Review of Texas Commission on Environmental Quality’s Ethylene Oxide Development Support Document

Committee

David C. Dorman

Chair

David C. 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 is an elected fellow of the Academy of Toxicological Sciences, a fellow of the American Association for the Advancement of Sciences, and a diplomate of the American Board of Veterinary Toxicology and the American Board of Toxicology. Dr. Dorman has served on the North Carolina Secretaries Scientific Advisory Board. He completed a combined PhD and veterinary toxicology residency program at the University of Illinois at Urbana-Champaign and holds a DVM from Colorado State University. Dr. Dorman is a National Associate of the Academies and has chaired or served on multiple National Academies committees.

Deborah H. Bennett

Member

Deborah H. Bennett is a Professor in the Division of Environmental and Occupational Health at the University of California, Davis School of Medicine. Her research focuses on the measurement and modeling of organic compounds both in context of exposure science and environmental epidemiology. She has served on various U.S. Environmental Protection Agency Science Advisory boards, panels, and advisory committees related to the Exposure Factors Handbook, and Exposure Metrics for the National Children’s Study. She has served as Associate Editor for the Journal of Exposure Science and Environmental Epidemiology. She has served as an Elected Councilor, Treasurer, and Chair of the Awards Committee for the International Society of Exposure assessment. She has an MS and PhD from the University of California, Berkeley. She previously served on the National Academies Committee to Review EPA's TSCA Systematic Review Guidance Document.

Anneclaire J. De Roos

Member

Anneclaire J. De Roos is a professor in the Department of Environmental and Occupational Health at the Drexel University Dornsife School of Public Health. Dr. De Roos is an environmental epidemiologist with extensive experience studying chemical, physical, and biological exposures as risk factors for chronic and acute health outcomes such as cancer, asthma, and infectious illness – in exposure settings including the workplace (pesticides, solvents) and residential communities (pollution, water contamination). Current projects additionally focus on the nexus between the natural environment and human health – such as risks from extreme weather and potential benefits from urban greenspace. At Drexel University, Dr. De Roos teaches classes in epidemiology (including statistical modeling of observational study data), quantitative risk assessment (including dose-response and exposure modeling) and evidence evaluation/hazard identification (including systematic review). Dr. De Roos has served as an expert/peer reviewer for several national and international risk evaluations, including those reviewing pesticides for the International Agency for Research on Cancer (IARC) Monograph series, formaldehyde for the NIEHS Report on Carcinogens, and methylene chloride in paint stripping use for an EPA risk assessment. She received her MPH in epidemiology/biostatistics from the University of California at Berkeley, and her PhD in epidemiology from the University of North Carolina at Chapel Hill. Dr. De Roos previously served on the National Academies Committee to Review the Department of Defense's Approach to Deriving an Occupational Exposure Limit for Trichloroethylene.

Ellen A. Eisen

Member

Ellen A. Eisen is a Professor in the School of Public Health at the University of California, Berkeley. She is an occupational epidemiologist, bridging the fields of environmental health science, biostatistics, and epidemiology. Her research focuses on exposure-response modeling in occupational cohort studies, with a particular interest in methods to reduce selection bias and address time-varying confounding. She has published studies on mortality and the incidence of ischemic heart and lung disease and cancer in worker populations, with a focus on the quantitative assessment of long-term exposure to chemicals and fine particulate matter. Eisen's professional activities include service on the editorial board of the American Journal of Epidemiology and on the scientific committee of the International Congress on Occupational Health – Epidemiology section. Eisen received an M.S. in operations research and statistics from the Massachusetts Institute of Technology, an M.S. in biostatistics from the Harvard School of Public Health (HSPH), and an Sc.D. in biostatistics and occupational health from HSPH. She has served on numerous committees for the National Academies, including the Committee on the Respiratory Health Effects of Airborne Hazards Exposures in Southwest Asia Theater of Military Operations and the Committee on the Long-Term Health Consequences of Exposure to Burn Pits in Iraq and Afghanistan.

Wendy Heiger-Bernays

Member

Wendy Heiger-Bernays is emerita clinical professor in the Department of Environmental Health at the Boston University School of Public Health where she applied her training in molecular toxicology to questions about the health impacts of environmental chemicals and pharmaceuticals in water and waste streams on people's health. She is currently Chief of Research in the Office of Research and Standards at the Massachusetts Department of Environmental Protection. Dr. Heiger-Bernays' work relies on innovative technology and information transfer of the science to multiple audiences, including environmental regulatory and health agencies as well as with advocacy and community groups. She has served on multiple US Environmental Protection Agency Advisory Committees and currently serves as a member of the MA Science Advisory Board for the Toxics Use Reduction Act, the US Environmental Protection Agency Science Advisory Committee on Chemicals and she serves as Chair of her local board of health. She is the immediate past-president of the International Society for Children's Health and Environment. Dr. Heiger-Bernays received her PhD in Biochemistry at the University of Nebraska Medical Center and she completed post-doctoral fellowships at Cold Spring Harbor Laboratory and the Massachusetts Institute of Technology in the Program in Toxicology.

Carmen J. Marsit

Member

Carmen J. Marsit is Executive Associate Dean for Faculty Affairs and Research Strategy, Rollins Distinguished Professor of Research, and Professor in the Gangarosa Department of Environmental Health and Department of Epidemiology at the Rollins School of Public Health of Emory University. He serves as Director of the National Institute of Environmental Health Sciences-funded Emory HERCULES Exposome Research Center and Training Program in the Environmental Health Sciences and Toxicology. His training and experience bring together cancer molecular epidemiology, environmental and occupational health, and epidemiology. He leads a multi-disciplinary research program utilizing the tools of genomics, epigenomics, and bioinformatics to uncover mechanisms underlying the impact of the environment on health within epidemiologic studies. His lab applies these tools to questions related to the impacts of the pre- and perinatal environments on maternal and child health, and the use of epigenetic and genomic biomarkers to understand the etiology and outcomes of human exposure related cancers. Dr. Marsit was the recipient of a National Institute of Mental Health Biobehavioral Research Award for Innovative New Scientists. He received a B.S. in biochemistry from Lafayette College and a Ph.D. in biological sciences in public health from the Graduate School of Arts and Sciences at Harvard University.

Keeve Nachman

Member

Keeve Nachman is the Robert S. Lawrence Professor and Associate Chair of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health, where he co-directs the Risk Sciences and Public Policy Institute and serves as the Associate Director of the Johns Hopkins Center for a Livable Future. Nachman has rigorous training and extensive practical experience in the risk sciences, regulatory toxicology, exposure science, epidemiology, occupational and environmental health, and environmental policy and communication. He has over twenty years of experience in the field of public health, with experience working in two federal agencies (EPA and DOD/USACE) on issues related to toxicology, epidemiology, exposure science, and risk assessment. Nachman's research is funded by the USEPA, USDA, NIH, and foundations. He has active projects focused on the development of novel methods to quantify infants' and children's soil and dust exposures, prioritization of novel contaminants in human biosolids, and development of occupational exposure factors in the agriculture sector. Nachman has a Ph.D. in Environmental and Occupational Health Policy and an MHS in Environmental Health Science from the Johns Hopkins Bloomberg School of Public Health. Dr. Nachman contributed to a recent study related to ethylene oxide exposure levels in Louisiana, funded by the Bloomberg Philanthropies' Beyond Petrochemicals Campaign, described in "Ethylene Oxide in Southeastern Louisiana's Petrochemical Corridor: High Spatial Resolution Mobile Monitoring during HAP-MAP" in Environmental Sciences and Technology in 2024.

Anne Nigra

Member

Anne Nigra is an Assistant Professor of Environmental Health Sciences at the Columbia University Mailman School of Public Health. Dr. Nigra is affiliated with the Columbia University-Northern Plains Superfund Research Program and is the Director of the affiliated EARTH Program, which engages high school students and their teachers in environmental health sciences research. Dr. Nigra is an environmental health scientist and environmental epidemiologist with expertise in public drinking water exposures, metal exposures, and chronic health outcomes. Her research is funded by the NIH and leverages collaborations with several large epidemiological cohorts. Her active projects are focused on developing novel methods for public drinking water contaminant exposure assessment, evaluating epidemiologic associations of public water contaminants and infant, maternal, and chronic adverse health outcomes, and evaluating the impact of federal water policies and regulatory changes on population exposures and health outcomes. Dr. Nigra is a recipient of an NIH Director's Early Independence Award (2021). Dr. Nigra has a ScM in Epidemiology from Johns Hopkins Bloomberg School of Public Health and a PhD in Environmental Health Sciences from the Columbia University Mailman School of Public Health.

Craig Rowlands

Member

Craig Rowlands is the Principal Toxicologist and a Distinguished Member of the Technical Staff at UL Solutions Global Research and Development. His responsibilities include providing leadership in the innovation of services for chemical safety assessments of consumer products across the ULS enterprise. Previously, Dr. Rowlands was a Senior Toxicologist at The Dow Chemical Company leading a cross-disciplinary teams of regulatory scientists to conduct product risk evaluations. He served as a strategy leader to develop Dow's Next Generation Safety Center to use New Approach Methods (NAMs) including in silico, in vitro, and in vivo approaches to design products with more favorable environmental and human health safety profiles. This included application of toxicogenomic, epigenetic, toxicokinetic, and systems biology research programs to investigate the modes-of-action and molecular mechanisms of toxicants and their impact to product safety assessments. He has served on the US Environmental Protection Agency TSCA Science Advisory Committee for Chemicals, and currently serves as a co-chair of the on the US Environmental Protection Agency Board of Scientific Counselors (BOSC) ad hoc EPA Transcriptomic Assessment Product (ETAP) Panel. He is a member of the Joint Peer Review Steering Committee (JPRSC) on Drinking Water Chemical Standards Conformity and is an Adjunct Professor at Michigan State University. Dr. Rowlands was awarded the Society of Toxicology Mechanisms Specialty Section Carl C. Smith graduate student award for meritorious research and served as the president of the SOT Molecular and Systems Biology Specialty Section. He earned a BS and PhD from Texas A&M University, completed a post-doctoral fellowship at the Karolinska Institute and served as a staff fellow at the US Food and Drug Administration.

Veronica M. Vieira

Member

Veronica Vieira is a Professor in the Susan & Henry Samueli College of Health Sciences and the Chair of Environmental and Occupational Health at University of California, Irvine. She is a trained environmental epidemiologist, and her research involves statistical analyses of health data for examining the contributions of known risk factors and environmental exposures to the underlying pattern of disease risk with a particular emphasis on the importance of location in cancer disparities. Dr. Vieira works extensively with reconstructing historic environmental exposures using GIS and has experience with groundwater modeling and perfluorooctanoic acid (PFOA). Dr. Vieira collaborated on the C8 Health Project, contributing to several health and exposure studies, and is currently an MPI of a NIEHS PFAS and Childhood Cancers R01 and co-investigator of the UCI PFAS Health Study, part of a multi-site study sponsored by CDC/ATSDR. She received her M.S. in Environmental Engineering from Stanford University and her D.Sc. in Environmental Health from Boston University School of Public Health. Dr. Vieira served on the National Academies Committee to provide Guidance on PFAS Exposure, Testing, and Clinical Follow-Up.

Kathryn Guyton

Staff Officer

Kathryn Guyton is a Senior Program Officer on the Board of Environmental Studies and Toxicology at the National Academies. She joined the National Academies after seven years as a Senior Toxicologist at the International Agency for Research on Cancer, World Health Organization. Her prior experience includes eight years as a Toxicologist at the US Environmental Protection Agency, and seven years as the Director of Scientific Affairs at CCS Associates. Dr. Guyton received her BA and PhD from Johns Hopkins University and her postdoctoral training at the US National Institutes of Health. She has been certified as a Diplomate of the American Board of Toxicology since 1998.