

State-of-the-Science and the Future of Cumulative Impact Assessment

Board on Environmental Studies and Toxicology

AXEL ADAMS

Axel Adams is a board-certified emergency medicine physician and medical toxicology fellow. Issues of concern for his community include PFAS in the Great Lakes and Mississippi basins of the Upper Midwest, environmental disposition of waste materials of complex manufacturing processes such as semiconductor fabrication, overdose outbreaks related to new psychoactive substances, and invertebrate conservation. He completed his undergraduate education at the University of Wisconsin in Molecular Biology, and medical school at the University of California-San Francisco and a master's degree at the University of California-Berkeley School of Public Health before complete emergency medicine residency at the University of Washington.

WALTER AUCH

Walter E. Auch III, Ph.D., is currently the Midwest Program Director at the FracTracker Alliance, a role he has held since 2012. Specializing in terrestrial biogeochemistry with a focus on environmental justice and hydraulic fracturing impacts, Dr. Auch conducts research and mapping of environmental impacts, creates aerial image and drone libraries, and publishes peer-reviewed papers. He initiated the "Energy Audio Stories" archive to document personal experiences related to energy development. Recognized with multiple awards, including the 2020 Cornell Douglas Foundation's "Jean and Leslie Douglas Pearl Award," and several grants from institutions like the US EPA and The Gund Foundation, Dr. Auch is a member of the Soil Science Society of America, the Ecological Society of America, and the American Geophysical Union. He earned his Ph.D. in Plant and Soil Science with a specialization in Terrestrial Biogeochemistry from the University of Vermont in 2010, completed his M.S. in Forest Resources and Environmental Conservation at Virginia Tech, and his B.A. in Plant and Soil Science from the University of Vermont. Over the past five years, he has served on multiple advisory boards and working groups, including the US EPA Environmental Justice Screen Tool Data Gaps and Sources Working Group, the NAACP Ohio Environmental Justice Advisory Board, the Buckeye Environmental Network, the City of Shaker Heights Tree Advisory Board, and serves on the US EPA Environmental Justice Science and Analysis Review Panel and the Environmental Justice Screen Science Advisory Board from 2023 to 2024.

JACQUELINE BAHAM

Jacqueline Baham, New Orleans East Green Infrastructure Collective (NOEGIC)/Water Wise Gulf South, has a professional background as a Mental Health Specialist (MHS) where she counseled youth ages 5-21 and worked towards the goals of their treatment plan. She has always had a passion for youth and has continued to contribute to the development of youth in New Orleans for almost twenty years. She also has a passion for growing fruits, vegetables, and herbs in an attempt to combat the accessibility to fresh food and produce in New Orleans East where she is a long term resident. NOEGIC is based in a community that faces food insecurities, affordable housing issues, climate change, environmental justice issues, workforce development crisis, and educational issues. NOEGIC's mission is to equip residents with the knowledge and tools to manage stormwater where it falls, effectively reducing flooding, enhancing community resilience, promoting environmental stewardship, and improving the quality of life for all residents by fostering innovative solutions for stormwater management, and the urban heat island effect.

JO BANNER

Jo Banner is the Co-Founder and Co-Director of The Descendants Project where she channels her love for Louisiana into protecting her Afro-Creole heritage, descendants of the enslaved who suffer from environmental racism in Louisiana's Cancer Alley and Louisiana's unique biodiversity. As a Louisiana Cancer Alley resident, Banner champions environmental justice causes and is developing strategies to protect and transform the land into green spaces where communities like hers can thrive. Banner's advocacy has led her to speak before the United Nations. She has now participated in four UNEP Intergovernmental Negotiating Convenings (INCs) to develop a legally binding treaty to halt plastic and marine pollution as well as speaking before the UN Committee for the Elimination of Racial Discrimination. Banner works with several industries, including entertainment, culture, and heritage, to develop alternative job opportunities for her community. Banner utilizes her degrees in Communications and her management skills to challenge exploitative systems while creating long-lasting pathways of improvement for the health and happiness of her community.

DEEDEE BENNETT GAYLE

DeeDee M. Bennett Gayle, Ph.D., is an Associate Professor and Department Chair for Emergency Management and Homeland Security within the College of Emergency Preparedness, Homeland Security, and Cybersecurity at the University at Albany, State University of New York. She is the lead director of the Extreme Events, Social Equity, and Technology Lab. Her research examines the influence and integration of advanced technologies on the practice of emergency management and for use by vulnerable populations, in particular older adults, people with disabilities, as well as racial and ethnic minorities. Recently, her studies have also focused on workforce development and participation in disaster management fields in the United States. Dr. Bennett Gayle secured nearly \$2M in research grants and contracts as PI or Co-PI, including from the National Science Foundation, the Federal Emergency Management Agency, and the Department of Homeland Security. Employing experimental designs, qualitative one-on-one and focus group interviews, and quantitative survey analysis, her research explores ways to increase disaster preparedness, reduce vulnerability, and shorten recovery. She received her Ph.D. in Fire and Emergency Management from Oklahoma State University. She has a unique academic background, receiving her M.S. in Public Policy and B.S. in Electrical Engineering from the Georgia Institute of Technology.

CASSIE COHEN

Cassie Cohen is the Executive Director of Portland Harbor Community Coalition, based in Portland, Oregon. Cohen holds a Masters of Social Work from Portland State University, with a concentration in Community-Based Practice, and has over a decade of experience coalition building with BIPOC, immigrant/refugee/asylee, Indigenous/tribal communities and people experiencing homelessness, focused on addressing relevant environmental justice and health concerns. She has specific significant accomplishments supporting frontline communities to influence agency decision-making processes. She co-led years-long community engagement processes and successful advocacy efforts to create the Portland Harbor Superfund Site Collaborative Group - an inclusive forum for interested and affected parties to provide input and recommendations to agencies responsible for the cleanup. In addition, she facilitated grassroots involvement in developing a Community Impact and Mitigation Plan (CIMP), recognized by EPA Region 10 as a standard-setting model process for development of community-driven CIMPs as part of superfund cleanup processes. Cohen and her coalition lead the development of the currently in-progress Cumulative Health Impacts and Resilience Plan (CHIRP), driven by frontline community leaders, with support from dozens of public health inter-agency and academic technical partners. The goal of this group is to envision collective action to achieve an actionable Cumulative Impact Assessment study design and roadmap for resilience investments and interventions.

JESS CONARD

Jess Conard, M.A. CCC-SLP is a multi-generational resident of East Palestine, Ohio. Jess is a licensed medical speech language pathologist who was launched into grassroots advocacy following the Ohio Train Derailment in February 2023.

Jess is a strong advocate for policy implementation and health program resourcing for her community and is leading a national campaign to ban vinyl chloride. Vinyl chloride was the primary hazardous chemical that was purposely drained and burned in her community a few days following the derailment.

DIONNE DELLI-GATTI

Dionne Delli-Gatti is the, Associate Vice President for Community Engagement with the Environmental Defense Fund (EDF) and, is currently executing executes an organization-wide effort to implement innovative, scalable, and equitable community engagement strategies with a specific focus on community-driven solutions to reduce the disproportionate and devastating effects of petrochemical operations on frontline communities. With a career spanning over three decades in environmental sustainability, climate policy, and community engagement, Dionne has experience in the public, private, and advocacy space. Dionne holds an Associate Arts degree in Geology from Sinclair College, a Bachelor of Arts in Environmental Geology from Wright State University and a Master of Science in Environmental Science from the University of North Texas. With a career spanning over three decades in environmental sustainability, climate policy, and community engagement, Dionne has experience in the public, private, and advocacy space.

ROBIN DODSON

Dr. Robin Dodson is an exposure scientist at Silent Spring Institute and an adjunct assistant professor at Boston University School of Public Health. Her research focuses on three main areas: development of novel exposure measurements for community-based and epidemiological studies, analysis of environmental exposure data with particular emphasis on semivolatile organic compounds (SVOCs), and interventions aimed at reducing chemical exposures. Dr. Dodson investigates environmental exposures of chemicals linked to a range of health outcomes, including asthma, altered neurological and reproductive development, and breast cancer. Dr. Dodson recently served as a peer-reviewer and dissemination workshop presenter for NASEM's 'Why Indoor Chemistry Matters' report. Dr. Dodson completed her doctorate in environmental health and masters in environmental science and risk management at Harvard T.H. Chan School of Public Health.

JENNIFER M. HADAYIA

Jennifer M. Hadayia, MPA is the Executive Director of Air Alliance Houston, the longest running advocacy non-profit singularly focused on the public health impacts of air pollution in the Greater Houston Area. She has worked for over 25 years in public health and health equity with state and county health departments and non-profit organizations in five states and the District of Columbia. Prior to leading Air Alliance Houston, Jennifer was senior staff at Legacy Community Health Services, Inc., the largest Federally Qualified Health Center (FQHC) in the state of Texas, where she ran the public health department. She was also Harris County's first-ever Health Equity Coordinator and developed their first Health Equity Framework, which is still in use today. She was born and raised in Houston, hails from a three generation Houston Ship Channel family, and is a proud resident of Houston's Near Northside, an environmental justice community inundated by the cumulative impacts of multiple concrete producers and rock crushers, plastic manufacturers, and tailpipe emissions. Hadayia holds an MPA from Columbia University with a concentration in Gender and Public Policy and a BA in English from Yale University.

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.

JOSEPH F. KOZMINSKI

Joseph Kozminski is Professor and Chair of Physics at Lewis University in Romeoville, IL, a southwest suburb of Chicago. His current work focuses on examining climate vulnerability factors and expanding air quality monitoring using low-cost sensors in Joliet and the surrounding area in Will County, IL. This area is a supply chain hub that houses the largest inland container port in North America along with other intermodals, several interstate highways, major rail lines, a ship canal, and an increasing number of warehouses. There are environmental justice communities interspersed throughout this area that are negatively impacted by the traffic, air pollution, loss of green space, and other factors. Kozminski and his students partner with community organizations on this work and on providing community education around air quality and climate vulnerability. Dr. Kozminski holds a B.S. in Physics and Mathematics from the University of Notre Dame and an M.S. and a Ph.D. in Physics from Michigan State University.

ALEXIA LECLERCQ

Alexia Leclercq is a grassroots environmental justice organizer and scholar working with PODER (People Organized in Defense of Earth and her Resources), located in East Austin. She has led dozens of campaigns from pushing for an equitable fossil fuel phase out at the UN to passing climate legislation, fighting for clean water, addressing aggregate mining pollution, relocating toxic tank farms, and organizing mutual aid. Alexia is also the co-founder of the Colorado River Conservancy and social-environmental justice education non-profit named Start:Empowerment. Her curriculum has reached over 120,000 students across the U.S, and featured on Forbes, Washington Post, Guardian. She was awarded the prestigious Brower Youth Award, 2022 WWF Conservation Award, and is the youngest recipient of the Harvard AOCC Award. She served as the 2022 UN Assembly Ambassador and has been a guest lecturer at Harvard, University of Texas Law, University of Connecticut, Dell Medical School, Princeton. Alexia graduated Summa Cum Laude from New York University and Harvard Graduate School of Education.

STEPHEN H. LINDER

Stephen H. Linder, Ph.D. is a Professor in the Department of Management, Policy and Community Health at the School of Public Health of the University of Texas Health Science Center at Houston. He serves as Director of the Institute for Health Policy, and Co-Director, Community Engagement, Gulf Coast Center for Precision Environmental Research. His current work with County and City health authorities focuses on community-based assessment of health needs and disparities, and on environmental and cumulative risks. His earlier work dealt with public policy design, policy implementation, and environmental policy. His doctorate is in Political Science with subsequent training in conflict resolution and mediation at UT School of Law. He is currently a member of the National Academies Board on Environmental Change and Society.

SOPHIA LONGSWORTH

Sophia Longworth currently works as the Toxics Policy Director at Clean+Healthy, a non-profit environmental health organization based in Albany, NY. She works on state legislation that advances environmental justice, turns off the tap on

toxic chemicals, and ensures protection of the children, wildlife, and the environment. Longworth is concerned about the air quality in environmental justice communities stemming from decades of legacy pollution from polluting facilities that have intentionally been placed in communities of color and low income communities. Longworth is passionate about advocating for populations that have been made vulnerable by the climate crisis, and environmental and social injustices. She hopes to contribute to the improvement of livelihoods through education and policy development. Sophia is originally from Grenada in the Caribbean, and has been living in New York since 2013. She holds a Master of Public Health from St. George's University in Grenada, and Master of Science in Natural Resource and Environmental Management from the University of the West Indies in Barbados.

ANDREA ISABEL LÓPEZ

Andrea Isabel López is a PhD student in the Life Sciences Communication Department at the University of Wisconsin – Madison and a 2021 Civic Science Fellow with Ciencia Puerto Rico. She completed the Margaret E. Mahoney Fellowship with the New York Academy of Medicine and has also worked as a Research Project Coordinator and Associate Researcher for multiple NIH-funded projects based at the Icahn School of Medicine at Mount Sinai and the Albert Einstein College of Medicine. She is a bilingual science communicator and public health researcher with close to 10 years of experience in community-based participatory research, science communication, and project management. López was born in San Juan, Puerto Rico, and is currently based in Madison, Wisconsin. Her work centers on the perspectives of Latine and Puerto Rican audiences and is deeply influenced by the pressing issues facing Puerto Rico, including the legacy of colonialism, the impact of social determinants of health, the increasing frequency of extreme weather events such as hurricanes, and the challenges posed by a precarious energy grid system. She holds an MPH from the CUNY Graduate School of Public Health and Health Policy.

BETO LUGO MARTINEZ

Beto is a grassroots community organizer with fenceline knowledge and expertise rooted in environmental justice, and climate justice principles, dedicated to improving community health of overburdened communities through a broad range of approaches: environmental health education, community led participatory research, community led research and science. He advocates for community led solutions at the local, state and federal levels and continues to educate political officials on how directly and indirectly they perpetuate environmental racism through their policies. Because of his experiences ranging from local to international, Beto recognizes how global climate-action table negotiations can be leveraged at the local community level; this can help local community action and change from the bottom up - to improve environmental protections, chemical safety and address environmental health hazards. His years of collaboration and knowledge of environmental enforcement, environmental laws, local, state and federal air pollution research, community engagement, and crowdsourcing data make me a trusted community expert in the movement. Beto has participated in multimedia enforcement (water, air, soil) and interagency initiatives, as well as workgroups and committees to make policy recommendations that prioritize public health. Through his experiences in developing, implementing, drafting new and reworking existing policies I have been able to cultivate skills in analyzing and synthesizing complex policies and practices associated with land use and environmental enforcement, policies that prioritize environmental justice communities. Beto is adaptive in high pressure and politically sensitive situations and has leaned on diplomatic and discrete approaches, as needed, but also comfortable being an outspoken community activist at local, state, regional and federal regulatory proceedings; such as public hearings, and similar venues. Beto has experience collaborating with academic institutions and governmental agencies around the nation and has partnered with multiple academic institutions on research-to-action, federally funded NIEHS research grants. Beto has co-authored several publications on community led research, and recently co-authored “The Air We Breathe” in the "Environmental Health: Foundations for Public Health."

AARON MARUZZO

Aaron Maruzzo (he/him) is a researcher at Silent Spring Institute. His research at Silent Spring focuses on toxic chemicals in water, especially in overlooked and marginalized communities. He studies how certain contaminants, such as PFAS chemicals, can impact people's health and the environment. He is interested in the cumulative impacts of chemical and non-chemical stressors on island and coastal communities. Effects from environmental stressors, such as drinking water contamination and climate change, can be magnified in island and coastal communities—but difficult to measure. He is interested in the ways in which we characterize, measure, and report-back these combined effects to support community-based and data-driven action. Maruzzo has previously worked with the Commonwealth Utilities Corporation in Saipan, the Water and Environmental Research Institute in Guam, and the Safer Consumer Products Program at California Department of Toxics Substances Control. He holds a BA from Williams College and an MPH in environmental health from UC Berkeley. Maruzzo previously served as a community liaison on a NASEM panel on PFAS testing and medical monitoring.

JACKIE MEDCALF

Jackie Medcalf is the Founder and Executive Director of Texas Health and Environment Alliance (THEA), a Houston-based nonprofit focused on communities at the intersection of legacy toxic waste sites and climate change. THEA's model is based on the theory that environmental justice can only be achieved when residents have the knowledge to make informed decisions about their health. Using the principles of environmental health literacy, THEA engages community members, provides them with technical analysis of the remediation process and creates opportunities for them to make their voices heard. THEA has used this approach to create a 55,000 member coalition to encourage the EPA to cleanup the San Jacinto River Waste Pits Superfund Site, convince the agency to rewrite remediation plans for the Jones Road Ground Water Plume Superfund Site because they were not protective of residents, and launch an investigation resulting in a state determination that part of Houston's historically BIPOC Greater Fifth Ward is a cancer cluster, prompting the EPA to require extensive water, soil and air testing. She holds a Bachelor of Science in Environmental Science and Geology from the University of Houston-Clear Lake and has studied nonprofit leadership at Rice University.

ANTOINETTE MEDINA

Antoinette Medina is the Program Manager for the California Rural Indian Health Board, Inc.'s California Tribal Epidemiology Center. Medina plays a vital role in CTEC's mission to enhance the health of 109 federally recognized Tribes in California by engaging communities in collecting and interpreting health information to establish health priorities, monitoring health status, and developing effective public health services that respect the cultural values and traditions of the communities. As sovereign nations, Tribes have the right and responsibility to govern their lands and environment to safeguard them for future generations. As a California Tribal citizen herself, Antoinette is deeply concerned with Tribal environmental health issues in California, such as clean air, healthy indoor air quality, food safety, vector-borne and communicable diseases, safe drinking water, fish and wildlife habitats, water contamination, and climate change. She holds a Master of Public Administration and a Bachelor of Arts in the Legal Environment of Business from the Craig School of Business at California State University, Fresno. Complementing her formal education, Antoinette has attained Public Health Management, Grants Management, and Conflict Resolution certifications. Additionally, she has certifications from the White Bison Wellbriety Training Institute and The Native Wellness Institute.

ESTHER MIN

Esther Min is the Director of Research at Front and Centered, a diverse and powerful coalition of communities of color-led groups across Washington State, whose missions and work come together at the intersection of equity, environmental and climate justice. She is based in Seattle, Washington and is also affiliated with the University of Washington Department of Environmental and Occupational Health Sciences as a clinical faculty. She has worked with frontline communities to create tools and research projects that elevates the importance of documenting and highlighting cumulative impacts on frontline communities. Dr. Min received her doctorate at University of Washington School of Public Health in

Environmental and Occupational Hygiene, and her Masters of Public Health with emphasis in Community Health at Touro University California.

MONA MUNROE-YOUNIS

Mona Munroe-Younis is Founder/Executive Director of Environmental Transformation Movement of Flint (ETM Flint), a grassroots environmental justice non-profit in Flint, Michigan. Her work builds on 15+ years of community organizing and partnership development for equitable community investment, including as a City of Flint neighborhood planner, Flint water crisis response liaison between the Flint community and U-M School of Public Health in Ann Arbor, and manager of the U-M Flint Center for Civic Engagement. ETM Flint is sponsoring her participation in this NASEM committee. Flint residents are deeply concerned about cumulative impacts because of prevalent health impacts and early death of residents in predominantly Black, low-income neighborhoods near concentrated industrial activity. While residents have fought industrial encroachment/expansion, all neighboring communities have zoned their heavy industry next to Flint's borders and the State of Michigan has a long track record of rubber stamping permits, underscoring the need for national policy to guide state regulations and proactively protect the health of impacted residents. Mona has an M.S. in natural resources (concentrations: environmental justice, policy) from University of Michigan in Ann Arbor and a B.S. in environmental science and planning from University of Michigan-Flint.

VALERIE I. NELSON

Valerie I. Nelson is a steering committee member of the Cape Ann Climate Resilience Collaborative, which includes local climate action non-profit organizations, municipalities, and programs at the Harvard University Graduate School of Design, Massachusetts Institute of Technology, and UMass-Boston. Since 2020, studies have focused on extreme storm scenarios, ecological restoration strategies, and cultural and ethnographic studies, including of Gloucester's environmental justice neighborhood. Upcoming research will explore a variety of community engagement approaches, governance structures, climate finance, and gray and green infrastructure. Dr. Nelson is an active member of the Cape Ann Climate Coalition, a grassroots advocacy group with a mission to advance climate action. Challenges on Cape Ann, a region north of Boston, include coastal flooding and extreme storms, heat island effects, droughts, lack of trees and green spaces, lead in pipes, and gas leaks. In prior years, Nelson led the Water Alliance, an international network of experts and advocates in 21st Century water management. She has been an active participant in government-community relations in Gloucester and served two terms on the Gloucester City Council. Nelson was an Instructor at the Harvard Kennedy School of Government and a Visiting Assistant Professor at the MIT Department of Urban Studies and Planning and holds degrees in Economics from Harvard University, London School of Economics, and Yale University. Dr. Nelson served on a 1988 NRC Committee, Saving Cape Hatteras Lighthouse from the Sea.

SHALMALEE PANDIT

Shalmalee Pandit currently works as a Program Officer at Stanford's Doerr School of Sustainability, Accelerator, where she determines funding priorities in various sustainability areas, designs programs in the aforementioned areas, and defines the scope of these investment theses. As she lives in a water desert, California, Shalmalee is most interested in how water and water access affect human and planetary health. Prior to this, Dr. Pandit worked at a top global consulting firm, completed a PhD focusing on biological solutions for climate and environmental problems, and commercialized her academic research. Dr. Pandit received a BS in Bioengineering and Biomedical Engineering from UC Berkeley and a PhD and Biological and Biosystems Engineering from the Massachusetts Institute of Technology.

JACOB PARK

Jacob Park is Associate Professor, Vermont State University (Castleton) University and Visiting Professor, University of Johannesburg, South Africa. He is an inter-disciplinary business school/management studies scholar with expertise in

corporate environmental management, sustainable finance, energy transition, and climate change & health (with a special focus/interest in heat health in workplace settings). He is particularly interested in climate change-related social equity and community health concerns including food security, flooding, heat health, and financial resilience. Dr. Park served as a community liaison group member for the National Academies PFAS study.

NIKITA PATIL

Dr. Nikita Patil is the co-founder of Aquasaic, where she focuses on increasing clean water access using biological principles. She is working to serve under resourced communities around the country to improve their access to clean water. Her research has focused on finding the long-term impacts of environmental factors like nutrition on human health and aging. Patil received her B.S. in Biomedical Engineering from Boston University and her Ph.D. in Biomedical Engineering from the University of Texas at Austin. She pursued her postdoctoral research in the neuroscience department of the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University.

KAN SHAO

Dr. Kan Shao is an Associate Professor of Environmental and Occupational Health at Indiana University (IU) School of Public Health - Bloomington, where he primarily works on human health risk assessment research and education. Prior to joining IU, he served as a postdoctoral fellow at the National Center for Environmental Assessment at the US EPA. Dr. Shao's research primarily focuses on advancing computational and modeling methods to support chemical risk assessment in the face of uncertainty. His major contributions to the field of quantitative chemical risk assessment include the development of the benchmark dose (BMD) methodology, Bayesian approaches to quantify various sources of uncertainties in dose-response assessment, and a modeling framework to quantitatively integrate mechanistic information. He has received more than three million dollars in external grants from NIH to support his research projects in computational toxicology. Dr. Shao is now an Associate Editor of the journal Drug and Chemical Toxicology and served as a reviewer for a few high-profile risk assessment reports, including NRC's Review of U.S. EPA's ORD Staff Handbook for Developing IRIS Assessments: 2020 Version. He holds a dual Ph.D. in Civil & Environmental Engineering and Engineering & Public Policy and an M.S. in Machine Learning both from Carnegie Mellon University.

SHEREYL SNIDER

Shereyl Snider is a community organizer with the East Trenton Collaborative and a lead advocate with Lead-Free NJ. Organizations that are helping to sponsor and support the East Trenton Collaborative endeavors are Rutgers EOHSI, Funds for NJ, and Lead-Free NJ. Snider's focus is on reducing lead exposure in the city of Trenton NJ, and providing early testing for children. She began working as a community organizer in 2019 organizing with the East Trenton neighborhood on environmental and traffic safety issues, and in 2021 began working with Lead-Free NJ on advocating for lead testing for children and reducing lead exposure. The issues of concern facing her environmental justice community are the same issues that are affecting many low-income, Black and Latinx communities. Some of the biggest burdens her community is facing are exposures to lead toxins in water, paint, soil, and dust, causing learning and behavior issues and producing Asthma, high crime, autistic children, and anemia, just to name a few. Snider received a BA in Liberal Studies with a concentration in Social Justice and History from William Paterson University.

ORLY STAMPFER

Orly Stampfer is an Indoor Air Quality Epidemiologist in the Climate and Health Section at the Washington State Department of Health. Dr. Stampfer's current role includes responding to community air quality concerns and developing indoor and outdoor air quality guidance, especially related to wildfire smoke and the use of low-cost air sensors. Their graduate research on air quality and low-cost air sensors was rooted in community and Tribal engagement. Dr. Stampfer has also been a consultant for Tribal Healthy Homes Network and Front and Centered. Dr. Stampfer received an MPH and

PhD in Environmental Health from the University of Washington Department of Environmental and Occupational Health Sciences.

RAYMOND SWEET

Raymond Sweet is a Climate Coordinator based in New Orleans, Louisiana, with a dedicated focus on the Hollygrove-Dixon neighborhood. His primary efforts are concentrated on community engagement to address issues such as the Urban Heat Island effect, extreme weather events, and increased rainfall. Raymond plays a crucial role in educating the community through seminars on Nature-Based Solutions and overseeing Green Infrastructure Installation Projects. Beyond his professional duties, Raymond is deeply involved in volunteer work. He has a background as a CASA advocate and continued into a staff role as a volunteer recruiter by recruiting new advocates to support children in foster care. His commitment to social issues extends to organizing efforts for safe housing with the Renter's Rights' Assembly, addressing the needs of the unhoused population. Additionally, Raymond mentors young boys through the Son of a Saint program, contributing to child welfare and development. A native of Tampa, Florida, Raymond brings personal experience with similar environmental and social challenges to his work in New Orleans. He is an active member of the Water Wise Gulf South collective, a network of Community-Based Organizations that collaborates to secure funding and implement solutions for their neighborhoods and the broader city. Raymond also serves on a five-member panel that discusses and develops policies around Nature Based stormwater management practices. Currently, Raymond is a member of the Climate Communities Network, where he continues to contribute his expertise and passion for sustainable community development.

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.

P. GRACE TEE-LEWIS

P. Grace Tee Lewis is a Senior Health Scientist at the Environmental Defense Fund and a visiting scientist in the Program for Population and Environmental Health Disparities in the Center for Precision Environmental Health at Baylor College of Medicine. Dr. Tee Lewis leads the Environmental Defense Fund's Data to Action work in Houston, Texas. She provides scientific expertise and guidance to community-based organizations and leaders to build climate/ environmental justice capacity and to implement community science efforts. This includes health impacts of criteria and hazardous air pollutants, particularly to environmental justice communities. She also focuses on community exposures from petrochemical facilities and transportation sectors, and strategies to improve regional air quality and public health. In collaboration with Texas A&M University, she also led a multi-disciplinary team of community advocates and scientists in development of a national scale environmental justice screening and mapping tool to identify disadvantaged communities and understand drivers leading to neighborhood-level cumulative vulnerability. She received her PhD from the University of Texas Health Science Center at Houston, School of Public Health in Epidemiology with minors in Environmental Science and Biostatistics.

INYANG UWAK

Inyang Uwak is the Research and Policy Director for Air Alliance Houston (AAH), an Environmental Justice non-profit based in Houston, Texas, dedicated to reducing the public health impacts of air pollution through research, education, and advocacy. She has over a decade of experience in air quality epidemiology, human health risk assessment, and environmental health. Some of her work with AAH involves monitoring air quality trends (particularly in fence-line communities), synthesizing the impacts of the data, and then conveying that data/science in understandable and actionable ways to various community stakeholder audiences. She has contributed to written and verbal public comments, policy papers, in response to proposed legislation/policy affecting air quality, permit applications, regulations, and enforcement. Dr. Uwak has a doctorate degree in epidemiology and environmental health (DrPH) from Texas A&M University School of Public Health, a master's in public health (MPH) from the Johns Hopkins Bloomberg School of Public Health and a medical degree (MD) from the University of Calabar College of Medicine.

ELIZABETH VÁSQUEZ

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).

LILY WU

Lily Wu, Ph.D. works at California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) as a community air protection toxicologist. She has over decade of experience doing health risk assessments of chemicals for reproductive toxicity. Her work in the last four years has engaged several overburdened communities in California's Bay Area, Central Valley, and Salton Sea regions as the state's primary community air protection toxicologist. Her responsibilities include assessing health benefits of community emissions reduction plans, and consideration of cumulative exposures of multiple chemical and non-chemical stressors in addressing communities' disparate health outcomes. Dr. Wu has extensive work experience and expertise in human health risk assessment, cumulative impacts assessment, exposome, and community engagement. She serves as a technical expert on several academic, community, and federal advisory committees, ranging in topics from health equity, pesticides, and environmental justice science. Dr. Wu received a B.S. in Animal Sciences from the University of Illinois, Urbana-Champaign, and a Ph.D. in Molecular, Cellular, and Integrative Physiology with a designated emphasis in reproductive biology from the University of California, Davis.

NAOMI YODER

Naomi Yoder is a GIS Data Manager and researcher with the Bullard Center for Environmental and Climate Justice at Texas Southern University, an HBCU in Houston. While Naomi's research focuses around geospatial analysis for environmental and justice issues, they have worked as a researcher and science communicator for Gulf Coast environmental policy, advocacy and justice for six years. Their career has involved studying and communicating about environmental issues for over 20 years. Naomi lives and works in Houston, Texas, and having lived before in New

Orleans, Louisiana, they have a keen familiarity with environmental issues in these two “petrochemical states”. The Bullard Center’s mission is to promote justice—environmental, climate, economic, energy, transportation, food and water and health justice—and eliminate structural inequality and systemic racism. This is accomplished through interactions with communities where environmental and climate injustice is most pronounced. Civic engagement and advocacy form the core of the Bullard Center’s work, and thus inform Naomi’s contributions. Naomi holds two Master of Science degrees, one in Marine Science (Biological Oceanography) from University of Southern Mississippi, and one in Geography (Biodiversity, Conservation and Management) from the University of Oxford.