

The Critical Public Health Value of Vaccines - Tackling Issues of Access and Hesitancy - A Workshop Series

Committee

Heidi Larson

Co-Chair

Heidi J. Larson, M.A., Ph.D., is an anthropologist and Director of The Vaccine Confidence Project™ (VCP); Professor of Anthropology, Risk and Decision Science, Dept. Infectious Disease Epidemiology, London School of Hygiene & Tropical Medicine; Clinical Professor, Institute of Health Metrics & Evaluation, University of Washington; and Chatham House Centre on Global Health Security Fellow. Dr. Larson previously headed Global Immunisation Communication at UNICEF, chaired GAVI's Advocacy Task Force, and served on the WHO SAGE Working Group on vaccine hesitancy. The VCP is a WHO Centre of Excellence on addressing Vaccine Hesitancy. Prof. Larson's research focuses on the analysis of social and political factors that can affect uptake of health interventions and influence policies. Her particular interest is on risk and rumour management from clinical trials to delivery – and building public trust. She served on the FDA Medical Countermeasure (MCM) Emergency Communication Expert Working Group, and is Principle Investigator of the EU-funded (EBODAC) project on the deployment, acceptance and compliance of an Ebola vaccine trial in Sierra Leone. Prof. Larson has recently joined the Centre for the Evaluation of Vaccination (CEV) (University of Antwerp) as associate professor, as the CEV at the Antwerp University will host the European regional Office of the Vaccine Confidence Project as of May 15, 2019, and will closely collaborate with Vaccine Confidence Project partners at European level on implementing the Vaccine Confidence Index™ and developing and evaluating interventions to address vaccine hesitancy.

Matthew Zahn

Co-Chair

Matthew Zahn, M.D., currently serves as medical director of the Division of Epidemiology and Assessment for the Orange County Health Care Agency. Dr. Zahn received his doctorate in medicine from St. Louis University School of Medicine. From 2004 through 2011, he served as medical director for the Louisville Metro Department of Public Health and Wellness. During that time, he also served as an assistant professor of pediatric infectious disease at the University Of Louisville School Of Medicine. Dr. Zahn has served on multiple national public health committees, including his current service as the chair of the Infectious Diseases Society of America's Public Health Workgroup.

Kevin Anderson

Member

Kevin Anderson, Ph.D., serves as a senior program manager in the Department of Homeland Security's (DHS's) Science and Technology Directorate, providing oversight and requirements for biodetection and biodiagnostics systems development for government-wide customers and stakeholders. Since joining DHS in 2003, Dr. Anderson has provided leadership for science program development, laboratory design, and strategic planning; served as a subject matter expert and advisor to the Bioterrorism Risk Assessment and Biological Threat Characterization programs; and has participated in interagency working groups and assessments which provide guidance to medical countermeasure development, a key component of the nation's biodefense strategy. Prior to joining DHS, Dr. Anderson was a principal investigator at the U.S. Army Medical Research Institute of Infectious Diseases, leading research focused on understanding basic mechanisms of viral diseases causing hemorrhagic fever and development of medical countermeasures. He received postdoctoral training in molecular virology at the University of Alabama at Birmingham and the University of North Carolina at Chapel Hill, performing basic research on human respiratory syncytial viruses, and earned Ph.D. and B.S. degrees in microbiology from Montana State University and the University of Maryland, College Park, respectively.

Alison M. Buttenheim

Member

Alison M. Buttenheim, Ph.D., M.B.A., is a public health researcher and behavioral epidemiologist who combines her interest in behavioral economics with a focus on improving child health on a global level. She has designed and evaluated interventions to improve parental and family decisionmaking across a broad range of topics, including food access in low-income neighborhoods, childhood obesity, vaccine hesitancy, and participation in large-scale vector control programs. Through her involvement with Penn's Center for Health Incentives and Behavioral Economics, Dr. Buttenheim is working with colleagues in epidemiology, politics, statistics, and mathematics on an NIH-funded study to reduce the transmission of Chagas disease (a neglected tropical parasitic disease) in Arequipa, Peru's second largest city. The study aims both to eliminate transmission of the parasite and to use behavioral economics to understand factors that influence residents' decisions about having their homes sprayed with insecticide. In a large pragmatic randomized trial, households were assigned to one of three interventions: improving the schedule for spraying; creating social norms for spraying; and participating in a lottery that offered financial rewards for spraying. Data analysis is underway. Dr. Buttenheim and colleagues hope that study findings will help address other common and emerging problems such as bed bugs or the Zika virus. With funding from NIH, Dr. Buttenheim studied California laws on nonmedical exemptions from school-mandated immunizations. After examining school records, she found that 47 percent of children whose parents requested exemptions had received the first dose of the measles-mumps-rubella vaccine. This suggests that using exemption rates as a proxy for vaccination rates is misleading; and, importantly, that the risk of disease in unvaccinated populations is therefore higher than previously thought. Colleagues in biostatistics and epidemiology participated in this study. With support from the Robert Wood Johnson Foundation, Dr. Buttenheim is part of an interdisciplinary team analyzing vaccination exemption laws in several states. The team's goal is to identify ideal state-level exemption legislation.

Andrew Clements

Member

Andrew Clements, Ph.D., is the Deputy Director of the Pandemic Influenza and Other Emerging Threats Unit in the U.S. Agency for International Development's Bureau for Global Health. He received his doctorate in Anaerobic Microbiology from Virginia Tech and completed his post-doctoral training in biochemistry at the National Institutes of Health's National Cancer Institute. Including his Diplomacy Fellowship through the American Association for the Advancement of Sciences, he has served as an infectious disease advisor at USAID for the past 17 years focusing on the development, management, and monitoring of programs to address tuberculosis, malaria, avian influenza, antimicrobial resistance, and disease surveillance. He is currently the manager of a grant with the UN Food and Agriculture Organization (FAO) to monitor influenzas in animals and the PREDICT project, part of USAID's Emerging Pandemic Threats program, which monitors wildlife for new zoonotic threats, characterizes the spill-over risk associated with specific interfaces between wild animals and humans, and improves models for predicting geographic "hot spots" for emergence of new public health threats. He also analyzes trends for avian influenza and other emerging public health threats and serves as a liaison to USAID missions in the Asia and Near East regions for programs related to avian influenza and emerging pandemic threats.

Amanda C. Cohn

Member

Amanda Cohn, M.D., currently serves as Executive Secretariat of the Advisory Committee on Immunization Practices (ACIP) and Acting Chief Medical Officer for the National Center for Immunization and Respiratory Diseases (NCIRD). She previously served as the Deputy Director of NCIRD's Immunization Services Division. Dr. Cohn came to the CDC in 2004 where she focused on prevention and control of meningococcal disease, both domestically and internationally. She is board-certified in pediatrics and is a fellow of the American Academy of Pediatrics.

Peter Daszak

Member

Peter Daszak, Ph.D., is president of EcoHealth Alliance, a U.S.-based organization that conducts research and outreach programs on global health, conservation, and international development. Dr. Daszak's research has been instrumental in identifying and predicting the impact of emerging diseases across the globe. His achievements include identifying the bat origin of SARS, identifying the underlying drivers of Nipah and Hendra virus emergence, producing the first ever global emerging disease 'hotspots' map, developing a strategy to find out how many unknown viruses exist that could threaten to become pandemic, identifying the first case of a species extinction due to disease, and discovering the disease chytridiomycosis as the cause global amphibian declines. Dr. Daszak is a member and chair-elect of the National Academy of Sciences, Engineering and Medicine's Forum on Microbial Threats. He is a member of the National Research Council (NRC) Advisory Committee to the U.S. Global Change Research Program, the Supervisory Board of the One Health Platform, the One Health Commission Council of Advisors, the Center of Excellence for Emerging and Zoonotic Animal Diseases External Advisory Board, the Cosmos Club, and the Advisory Council of the Bridge Collaborative; he has served on the Institute of Medicine committee on global surveillance for emerging zoonoses, the NRC committee on the future of veterinary research, the International Standing Advisory Board of the Australian Biosecurity Cooperative Research Centres, and has advised the Director for Medical Preparedness Policy on the White House National Security Staff on global health issues. Dr. Daszak is a regular advisor to the World Health Organization (WHO), World Organization for Animal Health, and the Food and Agriculture Organization of the United Nations, and is actively involved in the WHO Expert group on Public Health Emergency Disease Prioritization. Dr. Daszak won the 2000 Commonwealth Scientific and Industrial Research Organization medal for collaborative research on the discovery of amphibian chytridiomycosis, is the EHA institutional lead for USAID-EPT-PREDICT, is on the editorial boards of Conservation Biology, One Health, and Transactions of the Royal Society of Tropical Medicine & Hygiene, and is editor-in-chief of the journal EcoHealth. He has authored over 300 scientific papers, and his work has been the focus of extensive media coverage, ranging from popular press articles to television appearances.

Eva Harris

Member

Eva Harris, Ph.D., is a professor in the Division of Infectious Diseases in the School of Public Health and Director of the Center for Global Public Health at the University of California, Berkeley. She has developed a multidisciplinary approach to study the molecular virology, pathogenesis, immunology, epidemiology, clinical aspects, and control of dengue, Zika, and chikungunya, the most prevalent mosquito-borne viral diseases in humans. Specifically, her work addresses immune correlates of protection and pathogenesis, viral and host factors that modulate disease severity, and virus replication and evolution, using in vitro approaches, animal models, and research involving human populations. This has been possible through a close collaboration with the Ministry of Health in Nicaragua for over 28 years. Her international work focuses on laboratory-based and epidemiological studies of dengue, chikungunya, Zika, and influenza in endemic Latin American countries, particularly in Nicaragua, where ongoing projects include clinical and biological studies of severe dengue, a pediatric cohort study of dengue, Zika, chikungunya, and influenza transmission in Managua, a household transmission study of Zika, and a recently concluded cluster-randomized controlled trial of evidence-based, community-derived interventions for prevention of dengue via control of its mosquito vector. She is also directing a study of Zika in infants and pregnancy in Nicaragua and evaluating a number of Zika diagnostic tests with her team in Nicaragua. In 1997, she received a MacArthur Award for work over the previous 10 years developing programs to build scientific capacity in developing countries to address public health and infectious disease issues. This enabled her to found a nonprofit organization in 1998, Sustainable Sciences Institute (SSI; www.sustainableciences.org), with offices in San Francisco, Nicaragua, and Egypt, to continue and expand this work. Dr. Harris was named a Pew Scholar for her work on dengue pathogenesis. She received a national recognition award from the Minister of Health of Nicaragua for her contribution to scientific development and was selected as a "Global Leader for Tomorrow" by the World Economic Forum. In 2012, she was elected Councilor of the American Society of Tropical Medicine and Hygiene and received a Global Citizen Award from the United Nations Association. She has published over 200 peer-reviewed articles, as well as a book on her international scientific work.

Elizabeth D. Hermsen

Member

Elizabeth D. Hermsen, Pharm.D., M.B.A., is the head of Global Antimicrobial Stewardship at Merck & Co., Inc. and an adjunct associate professor at the University of Nebraska Medical Center, Colleges of Pharmacy and Medicine, in Omaha, Nebraska. Dr. Hermsen received her Doctor of Pharmacy degree from the University of Nebraska Medical Center followed by a pharmacy practice residency at The Nebraska Medical Center, a fellowship in infectious diseases research at the University of Minnesota College of Pharmacy, and a master's degree in business administration at the University of Minnesota Carlson School of Management with an emphasis in health care industry. Following her fellowship, Dr. Hermsen developed and codirected the antimicrobial stewardship program at The Nebraska Medical Center and subsequently joined Cubist, where she created and led the Antimicrobial Stewardship Outreach Group. Now, in her role at Merck, she is responsible for creating and executing a strategy to advance antimicrobial stewardship through education, implementation, research, and advocacy focused on patient outcomes, population health, and the value of care. When leading the program at The Nebraska Medical Center, Dr. Hermsen developed a publicly-available antimicrobial stewardship website (www.nebraskamed.com/asp) that subsequently was featured in an article regarding top web resources for antimicrobial stewardship (Pagani L, et al. Navigating the Web in Search of Resources on Antimicrobial Stewardship in Health Care Institutions. Clin Infect Dis. 2009; 48:626-32.). Dr. Hermsen actively contributed to the advancement of the Society of Infectious Diseases Pharmacists (SIDP) Antimicrobial Stewardship Certificate Program during her term as SIDP president and continues to participate as a lecturer in the program. Dr. Hermsen served as a contributing member of the Antimicrobial Stewardship Knowledge & Skills Collaborative, coordinated by the Society for Healthcare Epidemiology of America; an expert panel on Antimicrobial Practice Improvement in Hospitals, coordinated by the American Society of Health-System Pharmacists; an expert panel on Hospital-based Antimicrobial Utilization Surveillance via the National Healthcare Safety Network, coordinated by the U.S. Centers for Disease Control and Prevention (CDC); the Cardinal Health Infectious Diseases Advisory Group; and an expert panel coordinated by the National Quality Forum and CDC to develop the practical tool entitled, Antibiotic Stewardship in Acute Care: A Practical Playbook. Dr. Hermsen is currently co-chair of the Antimicrobial Stewardship Work Package (1A) for the Innovative Medicines Institute Driving Reinvestment in Research & Development and Responsible Antibiotic Use (DRIVE-AB) initiative (www.drive-ab.eu). Dr. Hermsen is a Board Certified Pharmacotherapy Specialist with added qualifications in infectious diseases. She has contributed to the profession with numerous publications in peer-reviewed journals, book contributions, and by serving as a reviewer for several professional journals. Dr. Hermsen has also given over 100 invited presentations at state, regional, national, and international meetings.

Noni MacDonald

Member

Noni MacDonald, M.D., M.Sc., is a Professor of Paediatrics (Infectious Diseases) at Dalhousie University and the IWK Health Centre in Halifax Canada. She is a former Dean of Medicine. Her current three major areas of interest are:

1) Vaccines, especially vaccine hesitancy, vaccine safety, vaccine pain mitigation at immunization and AEFI surveillance in pregnant women through her work with the World Health Organization as well as vaccine pain and hesitancy research and policy work in Canada; 2) MicroResearch, building capacity in community focused research in developing countries (www.microresearch.ca) and 3) Application of Health Information Systems in developing countries to improve health outcomes.

She has published over 350 papers; is the founding Editor-in-Chief of Paediatrics and Child Health, and a former Editor-in-Chief of CMAJ (Canadian Medical Association Journal). Dr. MacDonald has long been recognized in Canada and internationally as an advocate for children and youth health and as a leader in paediatric infectious disease.

Walter A. Orenstein

Member

Walter Orenstein, M.D., is a Professor of Medicine, Epidemiology, Global Health, and Pediatrics at Emory University; as well as the Associate Director of the Emory Vaccine Center and Director, Emory Vaccine Policy and Development. From 2008 through 2011, Dr. Orenstein was Deputy Director for Immunization Programs at the Bill & Melinda Gates Foundation. His primary focus at the foundation had been on polio eradication, measles control, and improving routine immunization programs. Prior to 2004, Dr. Orenstein worked for 26 years in the Immunization Program at the Centers for Disease Control and Prevention. From 1988-2004, he was the Director of the United States Immunization Program. He is a former Assistant Surgeon General of the USPHS. Dr. Orenstein successfully developed, promoted, facilitated and expanded new vaccination strategies to enhance disease prevention.

Dr. Orenstein has authored and co-authored numerous books, journals and reviews. Dr. Orenstein co-edited Plotkin's Vaccines, 7th edition in 2018 - the leading textbook in the field. He is a past Chair of the WHO's Poliomyelitis Technical Consultative Group. He served as the Chair of the National Vaccine Advisory Committee (NVAC) from 2012 to 2016. He is also currently a member of the WHO's Strategic Advisory Group of Experts (SAGE) on Immunization Polio as well as Measles and Rubella Working Groups. He is currently the Chair of WHO's Immunization and Vaccines Related Implementation Research Advisory Committee (IVIR-AC). Between July 1, 2016 and June 30, 2018, Dr. Orenstein was the President of the National Foundation for Infectious Diseases (NFID).