

decisions. He has chaired, or has served as a member of a wide variety of national and international committees in areas related to risk and the environment, including those established by EPA, the World Trade Organization, the Department of Energy, NIH, the International Life Sciences Institute, and the Chemical Industry Institute of Toxicology.

3. *Nominee.* Frey, H. Christopher, Ph.D., Associate Professor, Department of Civil, Construction, and Environmental Engineering, North Carolina State University, Raleigh, NC.

i. *Expertise.* Quantification of variability and uncertainty, measurement, modeling and evaluation of energy and environmental control systems, and exposure and risk assessment.

ii. *Education.* B.S., Mechanical Engineering, University of Virginia; Master of Engineering, Mechanical Engineering, Carnegie-Mellon University; Ph.D., Engineering and Public Policy, Carnegie-Mellon University.

iii. *Professional experience.* Dr. Frey's research interests are primarily in: Development and demonstration of methods for quantification of variability and uncertainty; modeling and evaluation of energy and environmental control systems; measurement and modeling of real-world tailpipe emissions; and exposure and risk assessment. He has been a principal or co-principal investigator for 25 externally sponsored university research projects in these areas. Dr. Frey has published 26 peer-reviewed journal papers, co-authored the book, *Probabilistic Techniques in Exposure Assessment: A Handbook for Dealing with Variability and Uncertainty in Models and Inputs*, authored three other book chapters and authored or co-authored numerous conference proceedings papers and technical reports. He has served as a reviewer for 14 journals, and as an external reviewer for 8 draft EPA reports, 2 USDA risk assessments, and a draft Food and Agriculture Organization (FAO)/World Health Organization (WHO) exposure assessment guideline. He has served in numerous advisory capacities for EPA including on the EPA's Scientific Advisory Panel and on the Science Advisory Board. Dr. Frey has participated in the development of guidance documents and handbooks, including chairing a workshop in 1998 that recommended methods for developing input distributions in probabilistic analysis, and a 2001 workshop that recommended approaches for sensitivity analysis

applied to food safety risk models. Dr. Frey participated in international expert panels for the Intergovernmental Panel on Climate Change, pertaining to guidelines for uncertainty analysis, and for FAO/WHO regarding guidelines for probabilistic exposure assessment. Dr. Frey is active in the Society for Risk Analysis (SRA) and the Air and Waste Management Association (AWMA) and also is a member of the American Society of Civil Engineers. Formerly, he was president of the Research Triangle Chapter of SRA, a member of the SRA Council, and Chair of the AWMA's EE-1 Exposure and Health Effects Technical Committee. He is a recipient of a 1992 AAAS/EPA Fellowship, the 1992 AAAS Barnard Scholarship, a National Science Foundation CAREER award, and the SRA's 1999 Chauncy Starr Award for exceptional contributions to the field of risk analysis.

4. *Nominee.* Gray, George M., Ph.D., Executive Director, Harvard Center for Risk Analysis, Harvard School of Public Health, Boston, MA.

i. *Expertise.* Risk assessment, interpretation of rodent bioassays, risk management, risk communication.

ii. *Education.* B.S., Biology, University of Michigan; M.S. and Ph.D., Toxicology, University of Rochester.

iii. *Professional experience.* Dr. Gray's primary research interests are risk characterization and risk communication with a focus on food safety and agriculture and chemicals in the environment. He has published on both the scientific bases of human health risk assessment and its application to risk policy with a focus on risk/risk tradeoffs in risk management. Dr. Gray teaches toxicology and risk assessment to graduate students and to participants in the Continuing Professional Education Program at the Harvard School of Public Health. He serves on the Risk Assessment Task Force of the Society of Toxicology, and on government panels, including a Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN) Food Advisory Committee, and the NIEHS National Advisory Environmental Health Science Council.

5. *Nominee.* Zeise, Lauren, Ph.D., Chief, Reproductive and Cancer Hazard Assessment Section, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, Oakland, CA.

i. *Expertise.* Cancer and reproductive risk assessment methodologies and applications.

ii. *Education.* M.S. and Ph.D., Harvard University.

iii. *Professional experience.* Dr. Zeise has served as Chief of the Reproductive and Cancer Hazard Assessment Section since 1991, overseeing a variety of the State's cancer, reproductive, and ecological risk assessment activities. Dr. Zeise currently serves on the EPA Science Advisory Board Research Strategies Advisory Committee, on the National Institute of Medicine Board of Health Promotion and Disease Prevention, and on the NRC Board on Environmental Sciences and Toxicology. She is a member, fellow, and councilor of the Society of Risk Analysis and is on the editorial board of that society's journal. The National Cancer Institute Smoking and Tobacco Smoke monograph, *Health Effects of Environmental Tobacco Smoke*, was conceived and developed under her editorial direction. She is co-author and co-editor of the 1999 International Agency for Research on Cancer monograph *Quantitative Estimation and Prediction of Cancer Risk*. Dr. Zeise has served on the EPA Science Advisory Board Environmental Health Committee and Integrated Risk Project, and as a consultant to the Clean Air Act Scientific Advisory Committee, Environmental Engineering Committee, FIFRA Scientific Advisory Panel, EPA Board of Scientific Counselors, and on other *ad hoc* committees of EPA. She also has served on committees of the National Institute of Medicine, National Research Council, Consumer Product Safety Commission, National Toxicology Program, and the Office of Technology Assessment.

C. Nominations for the Field of Veterinary Pathology

1. *Nominee.* Chambers, Janice E., Ph.D., Director, Center for Environmental Health Sciences, and William L. Giles Distinguished Professor, College of Veterinary Medicine, Mississippi State University, MS.

i. *Expertise.* Pesticide toxicology, neurochemical and behavioral effects of pesticides, potential effects of pesticides on infants and children, mechanism of action and biotransformation of neurotoxicants and other xenobiotics, predictive modeling of the effects of mixtures.

ii. *Education.* B.S., Biology, University of San Francisco and Ph.D., Animal Physiology, Mississippi State University.

iii. *Professional experience.* Dr. Chambers directs several research projects that deal with the effects of pesticides in mammalian systems to determine the potential human health effects of pesticide exposures.