

**FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT  
SCIENTIFIC ADVISORY PANEL  
OPEN MEETING**

**OCTOBER 18-21, 2016**

**FIFRA SAP Website <https://www.epa.gov/sap>**

**Docket Number: EPA-HQ-OPP-2016-0385**

**U.S. Environmental Protection Agency Conference Center  
Lobby Level One Potomac Yard (South Bldg.) 2777 S. Crystal Drive  
Arlington, VA 22202**

**FIFRA SAP Review of a Set of Scientific Issues being Evaluated by the  
Environmental Protection Agency (EPA) regarding EPA's Evaluation of the  
Carcinogenic Potential of Glyphosate**

**Biosketches for FQPA Science Review Board Members**

**Kenny Crump, Ph.D.**

Dr. Kenny S. Crump holds a B.S. in Electrical Engineering from Louisiana Tech University, an M.A. in mathematics from the University of Denver, and a Ph. D. in mathematics from Montana State University. He is currently working part-time as a private consultant. Dr. Crump's research involved development and application of methodologies for quantitative assessment of risks from exposures to toxic substances. He has developed statistical models that have been used by governmental regulatory agencies and private groups for assessing such risks. He has served on science advisory boards of the EPA, the National Center for Toxicological Research, the Mickey Leland National Urban Air Toxics Research Center, the National Institute of Environmental Health Sciences, and on committees of the National Research Council.

**Laura C. Green, Ph.D., D.A.B.T.**

Dr. Laura C. Green is President and Senior Toxicologist at Green Toxicology LLC. She trained in (i) chemistry at Wellesley College (1975), (ii) food science, toxicology, and biochemical epidemiology at the Massachusetts Institute of Technology (M.I.T., 1981), and (iii) regulatory policy at the Harvard School of Public Health (1983-1985). Dr. Green served on the part-time faculty of M.I.T. for 25 years, as a Lecturer in Environmental Health and Toxicology. She currently consults in the areas of chemical carcinogenesis, general toxicology, cancer epidemiology, and health risk assessment. Dr. Green has been board-certified in toxicology since 1988.

**Peter F. Infante, Dr.P.H.**

Dr. Infante is currently the Managing Member of Peter F. Infante Consulting, LLC, an organization dedicated to research and analysis of occupational and environmental health issues. Between 2002 and 2011, he was Adjunct Professor, and Professorial Lecturer, of Environmental and Occupational Health at the George Washington University, School of Public Health, Washington. He was previously the Director, Office of Standards Review, Health Standards Program and Director of the Office of Carcinogen Identification and Classification at OSHA. During his 24 years in OSHA, he played a major role in determining cancer and other risks to workers during the development of standards for a number of toxic substances, including asbestos, arsenic, benzene, cadmium, ethylene oxide, formaldehyde, lead and MDA. Prior to working at OSHA, he was employed by the National Institute for Occupational Safety and Health (NIOSH) where he conducted epidemiological studies related to a number of carcinogens found in the workplace including, benzene, beryllium and vinyl chloride. He has served as an expert consultant in epidemiology for: the National Toxicology Program's (NTP) Report on Carcinogens (RoC); for Working Groups of the International Agency for Research on Cancer (IARC); the EPA Science Advisory Board (SAB) Chemical Assessment Advisory Committee; and as an expert on cancer risk from asbestos exposure for the World Trade Organization (WTO) in Geneva, Switzerland. He has testified before the U.S. Congress on numerous occasions about chemical pollution and the causes of cancer. He is a Fellow of the American College of Epidemiology and the Collegium Ramazzini. Dr. Infante received his D.D.S. degree from the Ohio State University, and his Dr.P.H. degree from the University of Michigan, School of Public Health, Department of Epidemiology.

**Kristi Muldoon Jacobs, Ph.D.**

Dr. Muldoon Jacobs is a Toxicology Supervisor of the Division of Food Contact Notifications in the Office of Food Additive Safety in Center for Food Safety and Applied Nutrition at the Food and Drug Administration (FDA). In this position, Dr. Muldoon Jacobs is responsible for the toxicology review and safety evaluation of food additives including food contact substances, processing aids, and antimicrobials along with their impurities, and constituents. In addition to her work at the FDA, she has served the World Health Organization (WHO) Joint evaluation committee on Food Additives and European Food Safety Authority (EFSA) on several occasions as an expert in food additive safety evaluations. Dr. Kristi Muldoon Jacobs earned her Ph.D. degree from the University of Medicine and Dentistry of New Jersey, Graduate School of Biomedical Sciences. Before joining the Food and Drug Administration in 2008, she was a fellow at the National Institutes of Health, National Cancer Institute in the Radiation Oncology Branch studying mechanisms and induction of carcinogenesis.

**Barbara L. Parsons, Ph.D.**

Dr. Barbara L. Parsons is a Research Microbiologist in the Division of Genetic and Molecular Toxicology at the U.S. Food and Drug Administration's National Center for Toxicological

Research (NCTR). Dr. Parsons developed the highly-sensitive, Allele-specific Competitive Blocker-PCR method to quantify specific hotspot oncogene and tumor suppressor gene mutations at very low frequencies (10<sup>-5</sup>). Dr. Parsons' group at NCTR has produced a large body of work validating ACB-PCR measurement of hotspot oncomutations in KRAS, HRAS, BRAF, PIK3CA, and EGFR, as biomarkers for assessing the carcinogenic potential of chemical exposures in rodents and as biomarkers of cancer susceptibility and therapeutic response in humans.

### **Kenneth Portier, Ph.D.**

Dr. Kenneth M. Portier is Vice President of the Statistics & Evaluation Center at the American Cancer Society (ACS) home office in Atlanta, GA, and Affiliate Professor of Biostatistics in the School of Public Health, Emory University. A native of south Louisiana, Dr. Portier holds an M.S. in Statistics (1975) and Ph.D. in Biostatistics (1979) from the University of North Carolina, Chapel Hill. Dr. Portier was a statistical consultant and teacher at the University of Florida for 27 years, working with researchers in agriculture, environment, natural resources, and environmental health. With ACS since early 2006, he provides administrative and statistical support on design and analysis of cross-sectional and longitudinal sample surveys, program evaluation and cancer modeling. He has participated in over 60 FIFRA-SAP meetings since 1999 and five SAB science review panels. In addition, Dr. Portier has served on expert and advisory panels for the National Institutes of Health (NIH), National Institute of Environmental Health Sciences (NIEHS), the National Toxicology Program (NTP), and the World Health Organization Food and Agriculture Organization (WHO/FAO). His research interests are wide, including the application of new statistical methodologies to cancer research and environmental health.

### **Aramandla Ramesh, Ph.D.**

Dr. Aramandla Ramesh is an Associate Professor in the Department of Biochemistry & Cancer Biology at Meharry Medical College in Nashville, TN. Dr. Ramesh earned his first Ph.D. in Marine Microbiology from Annamalai University, India in 1986. He earned his second Ph.D. in Environmental Toxicology from Ehime University, Japan in 1992. His areas of expertise are bioavailability, toxicokinetics, and biotransformation, acute and subchronic toxicity of polycyclic aromatic hydrocarbons (PAHs). Current research in Dr. Ramesh's laboratory focuses on colon cancer caused by benzo(a)pyrene (BaP). Studies in his laboratory have shown that exposure of rats and mice to BaP and other PAHs through saturated fat cause induction of cytochrome P450 (CYP) family of enzymes resulting in the formation and distribution of reactive metabolites which stay in target tissues for a longer time and cause enhanced DNA damage. Ongoing research in his laboratory will eventually address the issue of how environmental factors (exposure to toxicants) and dietary practices (excessive intake of animal meat and fat products tainted with BaP) contribute to colorectal cancer in African Americans (third leading cause of cancer related mortalities) relative to other racial/ethnic groups. Dr. Ramesh's association with the Meharry Medical College-Vanderbilt University Environmental Health consortium allows him to combine his long standing research experience in classical PAH toxicology and work

collaboratively with Vanderbilt colleagues to investigate the interplay between diet and environmental toxicant exposure using state-of-the-art analytical and molecular approaches. As a Robert Wood Johnson Health Policy Associate, his current research is focused on exposure of minority communities to environmental chemicals and health disparities. Dr. Ramesh has extensively published in environmental chemistry & toxicology (more than 60 peer-reviewed publications, and 8 book chapters). He is also serving as a reviewer for research proposals submitted to the NIH, HRSA, NSF, EPA, Robert Wood Johnson Foundation, and NERC, UK, Cancer Research Fund, UK and INSERM, France. Dr. Ramesh also serves on the editorial boards of Toxicology Mechanisms & Methods, ISRN Toxicology, and Polycyclic Aromatic Compounds.

**Daniel Zelterman, Ph.D.**

Dr. Zelterman completed his PhD in statistics in 1983. After serving on faculty positions at two other universities, he returned to Yale in 1995 as Professor of Biostatistics and to head the Biostatistics Core of the Yale Comprehensive Cancer Center. Dr. Zelterman has over 150 published works including six books on applied statistical methods. His methodological research is centered in applied statistics, specifically on the analysis of discrete-valued data. Dr. Zelterman's collaborative work is mostly in cancer: clinical trials, laboratory studies, and population studies. He has a number of methods publications on assessing the risks associated with low-dose exposure to carcinogens. These studies include both in vivo as well as in utero risks, mostly for cancer outcomes but also for birth defects. Dr. Zelterman has also served as Special Advisor to the US FDA on a committee that evaluates safety and efficacy for anesthetic drugs.

**Luoping Zhang, Ph.D.**

Dr. Luoping Zhang is a Professor of Research in Toxicology in the Division of Environmental Health Sciences (EHS), School of Public Health at the University of California, Berkeley where she has been employed since 1992. For the past two decades, her research has focused on understanding the molecular mechanisms of bone marrow toxicity caused by benzene, formaldehyde, and many other toxic chemicals in human studies, animal models, and in vitro testing. To identify novel biomarkers and disease-related mechanisms associated with these chemical exposures, Prof. Zhang has developed and employed many high-throughput technologies, such as OctoChrome FISH, single-cell genetic analysis (SCGA), advanced omic-based methodologies, next-generation sequencing (NGS), RNAi, and most recently, CRISPR-Cas9. Prof. Zhang has been involved as a co-project leader in the Berkeley Superfund Research Program (SRP) for the last 10 years. She has been appointed by California Governor Brown as a member of Carcinogen Identification Committee since 2012. Prof. Zhang has also served as a member on various committees for the Institute of Medicine at the National Academies of Sciences, Engineering, and Medicine.