An Analysis of the Requirements and Alternatives for Foreign Animal and Zoonotic Disease Research and Diagnostic Laboratory Capabilities

Committee

Terry F. McElwain

Chair

Dr. McElwain is the Executive Director of the Washington Animal Disease Diagnostic Laboratory, and the Associate Director of the Paul G. Allen School for Global Animal Health in the College of Veterinary Medicine at Washington State University. He is Past President of the American Association of Veterinary Laboratory Diagnosticians, and serves on the Board of Directors of the World Association of Veterinary Laboratory Diagnosticians. Dr. McElwain has been a key architect in the creation and development of the National Animal Health Laboratory Network, and has been closely involved in the development of the new School for Global Animal Health at Washington State University. He interacts with the Centers for Disease Control and Prevention, and is also a member of the governor’s emergency preparedness task force in the state of Washington. He has served on the National Research Council’s Committee on Assessing the Nation's Framework for Addressing Animal Diseases, and The Committee for Achieving Sustainable Global Capacity for Surveillance and Response to Emerging Diseases of Zoonotic Origin. Dr. McElwain has a long and established research record in the field of veterinary infectious diseases, especially those of agricultural animals. He received his DVM from the College of Veterinary Medicine, Kansas State University, in 1980, and his PhD from Washington State University in 1986. He is an elected member of the Institute of Medicine.

Nancy D. Connell

Member

Nancy Connell is Professor in the Division of Infectious Disease in the Department of Medicine at the University of Medicine and Dentistry of New Jersey (UMDNJ), New Jersey Medical School. A Harvard University PhD in Microbiology, Dr. Connell’s major research focus is the interaction between respiratory infectious agents and the macrophage. She is Director of the Biosafety Level Three Facility of UMDNJ’s Center for the Study of Emerging and Re-emerging Pathogens, and chairs the University’s Institutional Biosafety Committee. Dr. Connell is past chair of the CSR Study Section at NIH that reviews bacterial pathogenesis submissions to NIAID, and of the study section that reviews fellowships in infectious diseases and microbiology. She now serves on study sections that focus on antibacterial drug discovery and innate immunity. Dr. Connell’s interest in biological weapons research and policy issues began in the 1980s, when she chaired the Biological Weapons subcommittee of the Council on Responsible Genetics. She has served on a number of committees of the National Research Council, including the Committee on Advances in Technology and the Prevention of their Application to Next Generation Biowarfare Agents (2004); the committee on Trends in Science and Technology Relevant to the Biological Weapons Convention, Beijing, China (2010); and the Committee to Review the Scientific Approaches used in the FBI's Investigation of the 2001 Bacillus anthracis Mailings (2011).

David A. Hennessy

Member

Dr. David Hennessy is a professor in the Department of Economics and Center for Agricultural and Rural Development, both at Iowa State University. His research program emphasizes risk management, food quality and the provision of safe food, animal disease economics, agricultural structure, and roles of information in farm-level production decisions. His program on animal disease deals with risks and biosecurity incentives. Issues addressed have included the role of feeder animal trade in determining the ambient level of an infectious disease, biosecurity choices in light of the dynamics of disease incidence, costly regulation in the face of scientific uncertainty, managing disease when infection externalities arise, and how interdependent participation incentives can be used to ensure the success of voluntary livestock disease control programs. His teaching responsibilities concern commodity market analysis, business economics, agribusiness management, demand and supply systems, and decision analysis. Before joining the faculty at Iowa State University, Hennessy was on faculty at Washington State University. He is a Fellow of the Agricultural and Applied Economics Association and currently serves as an editor of the American Journal of Agricultural Economics. Dr. Hennessy received his bachelor's (1987) and master's degrees (1989) in Agricultural Science at University College Dublin, and his PhD (1993) in Agricultural Economics at Iowa State University.

Lonnie J. King

Member

Lonnie King, DVM, is Dean of the College of Veterinary Medicine, and Executive Dean for the Health Science Colleges at the Ohio State University. Previously, King was the director of the Center for Disease Control's (CDC) National Center for Zoonotic, Vector-Borne and Enteric Diseases. Before serving as director, King was the first chief of the CDC's Office of Strategy and Innovation. King served as the 11th dean of the Michigan State University College of Veterinary Medicine for 10 years. Prior to this, King was the administrator for the Animal and Plant Health Inspection Service, U.S. Department of Agriculture. He served as the country's chief veterinary officer for five years, and worked extensively in global trade agreements within North American Free Trade Agreement and the World Trade Organization. He has served as president of the Association of American Veterinary Medical Colleges and was the vice-chair for the National Commission on Veterinary Economic Issues. King received his BS and DVM degrees from the Ohio State University. He earned his MS in epidemiology from the University of Minnesota and also received his MPA from American University. He is an elected member of the Institute of Medicine.

James W. LeDuc

Member

Dr. James W. LeDuc directs the Galveston National Laboratory at the University of Texas Medical Branch. He also serves as a Professor in the Department of Microbiology and Immunology in the School of Medicine. Previously, he served as the coordinator for influenza for the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, and was the director of the Division of Viral and Rickettsial Diseases in the CDC National Center for Infectious Diseases (NCID). He began his professional career as a field biologist with the Smithsonian Institution's African Mammal Project in West Africa. He then served for 23 years as an officer in the U.S. Army Medical Research and Development Command. He joined CDC in 1992, was assigned to the World Health Organization as a Medical Officer, and later became the associate director for global health at NCID. His research interests include the epidemiology of infectious diseases, global health, and international biosecurity. He is a member of various professional organizations, has published over 200 scientific articles and book chapters, and is well recognized as an expert in virus diseases, biodefense, and global health. Dr. LeDuc is a native of southern California and earned his PhD and MSPH from the University of California at Los Angeles, and his BS in zoology from California State University.

N. James MacLachlan

Member

N. James MacLachlan is Distinguished Professor in the Department of Pathology, Microbiology and Immunology, School of Veterinary Medicine, University of California (UC) and Extraordinary Professor, Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria, Republic of South Africa. Dr. MacLachlan is a diplomate and past-President of the American College of Veterinary Pathologists, and he served for 10 years as inaugural chair of his home department at UC Davis. He studies viral diseases of livestock that impact international commerce, including bluetongue, African horse sickness, and other emerging diseases, and he is author or co-author of some 250 peer-reviewed publications, reviews, chapters, and books. Dr. MacLachlan has served as an expert advisor to numerous organizations including the World Organization for Animal Health (O.I.E), the U.S Departments of Agriculture and Homeland Security, and the European Union. Among other responsibilities, he currently chairs the U.S. Animal Health Association Committee on Bluetongue and Related Orbiviruses, and serves as co-editor-in-chief of Comparative Immunology, Microbiology & Infectious Diseases. He received his veterinary degree (BVSc) from Massey University, New Zealand; an MS in Microbiology (Virology) from the University of Missouri; and a PhD in Comparative Pathology from the University of California.

Bret D. Marsh

Member

Dr. Marsh serves as the Indiana State Veterinarian. He is responsible for all statewide animal health programs, as well as providing inspection services for the meat, poultry and dairy products industries. He is also an advisor to the Indiana State Board of Veterinary Medical Examiners. Dr. Marsh previously served as the Special Detail to the U.S. Secretary of Agriculture’s Homeland Security Staff. In that role, he represented the views of the country’s state veterinarians on issues affecting the nation’s ability to preserve and protect its agricultural assets. Dr. Marsh recently completed a six year term as the American Veterinary Medical Association (AVMA) Treasurer, and he also served in the AVMA House of Delegates for nearly a decade. In that time, he was twice elected to the House Advisory Committee and served on the Constitution and Bylaws Committee. Dr. Marsh is a past President of the Indiana Veterinary Medical Association (IVMA), the United States Animal Health Association (USAHA), and the Purdue Veterinary Alumni Association. He has received the Distinguished Alumnus Award from both the Purdue College of Veterinary Medicine and the Purdue College of Agriculture. He has also received the AVMA President’s Award (2011), the USAHA Medal of Distinction, and the IVMA President’s Award. He received his BS degree in Animal Sciences, and his DVM from Purdue University.

Mo Salman

Member

Dr. Salman is a professor of Veterinary Epidemiology in the Animal Population Health Institute of College of Veterinary Medicine and Biomedical Sciences at Colorado State University. He holds appointments in the Department of Clinical Science and the Department of Environmental Health and Radiological Sciences. His educational background is in veterinary medicine, preventive veterinary medicine, and comparative pathology. He received his veterinary medical degree from the University of Baghdad, Iraq, and a master's degree in preventive veterinary medicine and a PhD from the University of California at Davis. He is a Diplomate in the American College of Veterinary Preventive Medicine and Fellow of the American College of Epidemiology. Dr. Salman is engaged in research and outreach projects in more than 15 countries around the world. He participated in the peer review of the European Union scientific review for the geographical assessment for BSE and was elected to be on the European Food Safety Agency's Panel for Animal Health and Welfare. He is the chairman of the Continuing Education Committee of the Association for Veterinary Epidemiology and Preventive Medicine. He is the recipient of the 2007 American Veterinary Medical Association XII International Veterinary Congress Prize for his contributions to international understanding of veterinary medicine. In 2011, Dr. Salman was selected to serve a four-year appointment on the Scientific Advisory Board of the Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health in Germany, an independent research entity that focuses on the health of farm animals and protection of humans from zoonoses. Dr. Salman's research interests are on the methodology of surveillance for animal diseases with an emphasis on infectious diseases.

Alfonso Torres

Member

Dr. Alfonso Torres is a professor in the College of Veterinary Medicine at Cornell University where he also serves as associate dean for Veterinary Public Policy. Dr. Torres coordinates international programs and academic initiatives in public health. Prior to his return to academia in 2002, he served at the U.S. Department of Agriculture (USDA) for 11 years, where he was involved with activities related to the protection of our nation against the incursion of foreign animal diseases. He was the Director of the Plum Island Animal Disease Center before serving USDA as the Chief Veterinary Officer. During 2001, he worked closely with Secretary Veneman in efforts to prevent the entry of foot-and-mouth disease into the United States. He also served as the U.S. delegate to the World Animal Health Organization (OIE) in matters related to international standards for the trade of animals and animal products. These activities provided him with the opportunity to participate with other federal officials in international trade negotiations, also related to our import and export of animals and animal products. He was one of the lead participants at USDA in preparing a comprehensive report to this Senate Committee as part of the Animal Disease Risk Assessment, Prevention, and Control Act of 2001 (P.L. 107-9), which was concerned with the plans of federal agencies to defend our country against foot-and-mouth disease and BSE. Dr. Torres received his DVM (1968) from the National University of Colombia in Bogota, an MS in veterinary pathology (1971) at the University of Nebraska-Lincoln, and his PhD (1973) in medical microbiology, also at Nebraska.

Christopher A. Wolf

Member

Dr. Christopher Wolf is a Professor of Agricultural, Food and Resource Economics at Michigan State University (MSU). His research and outreach program focuses on farm management, markets, and policy. His recent work examines the economics of livestock and wildlife disease management and behavioral incentives provided to producers by current policies. Dr. Wolf was awarded the Excellence in Outreach Award by MSU Department of Agriculture, Food and Resource Economics in 2008. He is a member of the American Applied Economics Association and was part of their Distinguished Extension Program-Group, 2000FA in 2010. He was Domain Leader 2007-2009, Farm Business Management Section, of DAIReXNET, a national, extension-driven web resource designed to meet the educational and decision-making needs of dairy producers, allied industry partners, extension educators and consumers. He received his BA from the University of Wisconsin-Madison, and his PhD in agricultural and resource economics from the University of California-Davis.