



PMAC | PRINCE MAHIDOL
AWARD CONFERENCE **2018**



PARALLEL SESSION 4.5

**BRINGING SOLUTIONS INTO FOCUS: HARNESSING THE POWER OF AN
ECONOMIC LENS**



| BACKGROUND

Beyond the tragic loss of human life, the economic impact attributable to epidemics and pandemics can be catastrophic. SARS, \$30 billion; Pandemic H1N1: \$40 billion; Ebola: \$2.8 billion in the three West African economies alone. Recent estimates place the inclusive costs from a moderately severe influenza pandemic at \$570 billion annually, within the range projected for the annual cost associated with global climate change. And, without intervention, the cumulative economic impact from anti-microbial resistance (AMR) through 2050 is projected to exceed \$100 trillion (two-thirds of which is in low- and middle-income countries), substantially more than current annual global economic output.

Despite a repeated pattern of costly response, the economic case for investing in proactive, preventive measures targeting a reduction in the pressures that facilitate disease emergence has not been widely adopted. A yearly investment of \$1.9-3.4 billion to strengthen animal and human public health systems would yield a global public benefit estimated at over \$30 billion annually through avoided economic damages associated with pandemics. High return on investment is expected even if only a portion of pandemics are prevented, and strengthened One Health capacity in countries may confer additional benefits via improved prevention and control of endemic disease and AMR. However, challenges in mobilizing capital; an anemic evidence base and difficulty in translating evidence into policy advocacy with budget decision-makers; competing priorities for scarce health systems funding; and inequitable distribution of costs and benefits across sectors and stakeholders are all amongst the impediments to adopting the economic case for investing in preventive approaches.

Recent efforts designed to address these challenges have employed a range of approaches. Structures prioritizing risk avoidance and transference are being developed (e.g. multi-sectoral health security planning and capacity investments; epidemic/pandemic insurance structures). Also underway are new models capturing the economic impact of disease emergence as a function of land use, which will enable the disease regulatory role of ecosystems to be fairly valued and incorporated into payment for environmental services frameworks. And global financing structures promoting targeted, multi-sectoral systems strengthening and incentivizing investments in preparedness are being established.

| OBJECTIVES

- Highlight successful practices and approaches that have demonstrated promise in fostering decision making informed by economic analyses;
- Profile structures with proven utility in transcending the identified challenges, including resource prioritization and inequitable sectoral cost and benefit distribution;
- Discuss approaches that strengthen the economic evidence base for investments in proactive, preventive disease mitigation approaches; and
- Review policy and regulatory options, such as tax and incentive structures, that can contribute to a favorable investment environment for more wide scale adoption of risk mitigation approaches



Panelist

Victoria Fan

Assistant Professor, Office of Public Health Studies

University of Hawai'i at Mānoa
United States of America

Dr Victoria Fan is Assistant Professor at the University of Hawai'i at Mānoa. She is also Visiting Assistant Professor at the Harvard T.H. Chan School of Public Health, FXB Fellow at the Francois Xavier Bagnoud Center for Health and Human Rights at Harvard University, Adjunct Fellow at the East West Center, and Visiting Fellow at the Center for Global Development. She earned her doctor and master of science in global health and population from Harvard T.H. Chan School of Public Health and bachelor of science in mechanical engineering from the Massachusetts Institute of Technology. Her work in health economics and health systems is broadly concerned with allocating financial and human resources to improve health and to reduce financial risks associated with seeking health care. Her work has contributed to identifying the health financing transition, landscaping the health workforce in China and India, and assessing payment and other incentive mechanisms. She has studied aid effectiveness and value for money of development assistance for health. Her work using impact evaluation and economic evaluation in health have assessed the costs and benefits of health interventions and health risks, including diabetes prevention, dental care, end-of-life care, and pandemic influenza. She has published 67 peer-reviewed articles, monographs, book chapters, letters, and policy reports. She has published in *The Lancet*, *BMJ*, *Health Affairs*, *Social Science and Medicine*, *Health Services Research*, and other journals. She has applied econometric and quantitative methods to analyze census data, life tables, demographic and health surveys, consumption expenditure surveys, administrative databases, claims data, clinical and electronic health record data, budget data, macroeconomic cross-country time series data, and other sources of health information. She has been invited as a guest speaker by or given advice to multilateral institutions (e.g. WHO, World Bank, UNICEF, and African Development Bank) and national governments (e.g. State Council of China, Finance Commission of India, NITI Aayog of India, and ministries of health in China, India, South Korea, Thailand, and Myanmar). She has worked with nongovernmental organizations in Asia (BRAC, SEWA, Tzu Chi) and at units at Harvard University (Harvard Initiative for Global Health, Harvard Global Equity Initiative, Harvard University Program for Health Care Financing). She previously served as a consultant to the World Bank, World Health Organization, and the China Medical Board. Her research has been supported by the National Institutes of Health, US Centers for Disease Control and Prevention, Bill & Melinda Gates Foundation, China Medical Board, Rockefeller Foundation, and the State of Hawaii. She is passionate about mentoring students and teaching health economics, health systems and policy, and quantitative research methods. She has taught 17 different courses at the University of Hawai'i and Harvard. She invites students to follow her on Twitter (<https://twitter.com/FanVictoria>) and to sign up to meet her during office hours (use <http://calendly.com/vfan>). Victoria was born and raised in Honolulu.