

**Invitation for Public Comment on the List of Candidates for
the Environmental Protection Agency Science Advisory Board**

September 18, 2019

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a Federal Register Notice on May 23, 2019 (Vol 84 Number 100) that it was inviting nominations of experts to be considered for the Administrator's appointment to the Science Advisory Board (SAB). The SAB provides independent advice and peer review to EPA's Administrator on the scientific and technical aspects of environmental issues. The SAB Staff Office sought nominations of experts to serve on the SAB with experience in one or more of the following disciplines: Analytical Chemistry; Benefit-Cost Analysis; Causal Inference; Complex Systems; Ecological Sciences and Ecological Assessment; Economics; Engineering; Forestry Geochemistry; Health Sciences; Hydrology; Hydrogeology; Medicine; Microbiology; Modeling; Pediatrics; Public Health; Risk Assessment; Social, Behavioral and Decision Sciences; Statistics; Toxicology; Epidemiology; And Uncertainty Analysis. The SAB Staff Office is especially interested in scientists in the disciplines described above who have knowledge and experience in Air Quality; Agricultural Sciences; Atmospheric Sciences; Benefit-Cost Analysis; Complex Systems; Drinking Water; Energy and the Environment; Epidemiological Risk Analyses; Dose-Response, Exposure, Physiologically Based Pharmacokinetic (PBPK) Modeling; Water Quality; Water Quantity and Reuse; Ecosystem Services; Community Environmental Health; Sustainability; Chemical Safety; Green Chemistry; and Waste Management.

The SAB Staff Office identified 33 candidates based on their expertise and willingness and ability to serve. We hereby invite public comments on the attached List of Candidates for appointment to the SAB for consideration by the SAB Staff Office. Comments should be submitted to Dr. Thomas Armitage, Designated Federal Officer, no later than October 9, 2019 at armitage.thomas@epa.gov. E-mail is the preferred mode of receipt. Please be advised that public comments are subject to release under the Freedom of Information Act.

FY2020 Candidates for the EPA Science Advisory Board

Becker, Jennifer

Michigan Technological University

Dr. Jennifer G. Becker is an Associate Professor of Environmental Engineering at Michigan Technological University. She holds B.S., M.S., and Ph.D. degrees in Environmental/Civil Engineering from Michigan Technological University, the University of Illinois at Urbana-Champaign, and Northwestern University, respectively. Dr. Becker has research, teaching, and engineering practices experience focusing on engineered biological processes for the sustainable treatment of groundwater, wastewater, and residuals. Her major research areas include the bioremediation and environmental fate of hazardous contaminants in the subsurface, microbial processes for bioenergy production, and sustainable treatment and management of residuals. Dr. Becker's recent research has focused on understanding the fate of pathogens in wastewater treatment residuals under ambient conditions. This work has broad implications for the design of water reuse infrastructure, treatment and beneficial use of wastewater treatment solids, and global efforts to improve basic sanitation and hygiene. Dr. Becker also has expertise and outreach experience related to animal agricultural practices, their impact on the environment, and the management of their residuals. Core support for Dr. Becker's research has been provided by the federal government via grants from the National Science Foundation (NSF); foundations, including the Water Reuse Foundation; and state agencies. She is a Past-President of the Association of Environmental Engineering and Science Professors (AEESP) and served on its Board of Directors (2010-2014). Dr. Becker's research has been recognized with the Presidential Early Career Award for Scientists and Engineers (PECASE), the highest honor bestowed by the U.S. government on outstanding scientists and engineers beginning their independent careers, as well as a NSF Early Career Development Program (CAREER) Award; the Robert A. Canham Award from the Water Environment Federation; the AEESP/Montgomery Watson Harza Master's Thesis Award; and several other awards. Dr. Becker served on the Environmental Engineering Committee of the U.S. EPA Science Advisory Board from 2016 to 2018.

Bennett, Deborah Hall

University of California, Davis

Dr. Deborah Hall Bennett is currently an Associate Professor of environmental and occupational health at the University California, Davis. She received her Ph.D. and M.S. in Mechanical Engineering from the University of California, Berkeley, and her B.S. in Mechanical Engineering from the University of California, Los Angeles. Dr. Bennett's research focuses on the fate, transport, and exposure of organic compounds chemicals in multi-scale applications, including direct consumer product use, and indoor and outdoor multimedia environments within the context of both environmental epidemiology and environmental risk assessment. Her work utilizes both modeling and measurement techniques, bridging the gap between these two lines of inquiry. She had research funding from the Environmental Protection Agency to conduct modeling of the fate, transport, and resulting exposures from use of consumer products in the indoor environment. The American Chemistry Council is funding efforts for a modeling framework capable of rapidly calculating exposures over a continuum of spatial/temporal scales. She is involved in several projects funded through several NIEHS grants focusing on environmental causes of Autism. She has funding from the California Air Resources Board to evaluate the impact of air filtration interventions on asthma exacerbation, and a separate grant to evaluate ozone forming potential from low volatility compounds in consumer products. She has funding from NIOSH to evaluate heat exposure among farmworker populations, as well as pesticide exposure among landscape workers and farmworkers. She has served on various United States Environmental Protection Agency Science Advisory Boards, Panels, and advisory committees related to the Exposure Factors Handbook, and Exposure Metrics for the National Children's Study. She has served as Estimation Associate Editor for the Journal of Exposure Science and Environmental Epidemiology. She has served as an Elected Councilor, Treasurer, and Chair of the Awards Committee for the International Society of Exposure assessment. She has received funding from the American Chemistry Council, California Air Resources Board, Environmental Protection Agency, and the National Institute for Environmental Health.

Burke, Matthew

Physician

Dr. Matthew Burke is a board certified Family Physician and Fellow of the American Academy of Family Physicians (AAFP). He served on the Board of Directors of AAFP from 2016-2017. He earned an AB in Biology and History at Dartmouth College before pursuing an MD at Albany Medical College. He completed internship/residency at Brown University School of Medicine, Memorial Hospital of Pawtucket, RI and then did a fellowship in primary care health policy at Georgetown University. He has served in various roles in his 10 years of practice, including federal work (clinical advisor to the Community Health Center Program at the Health Resources Services Administration), academic faculty and private practice (including both primary and urgent care). He has taught social determinants of health and environmental health at Georgetown University School of Medicine. He currently serves as the chair of the Member Interest Group for Climate Change and Environmental Health for the AAFP (which has 130,000 members) and has lectured to physician groups across the country on the health effects of a changing climate. Further, he is a past board member of the Maryland Academy of Family Physicians and their director of Government Advocacy. He currently lives and practices in Arlington, VA.

Burken, Joel G.

Missouri University of Science and Technology

Dr. Joel Gerard Burken received his Ph.D. from the University of Iowa in 1996, where he conducted some of the initial research on phytoremediation. He has been at Missouri University of Science and Technology (Missouri S&T, formerly University of Missouri – Rolla) since 1997, now serving as Interim Chair and Curators' Professor. While at Missouri S&T, Dr. Burken led the formation of the environmental engineering program as well as the green campus committee and the campus wide sustainability minor. He served as Director of the campus-wide Environmental Research Center. He currently serves as Chair of the Civil, Architectural and Environmental Engineering Department. Dr. Burken has also held temporary positions at: EAWAG in Zurich Switzerland (research intern), at the National Environment Research Institute (NERI) in Denmark (visiting researcher and OECD Fellow) and at the University of Canterbury, New Zealand as an Erskine Fellow. Dr. Burken's research and service efforts have focused upon low impact and natural treatment systems since 1991. In that time, terms of sustainable-remediation, green infrastructure, and green-remediation have evolved and now promote the same fundamental aspects surrounding water quality and water resource management. His research in phytoremediation of organic contaminants and pioneering work in Phytoforensics have led to numerous publications, a patented environmental assessment method, and international recognition. This recognition includes twice winning the ASCE Rudolf Hering Medal and an NSF Career award. Dr. Burken has received Missouri S&T awards for teaching, service, advising and has received the Faculty Excellence award 7 times. In 2012 he was also awarded the Alumni Merit Award from the Miner Alumni Association, and in 2015 Dr. Burken received the President's Award for University Citizenship across the entire University of Missouri System. Dr. Burken was appointed as a Curator's professor at Missouri S&T in 2015. Dr. Burken has been noted for his local, national and international service, serving on the board of directors for the Association of Environmental Engineering and Science Professors (AEESP) and elected as President of the board in 2011-12. Locally, Dr. Burken is also active coaching youth sports and with the public school systems, Board of Directors for the Champions Of Rolla Education (CORE) a non-profit organization that supports the enrichment of the Rolla public schools, formerly serving as President of the CORE Board.

Chambers, Janice E.

Mississippi State University

Dr. Janice E. Chambers is the Director of the Center for Environmental Health Sciences, and is a William L. Giles Distinguished Professor in the College of Veterinary Medicine, Mississippi State University. She is originally from Berkeley, California. She holds an undergraduate degree in Biology from the University of San Francisco, and a Ph.D. in Animal Physiology from Mississippi State University (MSU). She held post-doctoral positions at Mississippi State University. Dr. Chambers has been the Principal Investigator of over \$20 million in federally-funded competitive grants in the field of toxicology, with current or previous support from NIH, EPA, NSF and the American Chemistry Council. She has served on a number of advisory boards and committees, including the National Research Council Board of Toxicology, the International Life Sciences Institute/Health and Environmental Sciences Institute, the Society of Toxicology and the American Chemistry Council. She is or has been a peer review panel member for NIH and NIOSH, and a member of journal editorial boards. She has received the International Award for Research in Agrochemicals from the American Chemical Society, Agrochemicals Division. She has received a Burroughs Wellcome Toxicology Scholar Award and a SmithKline Beecham award for Research Excellence, along with the Ralph E. Powe Research Award and the Alumni Association's Faculty Achievement Award in Research at MSU. She is board certified in general toxicology by the American Board of Toxicology and she is a Fellow of the Academy of Toxicological Sciences. She has held a number of committee positions in the Society of Toxicology. She has served as a member of EPA's Scientific Advisory Panel for FIFRA, as a member of EPA's Human Studies Review Board, and is a member of the Board of Scientific Counselors for the National Center of Environmental Health/Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. The Center for Environmental Health Sciences at MSU, which she directs, is an interdisciplinary research center specializing in pesticide toxicology and is supported primarily by the National Institutes of Health. This center has about 30-40 faculty, staff and students associated with it. Its research areas are neurotoxicology, biochemical toxicology, cardiovascular toxicology, analytical chemistry, biostatistics, epidemiology, computational chemistry, computational simulation, biochemistry and endocrinology. Dr. Chambers directs a mechanistic research program specializing in pesticide toxicology with a major emphasis on organophosphorus insecticides, and she has been involved in the training of about 40 graduate students and post-docs. She directs several research projects on the effects of pesticides in mammalian systems to identify the potential human health effects of pesticide exposures, and is primarily interested in the biochemical determinants of toxicity levels in adult and developing animals; her research addresses a number of Food Quality Protection Act issues. Her program emphasizes a consideration of the dose-response relationships, and making predictions of toxicity based on realistic levels of pesticide exposure. Specifically there are projects related to the neurochemical and behavioral effects of pesticides in developing organisms; the metabolism of pesticides in developing organisms; the role of esterases, oxidative stress and pesticides in cardiovascular disease; effects of chemical mixtures and the development of data related to cumulative risk assessment; mathematical predictions of the effects of mixtures; and exposure assessment of children and adults from contact with a pet which has been treated with flea control insecticides.

Cullen, Alison C.

University of Washington

Dr. Alison Cullen serves as Associate Dean for Academic Affairs and Professor at the University of Washington Evans School of Public Policy and Governance, with adjunct appointments in the College of the Environment and the School of Public Health. She holds a B.S. in Civil/Environmental Engineering from MIT (1984), and an M.S. (1989) and an Sc.D. in Environmental Health (1992) from Harvard University School of Public Health. Her research involves the analysis of environmental health risks, decision-making in the face of uncertainty, and the application of value of information and distributional techniques. Dr. Cullen is past president of the Society for Risk Analysis and is a 2016 NSF Faculty Fellow in the Advanced Studies Program. Her research is published in numerous peer-reviewed articles and a book with co-author H.C. Frey entitled Probabilistic Techniques in Exposure Assessment: A Handbook for Dealing with Uncertainty and Variability in Models and Inputs. She teaches graduate level courses in quantitative methods and environmental policy, and mentors MPA and Ph.D. students. Dr. Cullen is the recipient of a U.S. EPA Region 10 Special Recognition in the Field of Air Toxics, the Chauncey Starr Award from the Society for Risk Analysis, and the Outstanding Young Scientist Award from the International Society of Exposure Assessment. Outside of academia, Dr. Cullen has served as a technical consultant and advisor to many groups, including the Health Effects Institute, the U.S. Consumer Product Safety Commission, the State of Washington's Department of Ecology, the Sloan Foundation and the Bill and Melinda Gates Foundation. She has also served on the U.S. EPA Science Advisory Board Chemical Assessment Advisory Committee (CAAC 2016 - 2018) and was a member of the U.S. EPA Clean Air Scientific Advisory Committee's augmented panel on Sulfur Dioxide (2014 - 2018). Dr. Cullen's work has been supported by government agencies and non-profit foundations, including in the past five years the U.S. National Science Foundation, the National Center for Atmospheric Research, Washington State Department of Transportation, the Alfred P. Sloan Foundation, the Bill and Melinda Gates Foundation, and Intellectual Ventures.

Doering III, Otto C.

Purdue University

Dr. Otto C. Doering III is a professor of Agricultural Economics at Purdue University where he has teaching, research, and engagement responsibilities. He is a public policy specialist in agricultural, resource and environmental policy issues. He served the U.S. Department of Agriculture (USDA) working on the 1977 and 1990 Farm Bills. He was a Principal Adviser to USDA's Natural Resource Conservation Service (NRCS) for implementing the 1996 Farm Bill and worked again in 2005 with NRCS on the design and implementation of conservation programs. In 1999, he was team leader for the economic analysis of the White House's National Hypoxia Assessment focused on the Gulf of Mexico. Dr. Doering has been President of the Agricultural and Applied Economics Association and Chair of the National Public Policy Education Committee. He was founding Director of Indiana's State Utility Forecasting Group and Director of Purdue's Energy Policy Research and Information Program. He serves on the U.S. Environmental Protection Agency's Science Advisory Board (SAB) and chaired EPA SAB Integrated Nitrogen Committee. He was a member of the National Academies' Water Science and Technology Board and served on National Academy committees focused on protecting and restoring water quality in the Mississippi River. He served with the Intergovernmental Panel on Climate Change and was Director of Purdue's Climate Change Research Center. His climate work has focused on agricultural adaptation to climate change. His current research funding is from the U.S. Department of Agriculture. He has served in Southeast Asia with the Ford Foundation and the governments of Malaysia and Indonesia. Dr. Doering received a B.A. in Government from Cornell, a M.Sc. (Econ) from the London School of Economics, and a Ph.D. in Agricultural Economics from Cornell. In earlier incarnations he has been a legal investigator in the New York City Municipal Courts and a horse wrangler in the Canadian Rockies. His recent publications focus on agricultural and conservation policy, agricultural adaptation to climate change, improving water quality, and alternative approaches to controlling excess reactive nitrogen.

Eastmond, David

University of California - Riverside

Dr. David A. Eastmond is a professor in the Department of Molecular, Cell, and Systems Biology at the University of California, Riverside (UC Riverside). He received a B.S. in Zoology and an M.S. in Entomology from Brigham Young University in Provo, Utah, and a Ph.D. in Environmental Health Sciences from the University of California, Berkeley. After serving as a postdoctoral fellow at Lawrence Livermore National Laboratory, he joined the faculty at UC Riverside where he is actively involved in research and teaching. His research focuses on the mechanisms involved in the toxicity and carcinogenesis of environmental chemicals and their associated risks. He has published more than 125 scientific articles in these and related areas. At UC Riverside, Dr. Eastmond teaches classes in toxicology and risk assessment. In recent years, he has received funding from the National Institute of Environmental Health Sciences, and the University of California. Dr. Eastmond previously served as the president of the Environmental Mutagen Society and as a Jefferson Science Fellow in the US State Department. He has also participated on a variety of expert panels related to chemical mutagenesis, carcinogenesis and risk assessment including panels for the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration, the National Toxicology Program, the International Programme for Chemical Safety, the International Agency for Research on Cancer, the World Health Organization's Joint Meeting on Pesticide Residues, the Organisation for Economic Cooperation and Development, and Health Canada. He currently serves as a member of the Carcinogen Identification Committee for the California EPA and the Chemical Assessment Advisory Committee for the U.S. EPA Science Advisory Board.

Finley, Jason

41st Civil Support Team

Mr. Jason Finley currently serves as a Science Officer for a Civil Support Team. Mr. Finley received graduate training in Science for Disaster Response and Geoscience, and is Fellowship trained in Environmental Public Health. Mr. Finley's area of expertise is in Environmental Health and Safety, and his recent research activities are in uncontained volume characterization. Mr. Finley currently serves on national advisory boards and is a member of Environmental Health professional societies at the state, national and international level.

Fisher-Vanden, Karen

Pennsylvania State University

Dr. Karen Fisher-Vanden is Professor of Environmental and Resource Economics at Pennsylvania State University. Dr. Fisher-Vanden holds a B.S in Mathematics and a B.A. in Economics both from the University of California, Davis, a M.S. in Management Science from the Anderson Graduate School of Management at UCLA, and a Ph.D. in Public Policy from Harvard University. She was a Lead Author of the Intergovernmental Panel on Climate Change's Fifth Assessment Report Working Group III, and a previous member of the U.S. Climate Change Science Program (CCSP) Product Development Advisory Committee and lead author of a congressionally-mandated CCSP report on global change scenarios. She currently serves on the Board of Directors for the Association of Environmental and Resource Economists (AERE) and was a member of the EPA Science Advisory Board Economy-Wide Modeling Panel. Her areas of research include economic and integrated assessment modeling for climate change impacts and policy analysis; economic instruments for pollution control; and technology development in developing countries (in particular, China) and implications for energy use and carbon emissions. She is currently co-PI and co-director of two large externally-funded research projects: (1) Program on Coupled Human and Earth Systems (PCHES) and (2) Research in Integrated Assessment, Inter-Model Development, Testing and Diagnostics (PIAMDDI), both funded by the U.S. Department of Energy.

Gardella, Joseph A.

University at Buffalo

Dr. Joseph A. Gardella, Jr. is John & Frances Larkin Professor of Chemistry at the University at Buffalo, State University of New York (UB). He also serves as the Director of the UB/Buffalo Public Schools Interdisciplinary Science and Engineering Partnership. He has been on the faculty at UB since 1982. He completed a dual degree program in Chemistry (B.S.) and Philosophy (B.A.) from Oakland University in Rochester Michigan, a Ph.D. in Analytical Chemistry at the University of Pittsburgh, and postdoctoral research in Physical Chemistry at the University of Utah. He served as a visiting scientist/program officer at the National Science Foundation Chemistry Division in 1989-90. From 1999-2005, he was Associate Dean for External Affairs in the College of Arts and Sciences and he was responsible for coordinating and leading the College's programs in working with industry, community, government and elementary and secondary schools. From 1996-2006, he was the Director of the UB Materials Research Instrumentation Facility, managing \$9M of shared research instrumentation. As a Faculty Fellow in the Institute for Local Governance and Regional Growth from 2005-2006, he pursued policy studies in regional science and environmental policy and public participation.

Grattan, Lynn

University of Maryland

Dr. Lynn Grattan is a Neuropsychologist and Professor in the Departments of Neurology, Epidemiology, and Public Health at the University of Maryland School of Medicine (UMMS-SOM). She has been with the UMMS-SOM for more than 25 years where she directs the Neuropsychological Diagnostic and Environmental Health Research Laboratory. Dr. Grattan's primary areas of research are the behavioral, neurobehavioral, social, and public health impacts of marine based biotoxins (e.g. domoic acid, ciguatera) and other marine contaminants (e.g. oil spill) within the context of harmful algal blooms and environmental disasters. Her methods have included risk assessments and cohort studies as well as the analysis of brain-behavior relationships, reflecting her technical skills in these domains. In this capacity, her research has included overseeing community based research teams throughout the U.S. and U.S. Virgin Islands, including several American Indian reservations in the U.S. Pacific Northwest. Dr. Grattan's research and expertise have advanced knowledge in the social and behavioral determinants of exposure prevention, resilience (individual and community), and recovery while providing reassurance to many communities in distress. Dr. Grattan has published numerous peer reviewed articles in the scientific literature as well as book chapters. She also serves or has served as chairperson or member of many external scientific advisory and grant review committees related to environmental, behavioral, and public health; and resilience. She has had continuous research funding from the National Institute of Health for the past 25 years with the majority of funding from the National Institute of Environmental Health Sciences. For the past two years her research was entirely funded by the National Institute of Environmental Health Sciences and the National Institute of Minority Health and Health Disparities. Her Ph.D and three years of Post-Doctoral Training in Psychology and Neuropsychology were obtained from the University of Connecticut and Brown University Medical School, respectively.

Heldman, Dennis

The Ohio State University

Dr. Dennis R. Heldman is the current Dale A Seiberling Professor of Food Engineering at The Ohio State University. His teaching and research focus is food engineering, with emphasis on sustainability of the food system, through improvements in process efficiencies while enhancing product quality. Dr. Heldman is Director of the Center for Advanced Processing and Packaging Studies, a food industry consortium funding research on process and packaging improvements. Dr. Heldman held faculty positions at Michigan State University, University of Missouri, and Rutgers University. He has been Vice President of Process Research and Development at Campbell Soup Company, Executive Vice President of Scientific Affairs at National Food Processors Association, and Principal at Weinberg Consulting Group Inc, with consulting on food regulatory issues. Dr. Heldman has authored, co-authored or edited textbooks and references books, including Food Process Engineering (Second Edition), Introduction to Food Engineering (Fifth Edition), Handbook of Food Engineering (Third Editions), Principles of Food Processing, Encyclopedia of Agricultural, Food and Biological Engineering (Second Edition), the Encyclopedia of Biotechnology in Agriculture and Food, and Food Preservation Process Design. He was elected President of the Institute of Food Technologists (IFT) (2006-07), President of Phi Tau Sigma (2010-11), and appointed to National Agricultural, Research, Extension, Education, and Economics Advisory (NAREEE) Board (2008-11). Dr. Heldman was elected Fellow in the International Academy of Food Science & Technology (2006), received the Lifetime Achievement Award from the International Association for Engineering and Food (2011), received the Frozen Food Foundation Freezing Research Award (2011), the Carl R. Fellers Award from IFT and Phi Tau Sigma (2013), the Harold Macy Food Science and Technology Award (2017), and 2018 Nicholas Appert Award from IFT. He received B.S. (1960) and M.S. (1962) degrees from The Ohio State University, and Ph.D. (1965) from Michigan State University. Since joining the faculty at Ohio State in 2012, Dr. Heldman's research program has generated external funding at an average of \$200K per year from a range of sources including industry, consortia and federal funding agencies. Although there has been no direct funding from EPA, several grants have been received to assist food manufacturers in dealing with EPA regulations. The focus of these research projects has been on management of waste streams from food manufacturing operations, primarily to reduce waste stream volumes and the concentrations of components in these waste streams.

Hoover, Dallas

University of Delaware

Dr. Dallas G. Hoover is a professor in the Department of Animal and Food Sciences at the University of Delaware, Newark. He joined the faculty there following postdoctoral appointments at Drexel University and Cornell University. He received his Ph.D. in food science from the University of Minnesota, his M.S. in biological sciences from the University of Delaware, and his B.S. in biology from Elizabethtown College (PA). Research areas include food safety and food process microbiology; classes currently taught include introductory food science classes and food microbiology. His research is currently focused on the production of fermented foods and beverages, primarily commercial beer and cheese manufacturing. He is an Institute of Food Technologists (IFT) Fellow, and has chaired the IFT Nonthermal Processing Division and IFT Food Microbiology Division. He also is an associate editor of food engineering and physical processes for the Journal of Food Science as well as an associate editor for Innovative Food Science & Emerging Technologies.

Kannappan, Vijayavel

Georgia Pacific LLC.

Dr. Vijayavel Kannappan is a Board-certified Toxicologist (European Registered -ERT) with over 15 years of active practice in Human and Environmental Health Toxicology. Dr. Kannappan is currently a Regulatory Toxicology & Stewardship Manager with Georgia Pacific LLC., ensuring the human and environmental safety of personal hygiene and skin care products. Prior to his current position, he was employed with Mary Kay Inc. as a Sr. Product Safety Toxicologist, accountable for the safety of raw materials used in cosmetic products. He also worked as an Environmental Health Toxicologist for various research projects in collaboration with Federal Agencies (U.S. EPA, NOAA, and USGS); State of Michigan-Department of Environmental Quality; Ottawa County Health Department; Academia (Wayne State University, Michigan State University, and Hope College), and NGO's (Macatawa Area Coordinating Council and Outdoor Discovery Center) where his research focused on conducting human and environmental health risk assessment of specialty chemicals and biological agents. Dr. Kannappan's educational qualifications include: Post-Doctoral Research in Environmental Toxicology; Ph.D. and M.S in Environmental Toxicology; and B.S. in Microbiology. Dr. Kannappan is a recognized Subject Matter Expert and serves a Committee Member in the Safety and Regulatory Toxicology Task Force with Personal Care Products Council, advocating and driving science-based policies impacting cosmetics and personal care products. He is an author/co-author of 100+ publications (peer-reviewed and non-refereed) with a track record of 1200+ citations in the field of Human and Environmental Health Sciences. Dr. Kannappan's ad-hoc service also includes, Vice President Elect with the Food Safety Specialty Section and Dermal Toxicology Specialty Section with the Society of Toxicology; Steering Committee Member of the Ecological Risk Assessment World Interest Group of the Society of Environmental Toxicology and Chemistry. He is also a recipient of Sr. Toxicologist Award (2019) with the Association of Scientists of Indian Origin, a Special Interest Group within the Society of Toxicology.

Kioumourtzoglou, Marianthi-Anna

Columbia University

Dr. Marianthi-Anna Kioumourtzoglou is an Assistant Professor at the Department of Environmental Health Sciences at Columbia University's Mailman School of Public Health. She is an environmental engineer (5 year diploma from the Democritus University of Thrace, Greece), and holds a Master of Science in Public Health (MSPH) from the Environmental Sciences and Engineering Department at the University of North Carolina at Chapel Hill and a Doctor of Science (ScD) in Environmental Health from the Harvard TH Chan School of Public Health, where she also conducted her post-doctoral fellowship. Her research focuses on applied statistical issues related to environmental epidemiology, including quantifying and correcting for exposure measurement error, exposure prediction uncertainty propagation, and assessment of high-dimensional and complex exposures in health analyses. Her studies mainly—albeit not exclusively—focus on air pollution exposures and, additionally, on identifying vulnerable sub-populations and characterizing how risks may vary across neighborhood-level and other urban characteristics. Dr. Kioumourtzoglou is the Co-Chair of the North American Chapter of the International Society of Environmental Epidemiology. Her research for the past two years has been funded from the National Institute of Environmental Health Sciences and the Health Effects Institute.

Kotchen, Matthew

Yale University

Dr. Matthew Kotchen is a Professor of Environmental Economics and Policy at Yale University and a former Associate Dean of Academic Affairs. His primary appointment is in the Yale School of Forestry and Environmental Studies, with affiliated appointments in the Yale School of Management and the Department of Economics. He is also a faculty research fellow at the National Bureau of Economic Research (NBER). Professor Kotchen's research interests lie at the intersection of environmental and public economics, and ongoing projects focus on program evaluation of environmental and energy policies. Dr. Kotchen joined the Yale faculty in 2009 and has held previous and visiting positions at Williams College, University of California (Santa Barbara and Berkeley), Stanford University, and Resources for the Future (RFF). He also served as the Deputy Assistant Secretary of Environment and Energy at the U.S. Department of the Treasury.

MacDonell, Margaret M.

Argonne National Laboratory

Dr. Margaret MacDonell heads the department of nuclear, radiological and environmental chemistry and risk management in the Environmental Science Division of Argonne National Laboratory. She holds a B.S. in biology and M.S. in civil/environmental health engineering from the University of Notre Dame, and a Ph.D. in civil/environmental health engineering from Northwestern University. Her research focuses on environmental health risk analysis, spanning air and water quality, contaminant fate and transport, exposure and dose-response assessment, mixtures and cumulative risk assessment, waste management, ecosystem services on contaminated lands, community environmental health, drinking water, water quantity and reuse, energy and environment, and sustainability and the circular economy. Margaret is a fellow and past president of the Society for Risk Analysis, and a fellow of the nonprofit Waste Management Symposia (for contributions to the advancement of radioactive waste management). She has served on several National Academies Committees related to exposure and toxicity, including the Committee on Toxicology, Committee on Acute Exposure Guideline Levels, Committee on Spacecraft Exposure Guidelines, and Committee to Review the EPA Integrated Risk Information System Process. She has also served the National Council on Radiation Protection and Measurements (NCRP) for Scientific Committee 94, Environmental Remediation and Radioactive Waste Management, and Scientific Committee 64-23, Cesium in the Environment. Her primary research funding is from the U.S. Department of Energy; other funding sources include the private sector and past funding from the National Science Foundation and U.S. Environmental Protection Agency through collaborative interagency agreements.

Marlborough, Sidney

Noble Energy, Inc

Dr. Sidney Marlborough is currently a Senior Environmental Toxicologist with Noble Energy, Inc. in Houston, Texas. He is responsible for the corporate chemical stewardship program and manages the risk evaluation of new products for oil and gas exploration and production. He received a B.S. in Environmental Management Systems, M.S. in Environmental Toxicology and Doctorate in Environmental Science minoring in molecular genetics from Louisiana State University. He has 18 years of experience in environmental risk management, toxicology, risk assessment, litigation, and research. He has worked for state government, academia, private consulting and industry. He has developed numerous human health and ecological risk assessments for expert reports and remedial cleanup requirements. He has studied the toxicity of metals, chlorinated solvents, poly-aromatic hydrocarbons and pesticides in both human and ecological receptors. Dr. Marlborough has developed an uptake kinetic model simulating the phytoremediation of arsenic with various plant species. He has developed formulas for the extrapolation of toxicity of arsenate and arsenite as part of ecological risk assessment. He has published research in the areas of marine toxicity to benthic invertebrates, arsenic speciation toxicity in ecological receptors, TNT exposure to benthic fish, and phytoremediation of metals. He has researched chemical carcinogenesis and activation pathways that increase microsatellite instability in vulvar squamous cell carcinoma. Dr. Marlborough is currently a member of the Society of Toxicology, American Chemical Society, and the Society of Petroleum Engineers.

Martin, Clyde F.

Texas Tech University

Dr. Clyde Martin received his Ph.D. in Mathematics from the University of Wyoming in 1971, worked as a National Research Council Research Associate at NASA from 1971-1973 and was a Paul Whitfield Horn Professor of Mathematics at Texas Tech University for 30 years. Dr. Martin's research interests include the development and analysis of mathematical and statistical models in medicine and environmental problems and control theory. He has collaborated with engineers and scientists in a number of areas including aeronautics, bioengineering, economics, analytical chemistry, public health, epidemiology and chemical engineering on a variety of scientific topics. He is a Fellow of the Institute of Electrical and Electronic Engineers, a Fellow of the American Statistics Association and an elected member of the International Statistics Institute. In November of 2001 he received an honorary doctorate for his contributions to systems theory from the Royal Institute of Technology in Stockholm, Sweden. He has received distinguished alumni awards from both Emporia State University and the University of Wyoming. He has directed more than 120 students to advanced degrees and published more than 400 papers in a variety of disciplines. From August 2012 to August 2013 he served as a Jefferson Science Fellow at the United States Department of State.

Osterhoudt, Kevin

Perelman School of Medicine at the University of Pennsylvania

Dr. Kevin C. Osterhoudt is Professor of Pediatrics at the Perelman School of Medicine at the University of Pennsylvania and serves numerous clinical and academic roles including: Medical Director, The Poison Control Center at Children’s Hospital of Philadelphia; Community Engagement Core, Center for Excellence in Environmental Toxicology; and Associate Scholar, Center for Global Health at the University of Pennsylvania. He has extensive bedside experience caring for children with pediatric environmental toxicology concerns, and is a distinguished teacher often charged with translating science and risks to communities and families. Dr. Osterhoudt has served on the Executive Committee of the Council on Environmental Health of the American Academy of Pediatrics, and has offered legislative testimony on matters of environmental health at local, state, and federal levels. Dr. Osterhoudt has co-authored over 150 journal articles and textbook chapters, and has academic interest in clinical epidemiology, risk assessment of pediatric poisoning exposures, and global environmental health. He obtained his medical degree from the State University of New York at Buffalo School of Medicine, and is board-certified in pediatrics, pediatric emergency medicine, and medical toxicology. Additionally, Dr. Osterhoudt has received a Master of Science in Clinical Epidemiology from the University of Pennsylvania School of Medicine. Dr. Osterhoudt is the Principal Investigator for grant funding from the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration funding poison control services for a population in excess of 8 million people in Delaware and eastern Pennsylvania.

Randolph, Dennis A.

City of Grandview

Mr. Dennis A. Randolph, P.E. is the Director of Public Works for the City of Grandview Missouri. He has been employed there since 2009 and has nearly 50-years of local government experience. Mr. Randolph has a unique combination of practical engineering experience, and academic experience that brings a diverse view to committees and panels on which he serves. Besides developing and maintaining public infrastructure, his responsibilities include obtaining and managing federal funds for infrastructure improvements. As part of his responsibilities he develops project documents to meet NEPA (National Environmental Policy Act) requirements and has managed many air, noise, and water quality studies. Over the past 10-years, he has led efforts to protect the health of citizens in an environmental justice community by monitoring air permit applications, overseeing the review of the results of air and noise monitoring projects, and overseeing the reviews of human health risk. He has a strong technical background and research interest in hazard identification related to infrastructure improvements, especially as they relate to community development. He has extensive knowledge of local, state and federal permitting processes, remediation of problems, and risk assessment issues, and has been responsible for issuing hundreds of permits over the past 50-years. He also takes part in public meetings and has conducted many media interviews. Mr. Randolph is adjunct instructor in civil engineering at the University of Missouri – Kansas City. He has published peer-reviewed articles and served on many external engineering and scientific committees. He also serves as an expert witness in engineering matters. Mr. Randolph earned B.S. and M.S. degrees in Civil Engineering from Wayne State University in Detroit and an MPA from Western Michigan University in Kalamazoo. His research for the past two years in asset management and artificial intelligence was funded by the City of Grandview.

Seeley, Mara

Massachusetts Department of Public Health

Dr. Mara Seeley is Chief of the Exposure Assessment Unit within the Environmental Toxicology Program at the Massachusetts Department of Public Health (MDPH) where she evaluates health effects from exposure to contaminants in the environment and consumer products, prepares risk communication material for the general public, and evaluates exposure to radiation associated with nuclear power plant operations. Prior to working at MDPH, Dr. Seeley worked at Gradient, specializing in human health risk assessment, exposure assessment, and regulatory comment. As a senior toxicologist, Dr. Seeley performed critical reviews of animal toxicology and human epidemiology studies, conducted multi-pathway human health risk assessments, developed toxicity criteria and health-based exposure levels, and evaluated exposures for non-standard exposure scenarios. Before joining Gradient, Dr. Seeley studied health effects of nitrogen dioxide as a National Institute of Environmental Health Sciences research fellow at the University of Washington, conducting controlled human exposure studies and in vitro studies using primary cell cultures of nasal epithelial cells. She has authored or co-authored peer-reviewed articles and book chapters on a variety of topics, including risk assessment, health effects of environmental contaminants, endocrine disruption, and developmental toxicity. Dr. Seeley has served on two committees at the Institute of Medicine; as an officer of the Society of Toxicology's (SOT) Nanotoxicology, and Ethical, Legal and Social Issues Specialty Sections; and as an invited participant at an SOT education summit. She received her B.A. from Wellesley College (cum laude), and both her M.S. in environmental engineering and science and Ph.D. in environmental health and toxicology from the University of Washington. Dr. Seeley is a diplomate of the American Board of Toxicology.

Smoak, Joseph

University of South Florida

Dr. Joseph Smoak is currently a Professor in Environmental Science at the University of South Florida where he has been employed since 2001. He received his Ph.D. in Geology and B.S. in Marine Science from the University of South Carolina. He also has an M.S. from North Carolina State University in Chemical Oceanography. Dr. Smoak is a Biogeochemist who examines local and global environmental issues. Dr. Smoak's research in a broad sense seeks to understand the relationship between ecology, solid earth, and human activity. His research focuses on how ecosystems adapt to change and specifically on the carbon cycle in wetlands. His research tools include natural and anthropogenic radionuclide tracers that can be used to examine fate and transport of sediments, contaminants and water masses. During his career, he has worked in lakes, freshwater wetlands, coastal ecosystems, continental margins, and deep-sea sediments. He has recent research funding from the U.S. National Science Foundation and the U.S. Department of Agriculture. He has published over 75 articles in peer-reviewed scientific journals, serves as a reviewer for numerous journals and agencies, and serves on a journal editorial board. Dr. Smoak has a diverse background which includes a broad understanding of ecology, geology, and chemistry of natural systems along with a strong knowledge of environmental radiochemistry. In addition, Dr. Smoak has a long history of service and advisory committee work.

Sonwane, Chandrashekhar

Aerojet Rocketdyne

Dr. Chandrashekhar Sonwane is a Specialist Scientist and Lead Consultant leading various teams for engineering and environmental projects at Pratt and Whitney Rocketdyne, Boeing, Rockwell, now called Aerojet Rocketdyne. Dr. Sonwane holds a Bachelor of Chemical Engineering from ICT Mumbai (University of Mumbai), Master of Technology in Chemical Engineering from Indian Institute of Technology Mumbai, and a Ph.D. in Chemical Engineering from University of Queensland, Brisbane, Australia. He is an Elected Fellow of European Academy of Sciences and Arts, Fellow of Royal Aeronautical Society (FRAeS), Fellow of Royal Astronomical Society (FRAS), Fellow of the Institute of Engineering and Technology (FIET), Institute of Chemical Engineers (FICHEM), Fellow of Royal Australian Chemical Institute (FRACI), Fellow of Engineers Australia (FEA). Dr. Sonwane is elected Chair of American Institute of Aeronautics and Astronautics (AIAA) Los Angeles Las Vegas section with ~1300 members. Shekar is Board member of American Chemical Society, lead for Earth day and Chemistry week. He has received a topmost award "Engineer of the Year" from his current employer. He is inventor of about 50 device and process patents/ patent applications worldwide (U.S., China, Japan and Europe) assigned to various companies (General Electric, Pratt & Whitney, United Technology Corporation, Aerojet Rocketdyne, Solar Reserve). Dr. Sonwane holds the following certifications: BCEE (Board Certified Environmental Engineer), QEP (Quality Environmental Professional), Master Black Belt Six Sigma for Quality Improvement, PMP (Project management Professional), Chartered Engineer, and Chartered Chemist. Dr. Sonwane is author of 30 papers in peer reviewed international journals, 40 international conference papers and about 20 significant company reports. Dr. Sonwane's recent sources of research funding include: Internal corporate/company funding, U.S. Department of Energy, DARPA, NASA, Shell, Exxon Mobile & BP.

Tiong, Hung King

University of West Alabama

Dr. Hung K. Tiong is a fulltime microbiology faculty member at the University of West Alabama (UWA), Livingston, AL. Since Dr. Tiong's tenure-based appointment in 2017, he has equally worked in teaching and research (i.e., principal investigator). Since 2017, Dr. Tiong's responsibilities have included serving on UWA Health Professions Advising Committee, serving on University Scholar Committee, and serving on University Research Symposium (URS) Organizing Committee. Dr. Tiong has a strong technical background and research interest in foodborne microorganisms in the areas of detection, isolation, identification (16S rDNA gene sequencing), virulence characterization of foodborne pathogens and their toxins (adherent *Listeria*, *Vibrio* spp, shiga toxins), the use of antimicrobials to inhibit foodborne pathogens and spoilage microorganisms (bacteriocins, thermal destruction, intervention chemicals), and verification of food safety processes using inoculated validation studies. For this research, Dr. Tiong has worked with a diverse group of food samples (namely, farm/market as well as raw/ready-to-eat fresh produce and animal products) and farm operators. Dr. Tiong has a dedicated BSL-2 pathogens testing laboratory supported by student research cooperators as well as monetary awards and an U.S. Department of Agriculture (USDA) research grant. Dr. Tiong's ongoing/future microbial food safety research aims to isolate and characterize antimicrobial-resistant and producing foodborne pathogens and lactic acid bacteria, respectively. Dr. Tiong has degrees in Biology/Microbiology-based majors for master's degree (Microbiology and Molecular Genetics) and Ph.D. (Food Science-Microbiology, where he focused on biological molecules and genetics of pathogens found within food). Dr. Tiong serves or has served as a manuscript reviewer for various peer-reviewed journal articles, has published numerous peer-reviewed research articles in high impact factor journal publishers, has participated in or supported students for research presentations at the International Association for Food Protection (IAFP) annual conferences, has supported students for research presentation at the Institute of Food Technologists (IFT) annual conference, and serves on Asia-Pacific Symposium on Food Safety organizing committee.

Voice, Thomas

Michigan State University

Dr. Thomas C. Voice is an environmental engineer specializing in environmental chemistry and physical-chemical processes in environmental systems. His research interests focus primarily on the behavior of pollutants in natural and engineered systems, and have included a wide array of applications including water and waste treatment, acid deposition, site remediation, fate and transport studies, and exposure and risk assessment, and environmental health analysis. Much of this work has involved international collaborations, where he has led programs in Pakistan, Southeastern Europe, France-Ukraine-Russia, and Mexico. He has also been active in projects at the science/policy interface and has overseen environmental outreach, technical assistance and technology transfer programs under EPA, NSF and NIH centers and programs. Professor Voice currently serves as Senior Associate Dean for the College of Engineering at Michigan State University where he oversees administrative operations, compliance, international programs and academic human resources. He has held a number of positions on advisory or administrative boards, including the Board of Directors for Consumer Reports since 2008. He holds a B.S. in electrical engineering, and M.S. and Ph.D. degrees in environmental and water resources engineering, all from the University of Michigan. He is a registered professional engineer in Michigan and Missouri.

Vollmer-Sanders, Carrie

The Nature Conservancy

Ms. Carrie Vollmer-Sanders is the North American Nutrient Strategy Manager for The Nature Conservancy. She helps coordinate the Conservancy's efforts to reduce nutrient loss from agricultural land impacting freshwater and oceans. Ms. Vollmer-Sanders received the White House Champion of Change Award in 2014 for her leadership in developing the 4R Nutrient Stewardship Certification Program for Lake Erie. Prior to joining The Nature Conservancy in 2010, Ms. Vollmer-Sanders was the Agricultural Ecology Specialist at Michigan Farm Bureau. She has a bachelor's degree in Agriculture and Biology Education and a master's degree in Agricultural Economics, both from Michigan State University. Ms. Vollmer-Sanders and her husband, Ryan, live in Angola, Indiana where they own and operate Grains and Greens, Inc, a farm that grows corn, soybeans and wheat. Ms. Vollmer-Sanders and her husband are part of the National Corn Growers Association's Soil Health Partnership, a farmer-led research program to better understand the impact of cover crops on soil health and farm economics.

von Stackelberg, Katherine

Harvard T.H. Chan School of Public Health

Dr. Katherine von Stackelberg is a Research Scientist in the Department of Environmental Health and an affiliate of the Harvard Center for Risk Analysis at the Harvard T.H. Chan School of Public Health. She is also co-leader of the Biogeochemistry of Global Contaminants Group at Harvard University and a Principal at NEK Associates LTD. Dr. von Stackelberg has 30 years of experience designing and implementing human health and ecological risk assessments, focused on integrated, risk-based modeling approaches to support sustainable environmental decision making. She has published on the use of uncertainty analysis in decision making, bioaccumulation modeling, and use of decision analytic approaches to integrate ecosystem services and risk assessment for more effective decision making. She has served as Leader of the Research Translation Core of a Superfund Research Program. Dr. von Stackelberg is the Area Editor for Ecological Risk Assessment for the journal Risk Analysis and serves on the editorial boards of Human and Ecological Risk Assessment and Risk Analysis, and is a frequent peer reviewer for several additional journals. Dr. von Stackelberg served on the Board of Scientific Counselors at the U.S. EPA for six years and was Chair for the last three. She led the effort to explore the use of decision analytic tools and methods to support environmental decision making within the U.S. EPA Office of Research and Development. She is a member of the Scientific Advisors on Risk Assessment for the European Commission in Brussels, and served on several technical committees of the Interstate Technology and Regulatory Council (ITRC), including complex sites, contaminated sediments, and risk assessment. Dr. von Stackelberg served as Treasurer for the Society for Risk Analysis, and currently serves as Treasurer on the Board of Directors for the Society for Environmental Toxicology and Chemistry (SETAC). She has served on several U.S. EPA funding and grant program peer review panels. She has been an invited participant to numerous workshops and seminars addressing diverse issues in environmental risk and decision making. She has served as reviewer for the European Commission under HBM4EU (human biomonitoring program) and proposal review under Horizon 2020. Dr. von Stackelberg received an A.B. cum laude from Harvard College, and a Sc.M. and Sc.D. from the Harvard School of Public Health in Environmental Science and Risk Management. During the past two years her research has been funded by: U.S. EPA Science to Achieve Results (STAR) grants (completed Dec. 31, 2018) and the Department of Defense Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP).

Wells, E. Christian

University of South Florida

Dr. E. Christian Wells is Professor of Anthropology and Director of the Center for Brownfields Research and Redevelopment at the University of South Florida (USF), and a Fellow of the American Association for the Advancement of Science. At USF, he has served as Founding Director of the Office of Sustainability and as Deputy Director of the Patel School of Global Sustainability. He holds affiliate faculty appointments in the Institute for the Advanced Study of Culture and the Environment, the Water Institute, the Institute for the Study of Latin America and the Caribbean, and the Florida Institute of Forensic Anthropology and Applied Science. Dr. Wells received his B.A. from Oberlin College and his M.A. and Ph.D. in Anthropology from Arizona State University. He is an applied environmental anthropologist whose research portfolio includes substantive work on environmental remediation (brownfields and legacy contaminants), anthrosol formation (fate and transport of heavy metals), water/wastewater management (nutrient dynamics), environmental justice, community and stakeholder engagement, sustainable and equitable development, science-policy interactions, and quantitative modeling and simulation of social and environmental science data. Over the past 20 years, he has undertaken social and environmental science research throughout the U.S., Central America, and the Caribbean with over \$7 million in funding from the Environmental Protection Agency, the National Science Foundation, and other organizations including the School for Advanced Research. His work has been featured by various media outlets, including The New York Times, New Scientist, and over 100 other news media. He has authored or edited 10 books and journal issues, more than 100 articles and essays, and over 150 conference presentations. He has served on numerous national scientific advisory committees and boards and currently serves as Science Advisor to the Florida Brownfields Association.

Wilcoxon, Peter J.

Syracuse University

Dr. Peter J. Wilcoxon is a Professor in the Department of Public Administration and International Affairs at Syracuse University's Maxwell School, and he is also a Nonresident Senior Fellow at the Brookings Institution. He is the author or coauthor of three books and more than 50 papers and has won teaching awards at Harvard University and Syracuse University. Dr. Wilcoxon's principal area of research is the effect of environmental and energy policies on economic growth, international trade, and the performance of individual industries. His work often involves the design, construction and use of large-scale intertemporal general equilibrium models. He is coauthor of IGEM, a thirty-five-sector econometric general equilibrium model of the U.S. economy that has been used to study a wide range of environmental, energy and tax policies. He is also coauthor of G-Cubed, a nine-region, twelve-sector general equilibrium model of the world economy that has been used to study international trade and environmental policies. In addition, he is a coauthor of a graduate-level textbook on general equilibrium modeling. Many of his recent publications have focused on national and international policies to control climate change. Dr. Wilcoxon received his B.A. in physics from the University of Colorado and his A.M. and Ph.D. in economics from Harvard University. His past positions include Associate Professor of Economics, the University of Texas at Austin; Assistant Professor of Economics, the University of Texas at Austin; Visiting Fellow, the Brookings Institution; Visiting Scholar, Harvard University, and Senior Research Fellow, the University of Melbourne in Australia. In addition, he has served on the EPA Science Advisory Board Environmental Economics Advisory Committee. Dr. Wilcoxon's research has been supported by EPA, the National Science Foundation, the Department of Energy, and private sector organizations.

Williams, Pamela

E Risk Sciences, LLP,

Dr. Pamela Williams is a Principal at E Risk Sciences, LLP, an independent scientific consulting firm that provides sound analyses and tools to support risk-based decision-making related to human health and the environment. She is also a Clinical Assistant Professor in the Department of Environmental and Occupational Health at the Colorado School of Public Health as well as a Fellow with the non-profit organization Toxicology Excellence for Risk Assessment (TERA). Dr. Williams has a B.A. in Sociology and Applied Social Research from San Diego State University, M.S. in Health and Social Behavior from Harvard University, and ScD in Environmental Health and Health Policy and Management from Harvard University. She is also a certified industrial hygienist (CIH). Dr. Williams specializes in assessing human exposures and health risks in environmental, community, and occupational settings. Her areas of expertise include human health risk assessment, exposure science, exposure modeling, and uncertainty analysis. She is particularly interested in novel risk assessment methods and tools including cumulative risk assessment, exposome, and biomarkers of exposure and effect. She has published over 100 papers, book chapters, and presentation abstracts on various exposure and risk-related topics. She has also taught graduate-level and continuing education courses related to exposure and risk assessment at the Colorado School of Public Health, Harvard School of Public Health, Society of Toxicology, and the American Industrial Hygiene Association (AIHA). She routinely serves as a technical peer-reviewer for a number of scientific journals, peer review panels, and government agencies. Dr. Williams is past President of the Society for Risk Analysis (SRA) and past Chair of AIHA's Risk Committee. She has received several awards for her contributions to the fields of risk analysis, exposure science, and industrial hygiene. These include the Chauncey Starr Distinguished Award granted by the Society for Risk Analysis for excellent contributions to the field of Risk Analysis, the Joan M. Daisey Outstanding Young Scientist Award granted by the International Society of Exposure Science for outstanding contribution to the science of human exposure analysis, and both a Leadership Award and Outstanding Individual Contributor Award granted by AIHA in recognition of leadership and outstanding contributions to AIHA.

Wu, Felicia

Michigan State University

Dr. Felicia Wu is the John A. Hannah Distinguished Professor of Food Science and Human Nutrition and Agricultural, Food, and Resource Economics at Michigan State University (MSU). She earned her A.B. and S.M. in Applied Mathematics and Medical Sciences at Harvard University, and her Ph.D. in Engineering and Public Policy at Carnegie Mellon University. Her research examines the national and global burden of foodborne disease, how regulations affect global trade networks and influence chemical exposures, the role of *in utero* chemical exposures, nutrition, and socioeconomic factors on infant immunity, and the cost-effectiveness of strategies to improve food safety along supply chains in the United States and worldwide. Recently, her work has expanded to examine the risk of antimicrobial resistance from antibiotic use in livestock production. For her research on the impact of aflatoxin regulations on global liver cancer risk, Dr. Wu was awarded a U.S. National Institutes of Health (NIH) EUREKA Award. She was commissioned by the World Health Organization (WHO) to estimate the global burden of disease caused by aflatoxin and arsenic in food, and co-authored the WHO 2015 report on the Global Burden of Foodborne Disease. Currently, Dr. Wu serves as an expert advisor to the Joint FAO/WHO Expert Committee on Food Additives (JECFA) of the United Nations. She is an area editor for two journals: *Risk Analysis and World Mycotoxin Journal*, and on the editorial board of *Archives of Environmental and Occupational Health*. Recently, she served on the U.S. National Academy of Sciences panel on the future of animal sciences research for global food security. She also served as an invited reviewer for the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report on the topics of land use and food security. Dr. Wu was a Scientific Advisor to the Food, Nutrition, and Safety Program of the International Life Sciences Institute (ILSI). She was selected to serve on the MSU Presidential Search Committee, and now serves on the Presidential Transition Committee. Dr. Wu has received funding from multiple sources including the NIH, the U.S. Department of Agriculture (USDA), the Bill & Melinda Gates Foundation, Grand Challenges Canada, ILSI, and the U.S. Agency for International Development (USAID).