

Speaker Biographies

Steven Dutton is Acting Director of the Health and Environmental Effects Assessment Division (HEEAD) in the U.S. EPA's Office of Research and Development (ORD), Center for Public Health and Environmental Assessment (CPHEA). He has a Ph.D. in Environmental Engineering and M.S. degree in Physics from the University of Colorado, and a M.S. degree in Environmental Engineering Science from the California Institute of Technology. Dr. Dutton joined the U.S. EPA in 2008 with eleven years prior experience designing and conducting atmospheric and exposure characterization studies to support air quality and epidemiologic research activities. While at the U.S. EPA, he has developed, lead, and managed numerous science assessment activities addressing various provisions under the Clean Air Act. Dr. Dutton has played a leadership role in research planning and implementation in several of ORD's National Research Programs and is currently responsible for managing division activities across all of ORD's research programs.

Erika N. Sasser is the Director of the Health and Environmental Impacts Division within the Office of Air Quality Planning and Standards, part of EPA's Office of Air and Radiation (OAR). She directs programs to assess exposures and risks from criteria and toxic air pollution and to address the resulting health and ecological effects. She oversees the national ambient air quality standards program, as well as work to evaluate the costs, benefits, and economic impacts of EPA air quality regulations and the impacts of climate change and international transboundary air pollution on U.S. air quality. She holds a B.A. from the Woodrow Wilson School of Public and International Affairs at Princeton University (1993) and a Ph.D. from the Nicholas School of the Environment and Earth Sciences at Duke University (1999).

Jason Sacks is a Senior Epidemiologist in the Health and Environmental Effects Assessment Division (HEEAD) within the Center for Public Health and Environmental Assessment (CPHEA) in the Office of Research and Development (ORD) at the U.S. EPA. Jason has over 13 years of experience working on Integrated Science Assessments (ISAs). He is the Science Lead on the health effects of particulate matter (PM) within HEEAD and the Assessment Lead for the 2019 Particulate Matter (PM) Integrated Science Assessment (ISA). Jason also plays key leadership roles in synthesizing and integrating the health effects evidence of air pollution for various National Ambient Air Quality Standards (NAAQS) reviews. Jason has a B.A. in Biology from Rutgers University and a Master of Public Health (M.P.H.) from Johns Hopkins University – Bloomberg School of Public Health.

James S. Brown, MSPH, PhD, is a Senior Health Scientist for the U.S. EPA, Center for Public Health and Environmental Assessment. He received a masters and doctorate from the School of Public Health at the University of North Carolina at Chapel Hill (UNC-CH). Prior to joining EPA in 2003, he was a Research Associate at UNC-CH and conducted research on the transport, deposition, and clearance of particles and gases in healthy individuals and patients with a variety of respiratory diseases. As part of the National Ambient Air Quality Standards (NAAQS) reviews, Dr. Brown was Team Leader for the review of the ozone NAAQS completed in 2015 and has served as a chapter/section author for science assessments of lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. He provides expertise within the EPA and to external groups on respiratory deposition and clearance of particulate matter; clinical studies investigating acute respiratory effects of air pollution; assessment of lead exposure, uptake, biokinetics, and biomarkers; aerosol science; and respiratory physiology. In 2006, he served as a Monograph Working Group member evaluating the carcinogenic risk to humans from exposure to carbon black, titanium dioxide, and non-asbestiform talc for the International Agency for

Research on Cancer. Since 2009, he has been an active member (currently a co-chair) of the U.S. EPA Technical Review Workgroup for Lead and involved in the development of national guidance and documentation to promote the application of scientifically sound and consistent approaches to risk assessment for lead. He has extensive experience and understanding of EPA's Integrated Exposure, Uptake, and Biokinetic (IEUBK) model for children. He contributed to the development of the soon to be released IEUBK version 2.0 and has led an associated evaluation of the model. He has also led work on development of EPA's All Ages Lead Model, which was peer reviewed in 2019-2020 by EPA's Scientific Advisory Board (SAB). Dr. Brown has received numerous awards for his research and NAAQS related assessments including four U.S. EPA Gold Medals and a Young Investigator Award from the International Society for Aerosols in Medicine in 2003.

Barbara Buckley joined the National Center for Environmental Assessment, U.S. EPA as a Toxicologist in 2007. She primarily works on the Integrated Science Assessments that form the scientific foundation for the review of the National Ambient Air Quality Standards. She studied Biology and Chemistry at the University of Delaware and received a Ph.D. in Environmental Health Science from Johns Hopkins University where she trained in inhalation toxicology at the Bloomberg School of Public Health. Subsequently, Dr. Buckley worked in the Departments of Medicine and Pharmacology at Duke University. She has over 20 years experience studying biochemical and cellular signaling pathways involved in oxidative injury and antioxidant defense in lung epithelium and vascular endothelium. Her research interests included the role of nitric oxide and reactive nitrogen species in cellular adaptive responses. She has published numerous peer-reviewed articles and is a member of the Society for Free Radical Biology and Medicine and the Society of Toxicology.

Tara Greaver is a senior ecologist with the U.S. Environmental Protection Agency in the Center for Public Health and the Environment (CPHEA), specializing in the ecological effects of anthropogenic nitrogen. She received her M.S. and Ph.D. in ecology from the University of Miami and was post-doctoral fellow in the department of Earth and Planetary Sciences at Johns Hopkins University prior to joining the EPA in 2006. She led the 2008 Integrated Science Assessment (ISA) for Oxides of Nitrogen (NO_x) and Sulfur (SO_x)- Ecological Criteria and was part of the team that developed the first application of the causality framework to ecological criteria in the 2008 NO_xSO_xPM ISA. She went on to contribute to the 2011 NO_x and SO_x Policy Assessment. Dr. Greaver led the 2020 ISA for NO_x, SO_x and Particulate Matter (PM)- Ecological Criteria. She has published broadly on the effects of nitrogen on ecosystems, including studies on soil biogeochemistry, carbon cycling, biodiversity, ecosystem services, biogenic GHG flux, critical loads, and climate modification of ecosystem response to nitrogen in terrestrial and wetland ecosystems.

Chris Weaver is a climate scientist and chief of the Integrated Environmental Assessment Branch at the U.S. Environmental Protection Agency's Center for Public Health and Environmental Assessment. His research has focused on understanding climate system processes, climate change impacts and adaptation, decision-making under uncertainty, and the intersection of climate change with air quality, water quality, human health, and ecosystems. From 2011-2015, he served in a number of leadership roles within the U.S. Federal climate science enterprise, including as Deputy Director and Acting Director of the U.S. Global Change Research Program (USGCRP) and as a Senior Advisor in the White House Office of Science and Technology Policy (OSTP). Prior to joining the EPA in 2005, he was on the faculty of the Department of Environmental Sciences at Rutgers University, where he was also the Associate Director of the Center for Environmental Prediction. He received his Ph.D. from the Scripps Institution of Oceanography and his undergraduate degree from Princeton University.

Chris Frey is the Deputy Assistant Administrator for Science Policy in the Office of Research and Development as an appointee of the Biden/Harris administration. Prior to joining EPA, Dr. Frey was the Glenn E. and Phyllis J. Futrell Distinguished University Professor at North Carolina State University, where he served on the faculty since 1994. His research includes measurement and modeling of human exposure to air pollution, measurement and modeling of vehicle emissions, and applications of probabilistic and sensitivity analysis methods to emissions estimation, risk assessment, and technology assessment. Dr. Frey was an AAAS/EPA Environmental Science and Engineering Fellow in 1992. He served as exposure modeling advisor in ORD's National Exposure Research Laboratory from 2006 to 2007. He was a member of the EPA FIFRA Scientific Advisory Panel (2004 to 2006), a member of the EPA Clean Air Scientific Advisory Committee (CASAC) (2008 to 2012), chair of CASAC (2012 to 2015), and a member of the EPA Science Advisory Board (2012 to 2018). He was a member of the CASAC Particulate Matter Review Panel that was dismissed in 2018: under his leadership, the panel reconvened as the Independent Particulate Matter Review Panel. He was President of the Society for Risk Analysis in 2006. Dr. Frey has a B.S. in mechanical engineering from the University of Virginia, a master of engineering in mechanical engineering from Carnegie Mellon University, and Ph.D. in engineering and public policy from Carnegie Mellon.