FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT
SCIENTIFIC ADVISORY PANEL
OPEN MEETING
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FIFRA SAP Website https://www.epa.gov/sap
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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

Biographical Sketches 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.

Eric S. Johnson, M.B.;B.S. (M.D.), Ph.D., M.P.H., D.T.P.H.

Dr. Eric Johnson is currently a professor, and former chair of the department of Epidemiology at the University of Arkansas for Medical Sciences. His research interests include the utilization of the occupational environment to study long-term adverse effects of widespread environmental chemical and biological exposures that pose potential threats to the health of the general population. He is currently the principal investigator for a six-year case-cohort study funded by the National Institute for Occupational Safety & Health investigating the role of exposures to oncogenic viruses and other infectious agents and carcinogenic chemicals in the workplace in the occurrence of excess cancer, neurologic and other diseases in workers in poultry plants. His past experience includes working at the International Agency for Research on Cancer (WHO) where he was the scientist responsible for putting together the 12-country international study on workers exposed to dioxins and furans during the manufacture and spraying of phenoxyacetic acid herbicides and chlorophenols. He also worked at the National Institute for Environmental Health Sciences (NIEHS) where he pursued his research interests.

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 (10-5). 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.

Lianne Sheppard, Ph.D.

Dr. Elizabeth A. (Lianne) Sheppard, PhD is Professor and Assistant Chair in the Department of Environmental and Occupational Health Sciences and Professor of Biostatistics at the University of Washington. She holds a B.A. in psychology and a Sc.M. in biostatistics from Johns Hopkins University, and a Ph.D. in biostatistics from University of Washington. Her research interests focus on modeling and understanding the health effects of environmental and occupational exposures with particular emphasis on statistical methods for environmental and occupational epidemiology. She actively collaborates on a variety of research projects in the environmental and occupational health sciences and has been lead statistician for the Multi-Ethnic Study of Atherosclerosis and Air Pollution (MESA Air) study, a 10-year study funded by EPA to determine the effect of long-term air pollution exposure on subclinical progression of cardiovascular disease. Dr. Sheppard directs a NIEHS-funded program for quantitative training in the environmental health sciences. Her recent research funding comes from EPA, NIEHS, and NIOSH. She is a fellow of the American Statistical Association and a member of the editorial

board for Epidemiology. She serves on the Health Effects Institute's Review Committee, and has advised EPA through service on several Clean Air Scientific Advisory Committee special panels and Science Advisory Board ad hoc committees.

Emanuela Taioli, M.D., Ph.D.

Dr. Taioli obtained her Medical Degree from the University of Milano, where she also completed her Residency in Cardiology. She obtained an M.S. and a PhD. in Epidemiology from Columbia University. Dr. Taioli worked under a North Atlantic Treaty Organization (NATO) fellowship at the American Health Foundation in New York, and then as an Assistant Professor in the Department of Environmental Medicine at New York University. During that period, she conducted studies on genetic susceptibility to environmental factors in lung and breast cancer, and differences in estrogen metabolism with ethnicity in women. She then accepted a position as the Director of the Unit of Molecular and Genetic Epidemiology at the main University Hospital in Milano (Italy). She became the Principal Investigator of the International Study on Genetic Susceptibility to Environmental Carcinogens project, a pooled analysis of individual epidemiologic and genetic data including over 200,000 subjects, which was started in 1997 and funded by the European Commission for Research. Dr. Taioli has also been a technical advisor to the Italian Ministry of Health between 2002 and 2004. In that capacity, she was a member of the European High Group of Reflection on Patients Mobility, and she has participated in drafting the national anti-smoking law that was approved in January 2003 by the Italian parliament. Between 2005 and 2008, Dr. Taioli was Director of the Division of Cancer Prevention and Population Science at the University of Pittsburgh Cancer Institute, where she also held the Arnold Palmer Endowed Chair in Cancer Prevention. During that period, she developed a successful partnership with Hampton University under National Institutes of Health (NIH) funding, to teach Epidemiology to undergraduate minority students. She has been the Chair of the Department of Epidemiology and Biostatistics at the State University of New York (SUNY) Downstate and was Professor and Chief of Epidemiology at North Shore-Hofstra School of Medicine. She is currently Professor, Population Health Science and Policy, and Thoracic Surgery, Director, Institute for Translational Epidemiology, Director, Center for the Study of Thoracic Diseases Outcome, and Director, Division of Social Epidemiology at the Icahn School of Medicine at Mount Sinai. Dr. Taioli is the co-author of over 300 peer reviewed papers. She is currently funded by NIOSH to study prostate and thyroid cancer in WTC responders, and by CDC to study the health effects of Hurricane Sandy. She also holds a training grant towards undergraduates from Historically Black Colleges.

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.