expert technical advise on preparedness against cross-border threats of emerging vector-borne diseases to EU-Health Commission. Dr. Osama is using the One Health approach findings to improve the national, regional and international policy towards prevention and control of emerging and re-emerging diseases threats. Currently, he is One Health Postdoctoral Research Fellow as well as responsible for the One Health signatory them at the Centre for Global Health, Department of Community Medicine and Global Health, Faculty of Medicine, University of Oslo, Norway.