Speaker Biographies

Tina Bahadori, Chemical Safety for Sustainability Research Program, U.S. EPA
Email: bahadori.tina@epa.gov

Dr. Tina Bahadori leads the U.S. Environmental Protection Agency's (U.S. EPA) Chemical Safety for Sustainability (CSS) National Research Program. She is an exposure scientist with extensive expertise developing and managing research programs that integrate exposure with health sciences. Prior to coming to U.S. EPA, Dr. Bahadori was Managing Director for the American Chemistry Council's Long Range Research Initiative. Dr. Bahadori is the immediate past President of the International Society of Exposure Science and is an Associate Editor of the Journal of Exposure Science and Environmental Epidemiology. She has served on several committees for the National Academy of Sciences, the Center for Disease Control and Prevention, and the National Children's Study. Dr. Bahadori earned her doctor of science degree in Environmental Science and Engineering from the Harvard School of Public Health, her Master of Science degree in Chemical Engineering (Technology and Policy Program) from the Massachusetts Institute of Technology (MIT), and her Bachelor of Science in Chemical Engineering and in Humanities from MIT.

Deborah H. Bennett, Exposure Science STAR Grantee, University of California – Davis
Email: dhbennett@ucdavis.edu

Dr. Deborah H. Bennett is an Associate Professor at the University of California (UC) Davis School of Medicine Department of Public Health Sciences. Her research focuses on the fate, transport, and exposure to chemicals in a multimedia environment within the context of environmental risk assessment. Currently, Dr. Bennett is developing an indoor fugacity model to assess exposures resulting from indoor releases of pesticides and other organic compounds. She is also looking at the exposure to Hazardous Air Pollutants (HAPs) in various indoor microenvironments through modeling and monitoring. Additionally, she is developing methods for quantifying and using the Intake Fraction of compounds. She is also conducting research studies with the ACC, the U.S. EPA, and the MIND Institute. Previously, Dr. Bennett was an Assistant Professor at the Harvard School of Public Health, an elected Academic Councilor for the International Society of Exposure Assessment, and a guest editor for the Journal of Exposure Assessment and Environmental Epidemiology. Dr. Bennett received her Ph.D. and Master of Science in Mechanical Engineering from UC Berkeley.

Elaine Cohen Hubal, Chemical Safety for Sustainability Research Program, U.S. EPA
Email: hubal.elaine@epa.gov

Dr. Cohen Hubal is the Deputy Director for EPA's Chemical Safety for Sustainability (CSS) National Research Program. Her primary research interests are in characterizing human exposure and developing approaches for using human exposure metrics to inform health studies and public health policy. The current focus of her research is on applying a systems approach to characterize complex relationships between environmental factors and health outcomes with an emphasis on vulnerable populations. Previously, she was a senior scientist in the U.S. EPA's National Center for Computational Toxicology (NCCT), leading the ExpoCast Project which has now been incorporated into the CSS Rapid Exposure and Dosimetry Project. She was also acting Associate Director for Human Exposure Modeling in the Human Exposure and Atmospheric Sciences Division of the U.S. EPA's National Exposure Research Laboratory (NERL) where she worked to develop and direct NERL's human exposure modeling research program.

Dr. Cohen Hubal has published in the areas of children's exposure and human health risk modeling. Dr. Cohen Hubal has served as an expert on a variety of scientific panels and committees including the Voluntary Children's Chemical Evaluation Program (VCCEP) Peer Consultation Panel and the Study Design Working Group for the National Children's Study. Currently, she serves as chair of the WHO IPCS working group on "Identifying Important Life Stages for Monitoring and Assessing Risks from Exposures to Environmental Contaminants." Dr. Cohen Hubal also serves as an associate editor for reviews for the Journal of Exposure Science and Environmental Epidemiology. Dr. Cohen Hubal received her Ph.D. and M.S. in Chemical Engineering from North Carolina State University and a S.B. in Chemical Engineering from MIT.

Xudong Fan, Exposure Science STAR Grantee, University of Michigan – Ann Arbor
Email: fanxud@missouri.edu

Dr. Xudong (Sherman) Fan is Professor and Associate Chair for Undergraduate Education at the University of Michigan Biomedical Engineering Department, College of Engineering, and School of Medicine. His primary research focuses on the development of novel bio/chemical sensor platform based on opto-fluidic ring resonators. Dr. Fan also serves as a member of the Michigan Center for Integrative Research in Critical Care and the Wireless Integrated Microsensing and Systems at the University of Michigan. Previously, Dr. Fan served as an Associate and Adjunct Professor at the University of Missouri and a Senior Research Scientist at the Corporate Research Laboratory in Austin, Texas. Dr. Fan holds a doctorate in Physics and Optics from the University of Oregon and a Master of Science from Peking University.

Kristin Isaacs, National Exposure Research Laboratory, U.S. EPA
Email: isaacs.kristin@epa.gov

Dr. Kristin Isaacs is a Research Physical Scientist in the Human Exposure and Atmospheric Sciences Division of the National Exposure Research Laboratory (NERL) at U.S. EPA. The focus of Kristin's current research is the development and evaluation of computational and stochastic human exposure and dose models and their associated algorithms for use in human risk assessments of air pollutants and multimedia/multipathway chemicals. Her specific research interests and responsibilities include: the development of physiology-based energy expenditure prediction methods for exposure and dose models; development of inhalation and dietary dose algorithms for in-depth risk assessments and for chemical screening and prioritization; monitoring, assessment, and simulation of human activity patterns in support of exposure and risk assessment; development and evaluation of residential chemical source-to-concentration models; and development and application of sensitivity and uncertainty analyses for exposure and dose models. Dr. Isaacs holds a doctorate in Biomedical Engineering from Vanderbilt University and a Master of Science in Biomedical Engineering from the University of Kentucky.

James H. Johnson, Jr., National Center for Environmental Research, U.S. EPA
Email: johnson.jim@epa.gov

Dr. James H. Johnson, Jr., is the Director of the U.S. EPA's National Center for Environmental Research (NCER). In this role, Dr. Johnson continues a life-long career dedicated to sustaining and advancing scientific research and education initiatives supporting environmental protection, quality of life programs and policies, and environmental workforce development.

Dr. Johnson has served on numerous committees and boards for the National Academies, EPA and academic institutions. He is a member of the Anne Arundel Community College (MD) Board of Trustees, and is Professor Emeritus of Civil Engineering and Dean Emeritus of the College of Engineering, Architecture and Computer Sciences at Howard University. Dr. Johnson has a Bachelor of Science in Civil Engineering from Howard University and Master of Science from the University of Illinois. He further continued his education and graduated from the University of Delaware with a Ph.D. in Applied Sciences.

John Little, Exposure Science STAR Grantee, Virginia Tech
Email: jcl@vt.edu

Dr. John Little is a Professor at the Virginia Tech Department of Civil and Environmental Engineering. His current research focuses on process dynamics and mass-transfer in a wide range of environmental systems. His specific research interests include: characterizing indoor sources of volatile and semi-volatile compounds, sustainable management of source water quality in water-supply reservoirs using hypolimnetic aeration and oxygenation, predicting exposure and risk associated with chemical contaminants in drinking water, evaluating the effect of climate change on the stability of lakes and reservoirs, and exploring Interfaces through Graduate Education and Research (EIGER). Previously, he served as a Visiting Professor at the University of Sydney, Tsinghua University, Universidad de Granada, Swiss Federal Institute for Aquatic Science and Technology, and National Cheng Kung University. Dr. Little holds a doctorate and Master of Science in Environmental Engineering from UC Berkeley. He also holds a Master of Science in Physical Chemistry from the Universtiy of Cape Town, South Africa.

Jennifer Orme-Zavaleta, National Exposure Research Laboratory, U.S. EPA
Email: orme-zavaleta.jennifer@epa.gov

Dr. Jennifer Orme-Zavaleta is the Director of U.S. EPA's NERL. She has been with U.S. EPA for 30 years, working in the areas of human health and ecological research, risk assessment, policy and regulation development, strategic planning, and program implementation. The focus of her experience includes the evaluation of risks to human and ecosystem health, and the influence of environmental change on human health in response to a variety of stressors including synthetic organic and inorganic chemicals, radionuclides, microorganisms, and vector-borne disease. Jennifer has held a number of positions within the U.S. EPA in the Offices of Toxic Substances, Water, and Research and Development. Most recently she served as the Interim National Program Director for Safe and Sustainable Water Resources, where she led the development of research to achieve safe, resilient, and sustainable solutions to the increasingly complex water challenges facing U.S. regions, states, tribes, cities and rural areas. Dr. Orme-Zavaleta received her Bachelor of Arts in Zoology from Ohio Wesleyan University, Master of Science in Zoology and Toxicology from Miami University, and Ph.D. in Wildlife Science and Public Health from Oregon State University.

Heather M. Stapleton, Exposure Science STAR Grantee, Duke University
Email: heather.stapleton@duke.edu

Dr. Heather Stapleton is an Associate Professor in the Duke University Civil and Environmental Engineering department. Dr. Stapleton's research focuses on understanding the fate and transformation of organic contaminants in aquatic systems and in indoor environments. Her main focus has been on the bioaccumulation and biotransformation of brominated flame retardants, and specifically polybrominated diphenyl ethers, (PBDEs). Her current research projects explore the routes of human exposure to flame retardant chemicals and examine the way these compounds are photodegraded and metabolized using mass spectrometry to identify breakdown products/metabolites. She uses both in vivo techniques witth fish, and in vitro techniques with cell cultures to examine metabolism of this varied class of chemicals. Also of interest to Dr. Stapleton is the study of the fate of PBDEs in the environment which may lead to bioaccumulation in aquatic systems and examining their bioavailability under different environmental conditions. Dr. Stapleton holds a doctorate and Master of Science in Environmental Chemistry from the University of Maryland, College Park.

Caroline Stevens, National Exposure Research Laboratory, U.S. EPA
Email: stevens.caroline@epa.gov

Dr. Caroline Stevens is an Environmental Engineer in the Ecosystems Research Division of the U.S. EPA. The focus of her research is the use of mathematical modeling techniques to study coupled effects of physical transport, partitioning, and chemical and biological reaction processes on chemical behavior in the environment. From 2002–2009, her projects have been in three areas: modeling and field sampling to study fate and transport of nutrients in an agricultural application of a batch reaction model to interpret results of in-house laboratory studies on the metabolism of xenobiotics; and development of a QSAR-based model to predict biotransformation rates of organic compounds. Dr. Stevens holds a doctorate and Master of Science in Environmental Engineering from the University of Illinois at Urbana-Champaign.

Kent Thomas, National Exposure Research Laboratory, U.S. EPA
Email: thomas.kent@epa.gov

Dr. Kent Thomas is a Research Physical Scientist at the U.S. EPA Human Exposure and Atmospheric Sciences Division of NERL. Dr. Thomas has experience in the development and implementation of strategies and methods for assessing human exposure to environmental contaminants. His experience includes complex multi-media and multi-pathway studies of human exposure to volatile organic compounds, pesticides, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, metals, and particles. Dr. Thomas has contributed to the development of sampling and analytical methodology for contaminants in air, water, food, dust, soil, blood, breath, and urine. Additional experience includes studies of pollutants in building and residential environments. His research interests include improving exposure assessment in epidemiological investigations. Dr. Thomas is currently engaged in cumulative risk assessment and lifecycle and human exposure modeling research in the CSS program and in improving exposure and community assessments for children in the Sustainable and Healthy Communities program. Dr. Thomas holds a Bachelor of Science in Public Health from the University of North Carolina at Chapel Hill School of Public Health.

John Wambaugh, National Center for Computational Toxicology, U.S. EPA
Email: wambaugh.john@epa.gov

Dr. John Wambaugh is a physical scientist at the NCCT within the U.S. EPA. His research efforts involve developing a computer model of the liver that will allow us to anticipate liver toxicity based upon relatively inexpensive in vitro experiments. He is also developing approaches to forecast potential human exposures to chemicals in the environment using minimal information: ExpoCast. Dr. Wambaugh's research on these projects focuses on predicting chemical effects in and exposures to humans using in vitro laboratory measurements and computer simulations. Dr. Wambaugh received a Ph.D. from the Department of Physics at Duke University. His Ph.D. research focused on experimental non-equilibrium statistical mechanics, especially how large-scale behaviors can depend on small-scale differences. Dr. Wambaugh also holds a Master of Science in Physics from the Georgia Institute of Technology.

Tracey Woodruff, Exposure Science STAR Grantee, University of California, San Francisco
Email: woodrufft@obgyn.ucsf.edu

Dr. Tracey Woodruff is the Professor and Director of the Program on Reproductive Health and the Environment at the University of California, San Francisco. She has done extensive research and policy development on environmental health issues, with a particular emphasis on early-life development. Her research includes evaluating prenatal exposures to environmental chemicals and related adverse pregnancy outcomes, and characterizing developmental risks. She is an Associate Editor of Environmental Health Perspectives. She was appointed by the governor of California in 2012 to the Science Advisory Board of the Developmental and Reproductive Toxicant (DART) Identification Committee. She holds a Ph.D. from UC Berkeley and San Francisco, in Bioengineering, and a Master's of Public Health from UC Berkeley.