

Review of Advances Made to the IRIS Process

Committee

Jonathan M. Samet

Chair

Jonathan M. Samet is a pulmonary physician and epidemiologist. He is the Dean for the Colorado School of Public Health and previously served as a professor and Flora L. Thornton Chair of the Department of Preventive Medicine of the Keck School of Medicine of the University of Southern California (USC) and director of the USC Institute for Global Health. Dr. Samet's research has focused on the health risks posed by inhaled pollutants. He has served on numerous committees concerned with public health: the US Environmental Protection Agency Science Advisory Board; committees of the National Academies, including chairing the Biological Effects of Ionizing Radiation VI Committee, the Committee on Research Priorities for Airborne Particulate Matter, the Committee to Review EPA's Draft IRIS Assessment of Formaldehyde, the Committee to Review the IRIS Process, and the Board on Environmental Studies and Toxicology, among others; and the National Cancer Advisory Board. He is a member of the National Academy of Medicine. Dr. Samet received his MD from the University of Rochester, School of Medicine and Dentistry.

Richard A. Corley

Member

Richard A. Corley (retired) was a laboratory fellow at the Pacific Northwest National Laboratory operated by Battelle for the US Department of Energy. Dr. Corley specializes in the development of physiologically based pharmacokinetic models, real-time breath analysis, dermal and inhalation bioavailability, and the development of three-dimensional computational fluid-dynamic models of the respiratory system. He has published numerous peer-reviewed papers on oral, dermal, and inhalation toxicology; on modes of action of a variety of industrial and consumer chemicals; and on pharmacokinetic modeling and its applications in human health risk assessment. Dr. Corley has served on several National Academies committees, including the Committee to Assess the Health Implications of Perchlorate Ingestion, the Standing Committee on Risk Analysis Issues and Reviews, and the Committee to Review EPA's Draft IRIS Assessment of Formaldehyde, and the Committee to Review EPA's Draft State of the Science Paper on Nonmonotonic Dose Response. He received a PhD in environmental toxicology from the University of Illinois at Urbana-Champaign.

George P. Daston

Member

George Daston is the Victor Mills Society Research Fellow at the Procter & Gamble Company. He has published over 100 articles and book chapters and edited five books in toxicology and risk assessment. His current research efforts are in the areas of toxicogenomics and mechanistic toxicology, particularly in addressing how findings in these fields can improve risk assessment of chemicals and the development of non-animal alternatives. Dr. Daston has served as President of the Teratology Society, as Councilor and Treasurer-Elect of the Society of Toxicology, and on the US EPA Science Advisory Board, the Board of Scientific Counselors of the National Toxicology Program, the National Academies' Board on Environmental Studies and Toxicology, and the National Children's Study Advisory Committee. He is Editor-in-Chief of Birth Defects Research: Developmental and Reproductive Toxicology. With scientists at the US Humane Society, Dr. Daston manages the AltTox website, which is devoted to the exchange of scientific information leading to the development of in vitro replacements for toxicity assessments. Dr. Daston has been awarded the Josef Warkany Lectureship and the Distinguished Service Award by the Teratology Society, the George H. Scott Award by the Toxicology Forum, and the Society of Toxicology's Best Paper of the Year Award, and is an elected Fellow of AAAS. Dr. Daston is an adjunct Professor of Pediatrics at University of Cincinnati. He earned his PhD in developmental biology from the University of Miami.

David C. Dorman

Member

David Dorman is a professor of toxicology in the Department of Molecular Biomedical Sciences at North Carolina State University. His research interests include neurotoxicology, nasal toxicology, pharmacokinetics, and cognition and olfaction in animals. He has served on advisory boards for the US Navy, the National Aeronautics and Space Administration, the US Department of Agriculture, and the National Toxicology Program. He has chaired several National Academies committees, including the Committee on Endocrine-Related Low Dose Toxicity, the Committee on Predictive-Toxicology Approaches for Military Assessments of Acute Exposures, and the Committee on Design and Evaluation of Safer Chemical Substitutions. He was also a member of the Committee to Review EPA's Draft IRIS Assessment of Formaldehyde and the Committee to Review the IRIS Process. Dr. Dorman is an elected fellow of the Academy of Toxicological Sciences, is a fellow of the American Association for the Advancement of Sciences, and is a National Associate of the National Academies of Sciences, Engineering, and Medicine. He received a DVM from Colorado State University. He completed a combined PhD and veterinary toxicology residency program at the University of Illinois at Urbana-Champaign. Dr. Dorman is a diplomate of both the American Board of Veterinary Toxicology and the American Board of Toxicology.

Russ B. Hauser

Member

Russ Hauser is the chair of the Department of Environmental Health, Frederick Lee Hisaw Professor of Reproductive Physiology, and professor of Environmental and Occupational Epidemiology at the Harvard T.H. Chan School of Public Health. He also holds an appointment at the Harvard Medical School, where he is Professor of Obstetrics, Gynecology, and Reproductive Biology. Dr. Hauser's research focuses on the effects of environmental chemicals on reproductive health, pregnancy, and children's health. He has served on several National Academies committees, including the Committee to Review EPA's State of the Science Paper on Nonmonotonic Dose Response, the Committee on the Health Risks of Phthalates, and the Committee on Endocrine-Related Low Dose Toxicity. Dr. Hauser was a member of two US EPA Science Advisory Boards. He served on the US Consumer Product Safety Commission's Chronic Hazard Advisory Panel that examined the effects of phthalates on children's health. Dr. Hauser is an Associate Editor of Environmental Health Perspectives, Journal of the National Institute of Environmental Health Sciences. He received his MD from the Albert Einstein College of Medicine and his MPH and ScD from the Harvard T.H. Chan School of Public Health where he also completed a residency in Occupational Medicine. He is board certified in Occupational Medicine.

Karen A. Robinson

Member

Karen A. Robinson is an associate professor at the Johns Hopkins University School of Medicine. She also serves as director of the Johns Hopkins University Evidence-Based Practice Center and is a member of the core faculty in the Center for Clinical Trials and Evidence Synthesis at the university's Bloomberg School of Public Health. Her research focuses on evidence-based health care and evidence-based research. She conducts systematic reviews that are used to develop clinical practice guidelines and to inform other health decisions. She served on the National Academies Committee on Endocrine-Related Low-Dose Toxicity and the Committee on Gulf War and Health: Treatment of Chronic Multisymptom Illness. Dr. Robinson received her MSc in health sciences from the University of Waterloo, Ontario, and her PhD in epidemiology from the Johns Hopkins University Bloomberg School of Public Health.

Richard P. Scheines

Member

Richard P. Scheines is a professor and the head of philosophy at Carnegie Mellon University. His research focuses on causal discovery, specifically the problem of learning about causation from statistical evidence. Dr. Scheines also works in building and researching the effectiveness of educational software, ranging from intelligent proof tutors to virtual causality laboratories to a full-semester course on causal and statistical reasoning. Because of that work, he has a courtesy appointment in the Human-Computer Interaction Institute at Carnegie Mellon. He served on several National Academies committees, including the Committee to Review the IRIS Process. Dr. Scheines received a PhD in the history and philosophy of science from the University of Pittsburgh.

Lauren Zeise

Member

Lauren Zeise is director of the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment. She oversees the department's activities, which include the development of risk assessments, hazard evaluations, toxicity reviews, cumulative impact analyses, frameworks and methods for assessing toxicity and cumulative effects of vulnerability and environmental exposures on communities, and the department's activities in the California Environmental Contaminant Biomonitoring Program. Dr. Zeise was the 2008 recipient of the Society for Risk Analysis' Outstanding Practitioners Award. She has served on advisory boards and committees of the US Environmental Protection Agency, the Office of Technology Assessment, the World Health Organization, and the National Institute of Environmental Health Sciences. Dr. Zeise has served on numerous National Academies committees, including the Committee on Toxicity Testing and Assessment of Environmental Agents and the Committee on Improving Risk Analysis Approaches Used by the U.S. Environmental Protection Agency. Dr. Zeise received a PhD from Harvard University.

Yiliang Zhu

Member

Yiliang Zhu is a professor in the Division of Epidemiology, Biostatistics, and Preventive Medicine, School of Medicine at the University of New Mexico (UNM). He directs the biostatistics, epidemiology, and research design cores for the Clinical and Translational Research Center of UNM and for the Mountain West Clinical and Translational Research Infrastructure Network, a consortium of 13 universities in seven states. His research focuses on quantitative methods in health risk assessment, including integrative modeling of biological systems, dose-response modeling, benchmark-dose methods, and uncertainty quantification. He also conducts research in biostatistics methods, clinical- and health-outcome evaluation, and impact assessment of healthcare systems and policies in northwestern rural China. Before joining UNM Dr. Zhu was a professor at University of South Florida College of Public Health where he directed the Biostatistics PhD program and the Center for Collaborative Research. Dr. Zhu has served on several National Academies committees, including the Committee on EPA's Exposure and Human Health Assessment of Dioxin and Related Compounds, the Committee on Tetrachloroethylene, the Committee to Review EPA's Draft IRIS Assessment of Formaldehyde, and the Committee to Review the IRIS Process. He received a PhD in statistics from the University of Toronto.