

Countering Zoonotic Spillover of High Consequence Pathogens (HCP): Workshop Series

Committee

Meghan F. Davis

Chair

Meghan F. Davis, DVM PhD MPH, is an Associate Professor and Doctoral Program Director in Environmental Health and Engineering at Johns Hopkins Bloomberg School of Public Health, and she is Co-Director for the Johns Hopkins P.O.E. Total Worker Health Center in Mental Health. The goals of her research are to reduce microbe-mediated diseases at the human-animal interface and to promote systematic methods for One Health research. She received her D.V.M. from the University of California at Davis School of Veterinary Medicine in 2000, and her M.P.H. and Ph.D. from Johns Hopkins Bloomberg School of Public Health in 2008 and 2012, respectively. She most recently served on the NAS Committee on Building Capacity in Pakistan.

Wondwossen A. Gebreyes

Member

Dr. Gebreyes is a Hazel C. Youngberg Distinguished tenured and active Full Professor and Executive Director of the Global One Health initiative (GOHi) at The Ohio State University. Dr. Gebreyes has been a leader in molecular epidemiology of infectious zoonotic diseases. He led several programs funded through the NIH, CDC, USAID, Gates Foundation, CDC Foundation, RESOLVE to Save Lives among others. Besides research, he led global capacity building efforts teaching molecular epidemiology in more than 10 countries and also establishing genomic and genotyping laboratory capacities. Dr Gebreyes serves in national and international Advisory capacities for various governments and entities including Brazil CAPES, Ethiopian Ministry of Science and Higher Education as well as review panels for Austria, Poland, and Qatar among others. Dr. Gebreyes leads global outreach efforts addressing issues at the interface of Humans, animals, plants and the environment (ICOPHAI). Dr. Gebreyes is a recipient of the APLU Michael P. Malone International Leadership Award; NIH Gold Medallion; Universitas 21 Best Internationalization Model; NC State University Distinguished Alumni award; Andrew Heiskell Award (honorable mention) by the Institute of International Education (IIE). Dr. Gebreyes is a member of the National Academy of Medicine; also inducted as inaugural member of the National Academy of International Education.

Gregory C. Gray

Member

Gregory C. Gray MD, MPH, is a Professor and infectious disease epidemiologist who has conducted diverse epidemiological studies of infectious diseases for more than 25 years in 5 continents. He has authored more than 360 peer-reviewed manuscripts and book chapters.

Much of his work has involved identifying risk factors for occupational diseases, particularly for respiratory virus infections. He has studied numerous occupational groups including farmers, animal breeders, veterinarians, military personnel, turkey workers, poultry workers, horse workers, hunters, and pig workers. Much of his recent research work has been conducted in Asia regarding emerging pathogens.

In addition to the degrees listed above, he received residency training at Walter Reed Army Institute of Research in Washington, District of Columbia. His medical boards are in Preventive Medicine and Public Health. He is a Fellow in the Infectious Diseases Society and a member of the Council on Foreign Relations.

A strong supporter for the One Health approach, he has won multiple One Health research and training grants, helped to establish centers of One Health (USA, Romania, China) and developed four graduate programs in One Health (PhD, MHS, and certificates).

He has served on multiple previous boards, committees, and panels for the IOM and NASEM.

Jeffery C. Peterson

Member

Dr. Jeffery Chaichana Peterson is an Associate Research Scientist at the Pacific Institute for Research and Evaluation (PIRE-Southwest) as well as a Research Associate with the University of Montana's Center for Population Health Research. Previously, he was an Associate Dean in the Murrow College of Communication, Washington State University. His expertise includes work in the area of implementation science, especially utilizing community-based, participatory, and culture-centered approaches to promoting evidence-based public health research. He has been a member of multiple International Communication Association (ICA) Divisions including the Global Communication and Social Change, Intercultural, and Health Communication divisions and has won the Society of Public Health Education's (SOPHE) Lawrence W. Green award for his scholarship. He received his PhD from the University of New Mexico in Intercultural Communication and also received training as a Minority Research Fellow in a program jointly sponsored by the US Centers for Disease Control and Prevention/Association of Schools of Public Health/Prevention Research Centers.

Dirk Udo Pfeiffer

Member

Dirk Pfeiffer has been holding the Chair in Veterinary Epidemiology at the Royal Veterinary College (RVC), London, UK, since 1999. In 2016, Dirk joined City University of Hong Kong as Chow Tak Fung Chair Professor of One Health, while still maintaining a 20% appointment at RVC.

He has worked as an academic since 1992, first in New Zealand, then in the UK and now in Hong Kong. During his professional career, he has been involved in epidemiological research working in many developing as well as developed countries around the world. Dirk has worked extensively at the science-policy interface through advisory roles for the European Union, the United Nations FAO, the World Organisation for Animal Health (OIE) and several national governments.

Dirk graduated in Veterinary Medicine at Justus-Liebig University, Giessen, Germany in 1984. This was followed by postgraduate research towards a Dr.med.vet degree at the same university. He obtained a PhD from Massey University, New Zealand, in 1994. He became a Diplomate of the European College of Veterinary Public Health in 2003.

Dirk was an invited expert at the workshop “Emerging Viral Disease: The ‘One Health’ Connection”, Institute of Medicine of US National Academy of Science, Washington DC, Mar 18-19, 2014.

Raina K. Plowright

Member

Dr. Raina Plowright is an Associate Professor of Epidemiology at Montana State University. Her research program develops the science of pandemic prevention through transdisciplinary leadership, innovation, and translation. Plowright’s group focuses on WHO priority pathogens that have emerged from bats into humans and she leads www.batonehealth.org, a collaboration of scientists working to predict and prevent zoonotic spillover. Bat One Health has ongoing field data collection, modeling analyses, and laboratory investigation of bat henipaviruses and coronaviruses in Bangladesh, Ghana, and Australia. Plowright is an elected fellow of the American Association for the Advancement of Science, she has been an Australian-American Fulbright Fellow, an Australian Centenary Scholar, a David H. Smith Fellow in Conservation Research, and the recipient of a DARPA Young Faculty Award. Her training is in veterinary medicine (University of Sydney), epidemiology (UC Davis MS), and ecology (UC Davis PhD).

Linda J. Saif

Member

Linda Saif is a Distinguished University Professor at The Ohio State University (OSU) in the Center for Food Animal Health (CFAES, OARDC) and College of Veterinary Medicine and co-Director of the Virus and Emerging Pathogens Program (OSU Infectious Diseases Institute). Her degrees include a BA from The College of Wooster and MS/PhD from OSU. She is a virologist and immunologist, whose research focuses on comparative aspects of enteric and respiratory viral infections (coronaviruses, rotaviruses and caliciviruses) of animals and humans including pathogenesis, mucosal immunity and vaccine development. Dr. Saif is known internationally for her 4 decades of research on coronavirus infections of livestock, wildlife, and humans (SARS, MERS, SARS-CoV-2) and their zoonotic potential and mechanisms of interspecies transmission. Dr. Saif was an advisor to the WHO and CDC during the 2003 SARS outbreak and her laboratory is a WHO and FAO International Reference Lab for Animal coronaviruses. She was an advisor to the Ministry in Saudi Arabia on MERS in camels. She is an elected member of the US National Academy of Sciences, the National Academy of Inventors and Argentine Academia Nacional de Agronomía y Veterinaria. She is an elected Fellow of the American College of Veterinary Microbiologists, AAAS, and the American Academy of Microbiology. In 2015, she was the first woman to receive the Wolf Prize in Agriculture. Dr. Saif has coauthored over 420 referred journal publications and 78 book chapters. During the COVID-19 pandemic, she is providing One Health expertise about SARS-CoV-2, including interspecies transmission and zoonoses. She was past Chair of NAS Section 61, has served on NRC committees and was NAS Representative to 2 China-U.S. Workshops on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security (2017, 2019).

Sara Sawyer

Member

Dr. Sara Sawyer is a Professor at the University of Colorado Boulder. She has received national and international prizes for her research in virology. In 2011 she was the recipient of the PECASE award from President Obama at the White House. She serves as a Senior Editor at the journal eLIFE, and as a consultant on the topic of pandemic preparedness. In 2020, she co-founded Darwin Biosciences, an infectious disease diagnostics company located in Boulder, CO. She received her Ph.D. at Cornell University and was a postdoctoral fellow at the Fred Hutchinson Cancer Research Center in Seattle.

Dominic A. Travis

Member

Dominic Travis DVM, MS is Chief Program Officer of The Marine Mammal Center in Sausalito, CA. Recently, he was Associate Professor and lead of the One Health Division at the University of Minnesota's College of Veterinary Medicine (2010-2021). Previously, he was wildlife epidemiologist and Vice President of Conservation and Science at the Lincoln Park Zoological Society in Chicago, USA (2000-2010).

Dr. Travis is expert in disease risk analysis at the human-wildlife-environment interface. He has collaborated with World Organization for Animal Health (OIE), Food and Agriculture Organization and International union for Conservation of Nature on research, education and methodological standards since 1999. Relevant research includes assessing risk of prions (BSE) in the global food system; implementing and evaluating "one health" infectious disease surveillance programs; and creating ecosystem health approaches to health risks associated with wildlife trade and wild meat consumption. Previously, as a part of the USAID Emerging Pandemic Threats Program, he fostered partnerships with National wildlife authorities in Africa, SE Asia, S and N America and often advises the USG on Biological Threats intersecting with wildlife. He is co-editor of the OIE-IUCN Joint Guidelines for Risk Analysis at the Wildlife Interface; IUCN Best Practices for Wildlife Reintroductions and Best Practices for Monitoring Great Ape Health. His scholarly publications can be found via google scholar: <https://scholar.google.com/citations?user=jjDYZHwAAAAJ>

He holds degrees in Zoology/Marine Biology from North Carolina State University (BS); Veterinary Medicine from Michigan State University (DVM); and Epidemiology from University of Maryland (MS). His post DVM training includes an internship in pathobiology at USDA ARS Plum Island, and residency in Veterinary Public Health at the VA-MD College of Veterinary Medicine.

Benjamin J. Rusek

Staff Officer