

Workshop 1 – October 15, 2024: Speaker and Panelist Bios

WILLIAM BOYD

William Boyd is Professor and Michael J. Klein Chair in Law at UCLA School of Law and Professor at UCLA's Institute of the Environment & Sustainability. Professor Boyd received his JD from Stanford Law School and his PhD from the Energy & Resources Group at UC Berkeley. Prior to joining academia Professor Boyd served as counsel and AAAS congressional science fellow for the Democratic minority staff of the U.S. Senate Committee on Environment & Public Works and practiced law at Covington & Burling LLP in Washington DC.

JOAN CASEY

Dr. Joan Casey is an Associate Professor Environmental and Occupational Health Sciences and Epidemiology at the University of Washington School of Public Health. She received her doctoral degree from the Department of Environmental Health Sciences at Johns Hopkins Bloomberg School of Public Health and holds a BS in Biological and Environmental Engineering from Cornell University and an MA in Applied Physiology from Teachers College at Columbia University. Dr. Casey uses large secondary spatial data sources to investigate the health impacts of a range of emerging environmental exposures including wildfires, power outages, fossil fuel infrastructure, and the energy transition. She prioritizes the study of joint social and environmental risk factors that help explain persistent health disparities and focuses on policy-relevant climate justice work. Dr. Casey received funding from the National Institute on Aging to support the presented work.

JANET CURRIE

Janet Currie is the Henry Putnam Professor of Economics and Public Affairs at Princeton University. She co-directs the Program on Families and Children at the National Bureau of Economic Research. Currie is a pioneer in the economic analysis of child development. She has published four books and more than 200 articles and presented her work at universities around the world and in venues ranging from the White House to the European Investment Bank. Currie holds honorary degrees from the University of Lyon, the University of Zurich, and the Università della Svizzera Italiana and is a member of the U.S. National Academy of Sciences, the National Academy of Medicine, and of the American Academy of Art and Sciences. She is the 2024 President of the American Economic Association. She was chosen as a NOMIS Distinguished Scientist in 2019 and won the Klaus J. Jacobs Research Prize in 2023. She was named one of the top 10 women in Economics by the World Economic Forum in July 2015. Currie has served on the NAS Committee on Population, the NAS Committee on National Statistics, the NAM Board on Children Youth and Families, the NAS Societal Experts Action Network and other NAS/NAM committees.

DENISE DILLARD

Denise A. Dillard, Ph.D., is a Professor at the Elson S. Floyd College of Medicine and Co-Director of the Institute for Research and Education to Advance Community Health at Washington State University. Dr. Dillard is a psychologist of Inupiaq Eskimo heritage with a diverse research portfolio addressing the wide-ranging health needs of American Indian and Alaska Native communities using Indigenous community based participatory research methods. Dr. Dillard previously served on the National Institutes of Health Tribal Advisory Committee and is one of four authors commissioned by the National Institutes of Health to develop a resource to guide scientific reviewers in assessing American Indian and Alaska Native focused grant applications.

CHRISTOPHER T. EMRICH

Dr. Emrich, UCF's Boardman Endowed Professor of Environmental Science and Public Administration and Interim Director of UCF's National Center for Integrated Coastal Research, works toward equitable and just solutions for myriad coastal challenges through science-based decision making supported by transdisciplinary research. His research/service includes applying geospatial technologies to emergency management planning/practice, long-term disaster recovery analysis, and the intersection of social vulnerability and community resilience in the face of catastrophe. His experience working with FEMA providing geospatial support for response and long-term recovery to the states of Florida, Louisiana, and Mississippi has developed into a research agenda focused on how differential exposure and recovery manifest in disaster-stricken areas. Most recently, Dr. Emrich has supported long-term recovery programs in a growing number of states and Puerto Rico by developing CDBG-DR required impact and unmet needs assessments focused on the most impacted and distressed (socially vulnerable) places. Dr. Emrich is actively working at pinpointing challenges to equity in disaster recovery and mitigation and remains at the vanguard of theory, data, metrics, methods, applications, and spatial analytical model development for understanding in the field of hazard vulnerability science and the often very in-equitable and disproportionate pattern of disaster loss and recovery across communities.

BERNEECE HERBERT

Dr. Berneece Herbert is the chair of the Department of Urban & Regional Planning at Jackson State University in Jackson, Mississippi. She has a doctoral degree in natural resource management and a masters in Urban & Regional Planning. Her research areas include urban health indicators, sustainable development and social equity with specific focus on food security, poverty and hunger, climate change, energy and public perception. Her technical skills include spatial analysis, vulnerability analyses and resiliency mapping. Her recent grants have focused on advancing solar energy, green infrastructure, heat mitigation, energy burdens and community empowerment in underserved and under-represented communities. She has led projects sponsored by agencies such as FEMA, USDS, INROADS, Clean Energy States Alliance and Jobs to Move America. Her ultimate goal at JSU is to educate and train students to be highly knowledgeable, competent and innovative thinkers and leaders who will utilize and leverage their knowledge and skills to build healthy, resilient and sustainable communities. Dr. Herbert is a results-oriented and people-centered professional with over 20 years of practice, academic and research experience in higher education and training, community development, strategic planning and management, public sector investment planning and policy formulation.

DARRYL B. HOOD

Darryl B. Hood, Ph.D. is a nationally recognized environmental public health neurotoxicologist and environmental justice expert at the Ohio State University. After 20-years at Meharry Medical College, Dr. Hood continues his innovation in discovery as co-architect of the novel Public Health Exposome framework with Big Data to Knowledge analytics. In Columbus, OH, Dr. Hood has assembled a well-conceived, functional multidisciplinary, community-based research stakeholder team to address disparate health outcomes in environmental justice census tracts. He uses the Public Health Exposome framework to interrogate hypotheses focused on determining if there are associations between the built, natural, physical and social environment and disparate health outcomes observed in vulnerable populations. The exposome framework is extremely relevant to the disparities that were documented across the COVID-19 syndemic and as we move into the current climate-change era. In this regard, he is currently applying the exposome framework and analytics as the PI of the USEPA STAR "ENVISION" initiative, Co-PI and OSU leader of the Columbus Climate Pollution Reduction grant, and Co-PI of a second USEPA STAR "FLEETS for ALL" electrification initiative. Dr. Hood is also serving concurrently on the National Advisory Environmental Health Sciences council at the NIEHS currently and on the Society of Toxicology leadership team as a Councilor.

MARCOS LUNA

Marcos Luna is a professor of Geography and Sustainability, and Coordinator of the graduate Geo-Information Science program at Salem State University in Salem, Massachusetts. Dr. Luna received his PhD in Urban Affairs and Public Policy from the University of Delaware, and his Master of Arts in Geography from California State University, Los Angeles. He is a governor-appointed member of the Massachusetts Environmental Justice Advisory Council, and an appointed member of the Massachusetts Energy Transformation Advisory Board. He serves on the board of directors of GreenRoots, a community-based environmental justice organization in Chelsea, Massachusetts, and also the board of directors of Comunidades Enraizadas – Community Land Trust. He was an appointed member of the ad hoc committee for the National Academies of Sciences, Engineering, and Medicine “Committee on Utilizing Advanced Environmental Health and Geospatial Data and Technologies to Inform Community Investment.”

NA'TAKI OSBORNE JELKS

Na'Taki Osborne Jelks is assistant professor in the Department of Environmental and Health Sciences at Spelman College in Atlanta, Georgia and Co-Founder of the West Atlanta Watershed Alliance, a community-based, environmental justice organization. In her research, Jelks champions community science and other participatory research approaches in which she engages environmentally overburdened communities in elevating lived experience and community knowledge to help address environmental challenges, monitoring local environmental conditions, generating actionable data for community change, and developing effective community-based interventions that revitalize toxic, degraded spaces into healthy places. Since 2018, Jelks has served on the National Environmental Justice Advisory Council, a federal advisory committee that works to integrate environmental justice into the Environmental Protection Agency's programs, policies and activities as well as to improve the environment or public health in communities disproportionately burdened by environmental harms and risks. She has served as NEJAC Co-Chair since 2022. Jelks previously served on the NASEM Committee on Community-based Wastewater Infectious Disease Surveillance. Dr. Jelks holds a B.S. in Chemistry and Civil Engineering from Spelman College and the Georgia Institute of Technology, a M.P.H. in Environmental and Occupational Health from Emory University, and a Ph.D. in Public Health from Georgia State University.

BILL RISH

Dr. William (Bill) Rish has over 40 years of experience in providing consulting for environmental exposure and risk assessment. He is currently focused on scientific methods for assessment of cumulative health risks at communities that may be vulnerable to disproportionate environmental impacts. Dr. Rish was the Principal Investigator of a 2024 comprehensive evaluation of cumulative impact assessment (CIA) for vulnerable communities to clarify the current underlying science, methods, and models and to explore potential research needs. He has done research into the relationship between community stress factors and allostatic load. Dr. Rish was chair (2023) of the Society of Environmental Toxicology and Chemistry (SETAC) Human Health Risk Assessment Interest Group and co-chaired (with Dr. Christopher Frey, EPA ORD) sessions on the current state of cumulative impact assessment methods at several of SETAC's annual conferences. At the 2024 International Society of Exposure Science (ISES) annual meeting he will co-chair (with Dr. Nicole Tolve, EPA ORD) a symposium on quantitative methods for incorporating non-chemical stressors into CIA. Dr. Rish is also an instructor for a regular annual Society for Risk Analysis (SRA) workshop on EJ assessment methods. Dr. Rish graduated from Carnegie-Mellon University with a doctorate in Engineering and Public Policy.

SHIRLEE TAN

Shirlee Tan is the Senior Toxicologist for the Seattle & King County Public Health Department where she serves as a technical advisor for the department on issues related to chemical exposures, impacts and policies. She works directly with communities and individuals to address ways to reduce chemical exposures and effects. Dr. Tan serves on numerous advisory groups for WA State, focused on chemical policy and regulation around chemical use, toxics cleanup, and

environmental justice. She chairs the EPA's Children's Health Protection Advisory Committee (CHPAC). Dr. Tan previously worked for the Organization for Economic Cooperation and Development (OECD) and the US EPA on the development of regulatory assays for endocrine disrupting chemicals, with a particular focus on thyroid and in vitro assays. She also worked for the Smithsonian Institution's National Zoological Park on pesticide misuse in Southeast Asia. Dr. Tan holds a PhD in cell and molecular biology from the University of San Diego, CA and conducted her postdoctoral research studying dopaminergic receptors and neurodegenerative pathways. Dr. Tan participated in previous NAS workshops on NAMs and developmental neurotoxicity and children's environmental health.

BEN TRUMP

Dr. Benjamin D. Trump is a Research Social Scientist with the US Army Engineer Research and Development Center, and Lead of the Research Center Engineering for Public Health and Human Factors (EPH). Dr. Trump's research focuses upon the evaluation of extreme uncertainty and the resilience of complex systems, with particular emphasis upon how to use incomplete information to inform decision making for policymakers. Much of Dr. Trump's research for USACE ERDC is international, including evaluations of water security in Iraq, Jordan, Libya, and Turkmenistan, of emerging technologies development in Singapore and the European Union, and of cyber and digital resilience in Ukraine, among others. In 2023, he served as US Embassy Science Fellow to Turkmenistan. In 2022, he was recognized as the USACE Researcher of the Year by LTG Spellmon, and received the Society for Risk Analysis' Chauncey Starr Distinguished Young Risk Analyst Award. Dr. Trump received his PhD from the University of Michigan, School of Public Health.

ELIZABETH VASQUEZ

Dr. Elizabeth Vásquez is an Associate Professor in the Department of Epidemiology and Biostatistics at the University at Albany School of Public Health and the Director of the Center for Elimination of Minority Health Disparities. Dr. Vásquez NIH-funded research aims to address health inequities beyond individual-level indicators to those that consider the role of social context and place (e.g. neighborhoods, climate), and their contributions to differential health outcomes. This line of work has significant implications on three primary areas in the field of gerontology: (1) Evaluation of the effect of specific social and health behaviors on quality of life and health outcomes among racial and ethnically diverse older adults; (2) Racial and ethnic differences among risk factors associated with progression of disability, and (3) Early life social disparities. In addition, Dr. Vásquez is a fellow with the Sustained Training in Aging and HIV Research (STAHR) program and an affiliated investigator with the Study of Latinos (SOL). She is an alumna of Programs to Increase Diversity among Individuals Engaged in Health-Related Research (PRIDE), the National Institute of Aging Butler-Williams Scholars Program and the Hispanic Leadership Institute (HLI).

REED WALKER

Reed Walker is the Transamerica Professor of Business and Public Policy and Economics at UC Berkeley. He received his PhD in economics from Columbia University. His research explores the social costs of environmental externalities such as air pollution and how regulations to limit these externalities contribute to gains and/or losses to society. He is the faculty co-director of UC Berkeley's Opportunity Lab - Climate and Society Initiative, a research associate at the Energy Institute at Berkeley, and a research associate at the National Bureau of Economic Research. His work has been supported by the Environmental Protection Agency, the National Science Foundation, the Robert Wood Johnson Foundation, the Sloan Foundation, and the Smith-Richardson Foundation. He was a recipient of the Sloan Foundation Research Fellowship and the IZA Young Labor Economist Award. Most recently, Reed served as a committee member for the NASEM Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions report.

SACOBY WILSON

Dr. Wilson is a Professor with the Department of Global, Environmental, and Occupational Health (GEOH), School of Public Health, University of Maryland-College Park. He is an environmental health scientist with over 25 years of experience in environmental justice science, exposure science, community-engaged research including community-based participatory research (CBPR), air pollution monitoring, climate change, and other topics. He is Director of The Health, Environmental, and Economic Justice Lab (T.H.E. E.J. Lab) and CEEJH INC. He also directs the Mid-Atlantic Climate Action Hub (MATCH), the Mid-Atlantic Environmental Justice Fund, and co-directs the US EPA Region III TCTAC. He is a member of US EPA's Science Advisory Board and participates on the US EPA NEJAC's cumulative impacts workgroup. He is also a member of the NAS Board on Environmental Studies and Toxicology (BEST) and Editor in Chief of Environmental Justice.

TRACEY WOODRUFF

Dr. Tracey Woodruff is the Alison S. Carlson Endowed Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences at UCSF and the Director of the Program on Reproductive Health and the Environment. She is a recognized expert on environmental pollution exposures and impacts on health, with a focus on pregnancy, infancy and childhood, and her innovations in translating and communicating scientific findings for clinical and policy audiences. She was previously a senior scientist and policy advisor for the U.S. EPA's Office of Policy. For more information on Tracey's work, visit www.prhe.ucsf.edu, or follow on Twitter @UCSF_PRHE and @TraceyJWoodruff.