

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA)  
SCIENTIFIC ADVISORY PANEL (SAP)  
November 28 to 30, 2017, MEETING  
Ad Hoc MEMBER BIOGRAPHICAL SKETCHES  
Docket Number: EPA-HQ-OPP-2017-0214**

**Ioannis Androulakis, Ph.D.**

Dr. Androulakis is a Professor in the Department of Biomedical Engineering, the Department of Chemical & Biochemical Engineering and holds an Adjunct faculty position in the Department of Surgery at the Rutgers-Robert Wood Johnson Medical School. His research focuses on systems biology and pharmacology of inflammation with special emphasis on the interactions between the circadian, cell cycle and immune systems. He was recently elected Fellow of the American Institute for Medical and Biological Engineering. His research has been funded by the NIH, EPA, NSF and ONR. Dr. Androulakis holds a BS degree from NTUA, Athens, Greece; MS/PhD from Purdue University, all in Chemical Engineering. He was a Research Associate at Princeton University and prior to joining Rutgers was with ExxonMobil's Corporate Strategic Research Laboratories in New Jersey.

**Scott Belcher, Ph.D.**

Dr. Scott Belcher is Research Professor of Biological Sciences in the College of Sciences at North Carolina State University. Prior to assuming his current position at North Carolina State University, Dr. Belcher served as Professor of Pharmacology and Cell Biophysics, and in the Department of Environmental Health at the University of Cincinnati College of Medicine from 2004-2016. He has previously served as an expert committee member on US EPA – FIFRA Scientific Advisory and World Health Organization/Food and Agriculture Organization of the United Nations panels assessing the toxicology and safety testing of endocrine disrupting chemicals. His primary research efforts are aimed at understanding the role of estrogen signaling in development and disease. This research is focused on defining mechanisms of estrogen mediated signaling in childhood brain cancer, cardiovascular physiology, and how xenobiotics acting through nuclear receptors can impact development to cause cellular dysfunction and disease.

**Veronica J. Berrocal, Ph.D.**

Dr. Veronica J. Berrocal is Associate Professor of Biostatistics at the University of Michigan. Her expertise and research interests are in spatial and environmental statistics with a particular interest on development and application of statistical methods for environmental exposure risk assessment, particularly air pollution, weather and climate modeling, and their impact on health. Dr. Berrocal is the current core co-leader of the Integrated Health Sciences Core of the University of Michigan NIEHS-funded P30 center MLEEaD – Michigan Lifetime Environmental Exposure and Disease. She has also been and is currently co-Investigator on multiple NIH-funded, HEI-funded, and NSF-funded research projects, investigating the effect of the physical and built environment on health, the impact of climate change on health, as well as studies on rheumatic diseases, and brain cancer, among others. Prior to joining the University of Michigan as faculty, Dr. Berrocal was a postdoctoral fellow at Duke University, in the Department of Statistical Science and in the Children Environmental Health Initiative center, and a National Research Council postdoctoral research associate at the U.S. Environmental Protection Agency in the National Exposure Research Laboratory.

### **Rebecca A. Clewell, Ph.D.**

Dr. Rebecca A. Clewell, is the Chief Scientific Officer for ScitoVation, LLC. Her career path began with the Department of Defense, developing PBPK models, and moved on to in life toxicity studies and cell based assay development at The Hamner Institutes. In 2016, Rebecca and several colleagues started the small business ScitoVation, a research group focused on developing tools and methodologies to support in vitro based risk assessments. These goals are accomplished through the development of fit-for-purpose in vitro assays that encompass the relevant human biology and are predictive of alterations of cellular signaling processes (toxicity pathways) that may lead to adversity. Together with in vitro-in vivo extrapolation (IVIVE) and exposure modeling, these cell-based methods are designed to provide a point of departure for safety assessments based solely on biologically relevant in vitro data.

### **J. David Furlow, Ph. D.**

Dr. J. David Furlow is a Professor of Neurobiology, Physiology, and Behavior, in the College of Biological Sciences, at the University of California, Davis, where he has served on the faculty since 1998. Dr. Furlow is also Associate Dean for Undergraduate Education, and Director of the University Honors and First Year Seminars Programs since 2015. Dr. Furlow received his Bachelor of Science degree in Biochemistry from the Pennsylvania State University. He earned his Ph.D. in Biochemistry from the University of Wisconsin, Madison, and was a National Institutes of Health supported post-doctoral fellow at the Carnegie Institution of Washington, Department of Embryology, in Baltimore, MD, before joining the faculty at UC Davis. Dr. Furlow has served as a faculty member and director of the Physiology summer course at the Marine Biological Laboratory in Woods Hole, MA, where he has also been in residence as a Whitman Fellow visiting scientist. He has regularly served on grant review study sections for the National Institutes of Health and US EPA Scientific Advisory Panels. As an active member of two graduate groups at UC Davis, the Furlow laboratory investigates the control of gene expression by nuclear hormone receptors during development. The program has recently focused on the impact of environmental chemicals on thyroid hormone receptor activity and the development of novel synthetic thymimetic compounds. This research includes a long-standing collaboration with Dr. Tinka Murk at Wageningen University in the Netherlands. Research in Dr. Furlow's laboratory has been funded by extramural grants from the National Institutes of Health, the USEPA, and the Netherlands Organization for Scientific Research.

### **Susan Nagel, Ph.D.**

Dr. Susan C. Nagel is an Associate Professor of Obstetrics, Gynecology and Women's Health at the University of Missouri. Dr. Nagel is Director of OBGYN Resident Research and the OBGYN Research Success Center. Her primary research interests are in steroid receptor action and endocrine disrupting chemicals, particularly those that program development and alter adult health and disease. Dr. Nagel has an NIH funded research program to investigate the endocrine disrupting properties of chemicals used in hydraulic fracturing for natural gas and oil. She uses human cell culture in vitro bioassays in an effects directed analysis to identify chemicals in surface and ground water near oil and gas development that have EDC activity. Prior to joining the faculty at MU, she worked as a postdoctoral fellow at Duke University where she studied mechanisms of estrogen receptor action.

### **Michael L. Pennell, Ph.D.**

Dr. Pennell is an Associate Professor of Biostatistics in the College of Public Health at The Ohio State University. Prior to joining the faculty at Ohio State in 2006, he received his PhD in Biostatistics from the University of North Carolina at Chapel Hill and was both a predoctoral and postdoctoral trainee at the National Institute of Environmental Health Sciences. Dr. Pennell also holds a B.S. in Biology from the University of Puget Sound in Tacoma, Washington. His research interests are in Bayesian nonparametric and Bayesian survival analysis methods motivated by applications in toxicological risk assessment. His methodological research has been published in top-tier biostatistical journals including *Biometrics* and *Statistics in Medicine*. Dr. Pennell is also an active collaborator having worked with investigators in cancer prevention, biomedical informatics, cardiology, and veterinary medicine and has been a co-Investigator on grants from the National Cancer Institute, Breast Cancer Research Foundation, and National Heart, Lung, and Blood Institute. Dr. Pennell has 68 peer reviewed publications which are mixture of statistical methodology and collaborations in biomedical studies. He was also the 2016 recipient of the James E. Grizzle Distinguished Alumnus Award from the University of North Carolina at Chapel Hill Department of Biostatistics, which is one of the largest biostatistics departments in the country.

In addition to his research, Dr. Pennell has been involved in the field of risk analysis through education and service activities. For the past ten years, he has taught a unit on dose-response assessment in the Principles of Risk Assessment course at Ohio State. In terms of service, he has been an Associate Editor of the journal *Lifetime Data Analysis* for the past three years and has held a few different positions in the Section on Risk Analysis of the American Statistical Association (Program Chair Elect in 2015, Program Chair in 2016, and Chair Elect in 2017). He has also served on two EPA Scientific Advisory Board review panels (Trichloroethylene in 2010 and Libby Amphibole Asbestos in 2012) and was a member of the Chemical Safety Advisory Subcommittee for 1-Bromopropane in 2016.

### **Edward J. Perkins, Ph.D.**

Dr. Edward J. Perkins currently serves as Senior Research Scientist (ST) in Environmental Networks and Genetic Toxicology in Environmental Laboratory at the U.S. Corps Engineers Army Engineer Research and Development Center. Dr. Perkins received his PhD at Washington State University investigating the molecular biology of 2,4-D degradation by *Alcaligenes eutrophus* JMP4. Prior to joining ERDC, Dr Perkins worked in development of transgenic plants for phytoremediation and molecular measures of soil quality. Dr. Perkins joined the ERDC Environmental Laboratory in 1996 where he established a genetics research lab. His research focuses on using toxicogenomics and systems biology to understand chemical impacts on a wide range of species including rat, bobwhite quail, Japanese quail, earthworms, fish (Fathead Minnow and Zebrafish), invertebrates (daphnia) and coral. His current work focuses on development and application of new toxicogenomic tools, computational models and approaches for understanding the impact of chemicals on animals in the environment. Dr. Perkins provides guidance for the Army on basic and applied research programs, in addition to consulting on issues of national and international importance for the US Army Corps Engineers, DoD, and the Organization for Economic Cooperation and Development.

### **Kristi Pullen Fedinick, Ph.D.**

Dr. Pullen Fedinick is a Staff Scientist in the Health and Environment Program at the Natural Resources Defense Council and a Professorial Lecturer in the Department of Environmental and Occupational Health of the Milken Institute School of Public Health at The George Washington University. Dr. Pullen Fedinick's research career includes experience in molecular, structural, and computational biology; biochemistry; and population health. She has worked across a wide range of environmental health topics including air and drinking water quality, science communication, environmental justice, and the use of emerging methods in chemical assessments. She holds a bachelor's degree in biochemistry and molecular biology from the University of Maryland, Baltimore County, a PhD in molecular and cell biology from the University of California, Berkeley, and was a Robert Wood Johnson Foundation Health and Society Scholar at the Harvard T. H. Chan School of Public Health.

### **Grant B. Weller, Ph.D.**

Dr. Grant B. Weller is a Senior Research Scientist at Savvysherpa, Inc. in Minneapolis, Minnesota, a research and development company working on innovations in healthcare delivery. In his current position, he develops and leads research to support implementation of venture initiatives with stakeholders in the healthcare industry, including provider systems, clinical researchers, health insurance companies, medical device manufacturers, and pharmaceutical companies. His recent work has focused on statistical methodology for data-driven clinical risk prediction and population health management. Dr. Weller's research interests within statistics also include extreme value theory, time series forecasting, and spatial models in epidemiology. He received a Ph.D. in Statistics in 2013 from Colorado State University, and was previously a visiting assistant professor in the Statistics department of Carnegie Mellon University.

### **R. Thomas Zoeller, Ph.D.**

Dr. R. Thomas Zoeller, is Professor of Biology at the University of Massachusetts, Amherst. His early training was in molecular neuroendocrinology at the National Institutes of Health in Bethesda, MD. His current research focuses on the role of thyroid hormone in brain development with an emphasis on the fetal brain. Dr. Zoeller's lab also studies the mechanisms by which environmental endocrine disruptors can interfere with thyroid hormone action in the brain and his laboratory has published over 100 peer reviewed papers on these topics. Dr. Zoeller was a member of the U.S. EPA's Endocrine Disruptor Screening and Testing Advisory Committee working group on Screening and Testing in the 1990's and has served on several EPA committees since then, including the Chartered Science Advisory Board, chair of their Exposure and Human Health Committee, and two other SAPs. He has received numerous awards for his work, including the "Scientist of the Year – 2002" from the Learning Disabilities Association, a Samuel F. Conti Award for Research Excellence, and recently received the UMass Chancellor's Medal for research. He has written extensively on issues of Endocrine Disruption and Public Policy, and was one of the editors of the recent State of the Science of Endocrine Disruption published by a joint United Nations/World Health Organization project.