

Sustainability Considerations for the Future of Animal Agriculture Science Research

Committee

Bernard D. Goldstein

Chair

Bernard Goldstein (IOM) is emeritus professor of environmental and occupational health and former dean of the University of Pittsburgh Graduate School of Public Health. He is a physician, board certified in Internal Medicine, Hematology and in Toxicology. Dr. Goldstein is author of over 150 publications in the peer-reviewed literature, as well as numerous reviews related to environmental health. He is an elected member of the National Academies of Science Institute of Medicine (IOM) and of the American Society for Clinical Investigation. His experience includes service as Assistant Administrator for Research and Development of the U.S. Environmental Protection Agency, 1983-1985. In 2001 he came to the University of Pittsburgh from New Jersey where he had been the founding director of the Environmental and Occupational Health Sciences Institute, a joint program of Rutgers University and Robert Wood Johnson Medical School. He has chaired more than a dozen National Research Council and IOM committees primarily related to environmental health issues. He has been president of the Society for Risk Analysis; and has chaired the National Institutes of Health (NIH) Toxicology Study Section, U.S. Environmental Protection Agency's (EPA's) Clean Air Scientific Advisory Committee, the National Board of Public Health Examiners, and the Research Committee of the Health Effects Institute. Dr. Goldstein received his medical degree from New York University and undergraduate degree from the University of Wisconsin.

Louis R. D'Abramo

Member

Louis D'Abramo is a W. L. Giles Professor in the Department of Wildlife, Fisheries and Aquaculture and serves as Dean of the Graduate School and Associate Vice President for Academic Affairs at Mississippi State University. His primary research interests are the aquaculture of freshwater and marine organisms with the prevailing goal of the development of sustainable commercial production practices based upon the wise use of natural resources and environmental stewardship. He is Past President of the World Aquaculture Society, the largest aquaculture society in the world, and Past President of the National Shellfisheries Association. In 2003, Dr. D'Abramo was awarded the highest honor bestowed upon a member of the World Aquaculture Society, the Exemplary Service Medal, for his work in promoting aquaculture research and advancing the knowledge of sustainable aquaculture practices throughout the world. In 2010, he received the Distinguished Life-Time Achievement Award from the United States Aquaculture Society for contributions of broad impact to the development of the United States aquaculture industry. In 2007, he also received the Meritorious Award from the National Shellfisheries Association for outstanding leadership and dedicated service. Dr. D'Abramo earned M. Phil. and Ph.D. degrees in ecology and evolutionary biology from Yale University.

Gary F. Hartnell

Member

Gary F. Hartnell is a Senior Fellow of the Monsanto Company, St. Louis, Missouri, where he has been employed since 1983. Dr. Hartnell is an expert on the nutritional requirements of food animals and in developing and executing research strategies involving poultry, livestock and aquaculture in the evaluation of genetically modified crops and their co-products, feed ingredients and additives for regulatory, industry, and consumer acceptance. Dr. Hartnell has been active in every society of importance in the animal nutrition community, including the American Society of Animal Science, American Dairy Science Association (Past President), Poultry Science Association, World Aquaculture Society, American Registry of Professional Animal Scientists, Dairy Shrine, the Academy of Science of St. Louis, Sigma Xi, and Federation of Animal Science Societies (Past President). He recently co-chaired an International Life Science Institute committee that developed guidelines for conducting livestock feeding studies using biotechnology derived crops and their byproducts and he serves on the Board on Agriculture and Natural Resources within the National Research Council. He has authored or co-authored over 104 abstracts, 73 scientific journal articles, 9 book/book chapters, and 121 popular press, symposia, and conference articles. Dr. Hartnell received his Ph.D. from the University of Wisconsin in 1977.

Joy A. Mench

Member

Joy Mench is a Professor and Vice Chair in the Department of Animal Science and the Director of the Center for Animal Welfare at the University of California (UC), Davis. Dr. Mench conducts research on the behavior and welfare of animals, especially poultry and laboratory animals. She has published more than 120 papers, book chapters, and books on these topics, and also given many invited presentations to national and international audiences. At UC Davis she teaches courses on animal welfare, professional ethics, and the ethics of animal use. Dr. Mench has served on numerous committees and boards related to farm and laboratory animal welfare, including for the Association for the Accreditation of Laboratory Animal Care (AAALAC), the United Egg Producers, the National Chicken Council, McDonald's, Safeway, Sysco, Certified Humane, American Humane Certified, the Food Marketing Institute, the National Council of Chain Restaurants, the World Animal Health Organization (OIE), the U.N. Food and Agriculture Organization, and the European Union. She was the President of the International Society for Applied Ethology, and the recipient of the Poultry Science Association Poultry Welfare Research Award in 2004 and the UC Davis Distinguished Public Scholarly Service Award in 2007. Dr. Mench received her Ph.D. in Ethology (Animal Behavior) from the University of Sussex in England in 1983.

Sara Place

Member

Sara Place is an Assistant Professor of Sustainable Beef Cattle Systems in the Department of Animal Science at Oklahoma State University. Her research program focuses on the intersection of management and production practices that optimize animal well-being, nutrient-use efficiency, and the business sustainability of agricultural operations. Prior to Oklahoma State, she worked with the Innovation Center for U.S. Dairy and Winrock International as a Livestock Production Consultant. Dr. Place received her Ph.D. in June 2012 from University of California, Davis in Animal Biology where her work focused on measurement and mitigation of greenhouse gas emissions from cattle. She earned a B.S. in Animal Science from Cornell University in 2008 and an A.A.S. degree in Agriculture Business from Morrisville State College in 2006.

Mo Salman

Member

Mo Salman currently participates in the 2013-2014 Jefferson Science Fellows Program as the senior scientific advisor to the African Bureau under Public Diplomacy and Public Affairs Office in the U.S. Department of State. Dr. Salman is a Professor of Veterinary Epidemiology in the Department of Clinical Sciences and College of Veterinary Medicine and Biomedical at Colorado State University. He is founder and director of Colorado State University's Animal Population Health Institute. Dr. Salman's research emphasis is in veterinary epidemiology with interests in analytical veterinary epidemiology, methodology for national and international animal disease surveillance systems, observational and clinical studies on animal populations, and epidemiology of infectious diseases. He has been the principal investigator on several research projects which include: the Program for Economically Important Infectious Animal Diseases (PEIIAD), enhancement of the technical capability of the National Animal Health and Food Safety Services System in the Republics of Georgia, Armenia, Albania, Kyrgyzstan, Iraq among other countries; simulation modeling for foot and mouth disease, training in field investigation for highly pathogenic Avian Influenza, and the refinement of risk assessment methods for infectious animal diseases that have impact on trade and public health issues. He is a diplomate of the American College of Veterinary Preventive Medicine (ACVPM) and a fellow of the American College of Epidemiology (ACE). Dr. Salman received his veterinary degree from University of Baghdad - Iraq, and his both MPVM and Ph.D. from University of California, Davis.

Dennis Treacy

Member

Dennis Treacy is Executive Vice President and Chief Sustainability Officer, Smithfield Foods, Inc. Mr. Treacy oversees and directs many areas within the company, including government affairs, corporate communications, sustainability initiatives, and the legal department. Mr. Treacy also serves as the executive director of the Smithfield-Luter Foundation, the philanthropic wing of Smithfield Foods that funds education and growth opportunities in communities across America. Additionally, Mr. Treacy serves or has served on dozens of state and national boards and commissions. Prior to joining Smithfield Foods in 2002, Mr. Treacy was director of the Virginia Department of Environmental Quality. Mr. Treacy also served as assistant attorney general in the natural resources section of the Virginia Attorney General's office. He is a 2010 "Distinguished Environmental Law Graduate" from Lewis & Clark Law School in Portland, Oregon, where he graduated in 1983. He completed his undergraduate degree in Fisheries and Wildlife at Virginia Tech in 1978, and currently serves on its Board of Visitors.

B. L. Turner, II

Member

B.L. Turner II (NAS) is a Gilbert F. White Professor of Environment and Society in the School of Geographical Sciences and Urban Planning and School of Sustainability at Arizona State University. His research focuses on the study of human-environment relationships. Dr. Turner examines these relationships in the use of land and resources by the ancient Maya civilization in the Yucatan peninsula region, the intensification of land use among contemporary smallholders in the tropics, and the land-use and land-cover change as part of global environmental change. He has contributed journal articles to *Science*, *Annual Review of Environment and Resources*, *Annals of the Association of American Geographers* and many other publications. He is a member of the National Academy of Sciences, and American Academy of Arts and Sciences. Dr. Turner has served in several editorial positions, including the Editorial Board for the *Environmental Science and Policy*, *Regional Environmental Science*, *Human-Environment Interactions: A Book Series*, and is Associate Editor of the *Proceedings of the National Academy of Sciences*. Dr. Turner received B.A. and M.A. degrees in geography from the University of Austin at Texas and a Ph.D. in geography from the University of Wisconsin at Madison.

Gary W. Williams

Member

Gary W. Williams is Professor of Agricultural Economics and Co-Director of the Agribusiness, Food, and Consumer Economics Research Center (AFCERC) at Texas A&M University. He is the AFCERC chief operations officer responsible for managing the research program of the Center and leads AFCERC research and outreach projects relating to commodity and agribusiness markets and policy and international trade and policy. He is also an Associate Member of the Masters of International Affairs faculty in the Bush School of Government and International Affairs and Senior Scientist with the Borlaug Institute of International Affairs. His areas of teaching and research emphases include commodity promotion programs, international agricultural trade and development, agricultural policy, and marketing and price analysis. Prior to joining the faculty at Texas A&M University, he gained experience as a professor and Assistant Coordinator of the Meat Export Research Center at Iowa State University, Senior Economist at Chase Econometrics, agricultural economist for the U.S. Department of Agriculture (USDA), and Special Assistant to the U.S. Deputy Under Secretary of Agriculture for International Affairs and Commodity Programs at USDA. He is well known for his research on U.S. and world oilseed and oilseed product markets and the U.S. livestock industry including issues related to sheep and lamb markets and the effects of concentration in the beef packing industry. Dr. William recently served as chair of a National Academy of Science Committee on the Status and Economic Performance of the U.S. Sheep and Lamb Industry. Dr. Williams holds a Ph.D. and an M.S. degree in Agricultural Economics from Purdue University (1978 and 1981) and a B.S. in Economics from Brigham Young University (1974).

Felicia Wu

Member

Felicia Wu is a John A. Hannah Distinguished Professor in the Department of Food Science and Human Nutrition and the Department of Agricultural, Food, and Resource Economics at Michigan State University. Previously, she was an Associate Professor of Environmental and Occupational Health at University of Pittsburgh. Dr. Wu's research interests lie at the intersection of global health, agriculture, and trade. Using the tools of mathematical modeling, health economics, and quantitative risk assessment, she examines how agricultural systems affect health in different parts of the world. For her research on the impact of aflatoxin regulations on global liver cancer, Dr. Wu was awarded a National Institutes of Health EUREKA Award. She is a member of the World Health Organization (WHO) Foodborne Disease Burden Epidemiology Reference Group, as well as the expert roster of the Joint FAO/WHO Expert Committee on Food Additives (JECFA) of the United Nations. She received the 2007 Chauncey Starr Award of the Society for Risk Analysis, given annually to a risk scientist age 40 or under; and serves as the health risk area editor for the journal Risk Analysis. Dr. Wu received her A.B. and S.M. degrees from Harvard University and her Ph.D. from Carnegie Mellon University.