NATIONAL ACADEMIES Sciences Engineering Medicine

Emerging Science on Indoor Chemistry | BOARD ON CHEMICAL SCIENCES AND TECHNOLOGY

Why Indoor Chemistry Matters Townhall: A Dialogue for Improving Health and Building Healthier Homes in the Four Corners Region

San Juan College
Henderson Fine Arts Building – Room # 9006 (ROOM UPDATED)
4601 College Boulevard
Farmington, New Mexico 87402

AGENDA SUBJECT to CHANGE.

THURSDAY, NOVEMBER 14, 2024

About

In September 2023, the National Academies of Sciences, Engineering, and Medicine began a series of workshops to disseminate the results of the 2022 consensus study Why Indoor Chemistry Matters and to engage in dialogue with professionals and a variety of communities. That study examined the state of the science about chemicals in indoor air and outlined a research agenda for further understanding these chemical exposures and their impacts on human health. Importantly, the indoor environment is linked to the outdoor environment, and consequently, the study and workshops have sought to shed light on these interacting environments. This townhall will have that interaction as an essential theme.

The three previous workshops all held in Washington, DC, covered the topics of:

> Environmental Justice Considerations and Impact of Products and Services of Indoor Chemistry held September 19-20, 2023,
>
> Prioritizing Indoor Chemistry Research held February 8, 2024, and
>
> Reaching Communities for Action held April 10, 2024.

This townhall will create a community dialogue among researchers, community leaders, educators, public health practitioners, and representatives from tribal, state, and federal agencies. The topics will include investigating the chemical and radioactive exposures in water, land, and air, understanding how these exposures and mixture of exposures impact people's health and affect the indoor environment in their homes, and discussing available and potential future solutions to improve health.

Agenda (Times are listed in Mountain Time and, then, Eastern Time.)

8:30am – 9:00am MT
10:30am – 11:00am ET

Meet and greet over coffee, tea, and pastries

9:00am – 10:00am MT
11:00am – 12:00pm ET

Welcome, Introductions, and Keynote Address

Welcome and introductions from **Charles D. Ferguson**, Senior Director, National Academies of Sciences, Engineering, and Medicine's Board on Chemical Sciences and Technology, and **Mansel A. Nelson**, Program Manager, Indoor Air Quality in Tribal Communities, Tribal Environmental Education Outreach Program, Institute for Tribal Environmental Professionals, Northern Arizona University (confirmed)

Keynote address by **Gillian Mittelstaedt**, Executive Director, Tribal Healthy Homes Network, and member of the National Academies committee on the Emerging Science of Indoor Chemistry, Partnership for Air Matters and the Tribal Healthy Homes Network (confirmed)

Presentation on the National Academies' committee report *Why Indoor Chemistry Matters* and Partnership for Air Matters and the Tribal Healthy Homes Network

Note: This session includes time for dialogue with Dr. Mittelstaedt.

10:00am – 10:10am MT
12:00pm – 12:10pm ET

Brief break to set up first panel discussion

10:10am – 12:10pm MT
12:10pm – 2:10pm ET

PANEL 1 – Chemical Exposures that Impact Air and Water Quality: Research and Environmental Monitoring Needed for Community Action

Chaired by **Mansel A. Nelson**, Program Manager, Indoor Air Quality in Tribal Communities, Tribal Environmental Education Outreach Program, Institute for Tribal Environmental Professionals, Northern Arizona University (confirmed)

Janice Archuleta, Air Quality Program Manager, Ute Mountain Ute Tribe (confirmed)

Ryan T. Barton, Hydrologist, Water Management Branch, Navajo Nation Department of Water Resources (confirmed)

Pat Childers, Senior Advisor, Tribal Program Management, Office of Air and Radiation, U.S. Environmental Protection Agency (virtual) (confirmed)

Secody Hubbard, Environmental Protection Specialist, Office of Air and Radiation, Indoor Environments Division, EPA (virtual) (confirmed)

Carrie Nuva Joseph, Director, Department of Natural Resources, Hopi Tribe (virtual) (confirmed)

12:10pm – 1:10pm MT
2:10pm – 3:10pm ET

Buffet lunch (in-person participants)

1:10pm – 3:10pm MT
3:10pm – 5:10pm ET

PANEL 2 – Understanding Health Impacts of and Actions to Respond to Mixtures of Exposures

Chaired by Johnnye Lewis, Professor Emerita, Former Director, UNM METALS Superfund Research Center, Co-Director, Community Environmental Health Program (CEHP) – UNM HSC COP NBCS ECHO, Center for Native Environmental Health Equity Research, University of New Mexico (confirmed)

Jose Manuel Cerrato, Professor and Regents' Lecturer, Director, UNM METALS Superfund Research Center, University of New Mexico (confirmed)

Jacqueline M. Kakos, Health Education Consultant, New Mexico Poison and Drug Information Center supported by UNM Children's Hospital (virtual) (confirmed)

Darrell LaRoche, IHS Deputy Director for Management and Operations, Indian Health Service (confirmed)

Debra A. MacKenzie, Co-Director, CEHP, Assistant Professor, Pharmaceutical Sciences, University of New Mexico (confirmed)

Eliseo J. Pérez-Stable, Director, National Institute on Minority Health and Health Disparities (NIMHD) (virtual) (confirmed)

3:10pm – 3:30pm MT
5:10pm – 5:30pm ET

Break

3:30pm – 5:25pm MT
5:30pm – 7:25pm ET

PANEL 3 – Developing and Implementing Solutions for Healthier People and Homes: Communication, Education, Next Generation Research, and Community Engagement

Chaired by Michael T. Janicke, Senior Program Officer, Nuclear and Radiation Studies Board, National Academies of Sciences, Engineering, and Medicine

Sebastian Dawiskiba, Senior Native American Program Specialist, Headquarters Operations, Office of Native American Programs, U.S. Department of Housing and Urban Development (HUD) (virtual) (confirmed)

Eleanor Feir, Graduate Research Assistant and master's degree candidate in Analytical Chemistry at Northern Arizona University (confirmed)

Roy Lee Hosteen, Four Corners Program Coordinator, Red Feather, which "partners with Indigenous communities to develop and implement lasting and impactful housing solutions" and is currently working with Hopi Tribe and Navajo Nation (confirmed)

Nala Nelson, student, work with Kayenta community on education and communication on wood stoves and radon (confirmed)

Brian Perez, Research Assistant and master's degree candidate in Chemistry at Northern Arizona University (confirmed)

Mallery Quetawki, Communications and Outreach Specialist with the Community Environmental Health Program (CEHP) at the University of New Mexico-College of Pharmacy (confirmed)

Aaron "A.J." Salkoski, Program Analyst, Lead and Healthy Homes Program Division (LM), U.S. Department of Housing and Urban Development (virtual) (confirmed)

Justin Wilbanks, master's degree candidate in Chemistry at Northern Arizona University (confirmed)

NOTE: This session will also include opportunity for dialogue with others in attendance, researchers, and members of the communities who are connected off-site.

5:25pm – 5:30pm MT
5:25pm – 7:30pm ET

Closing song

Song sung by **Nala Nelson**

5:30pm MT
7:30pm ET

Adjourn the meeting

Brief Biographies of Participants and Staff

Since 2016, **Janice Archuleta** has been the Air Quality Program Manager for the Ute Mountain Ute Tribe, striving to strengthen the air quality program over the Reservation lands that expand into three states in the Four Corners Area. At Ute Mountain Ute Tribe, the Air Quality program measures ambient air quality: ozone, particulate matter (2.5µm and 10µm), associated meteorological parameters, and performs other short-term studies e.g., ambient radon and volatile organic compounds. The program is working on obtaining Treatment in the Same Manner (TAS) as a state for non-regulatory Clean Air Act Sections such as monitoring under Section 105. The program has also provided information to the communities on indoor

environmental quality, assists in indoor air/environment assessments, and conducts radon measurements in education buildings (including 1 school and 2 preschools), government buildings, and community homes on a voluntary basis. In 2023-2024, the program assisted in developing and conducting a Health and Homes Questionnaire for the White Mesa Community. Janice has an undergraduate degree in Biology and master's degree in health physics, (Radiation Safety), and has an array of environmental experience spanning 30-plus years, ranging over nuclear test site cleanup, asbestos inspections, environmental air modeling, radon testing, and mixed waste compliance.

Ryan T. Barton is a hydrologist with the Navajo Nation Department of Water Resources' Water Management Brach (NDWR-WMB) in Fort Defiance, AZ. Out of college, he volunteered as a biological assistant at the Petrified National Park. Ryan has worked collecting field data to quantify the storage capacity of lakes and reservoirs on the Navajo Nation through topographic and bathymetric surveys on lakes and reservoirs. He also conducts the annual crop inventory of Navajo Nation irrigated farmlands along the San Juan River in New Mexico. Ryan also works on water infrastructure projects along with many stakeholders. He serves on the Board of Directors for the National Tribal Land Association, and in his interest to bring more Native people into the field of natural resources, he mentors students through internships. Ryan has a B.S. in Environmental Biology (2013) from Fort Lewis College, Durango, CO.

Pat Childers is the Senior Advisor for Tribal Program Management for the Office of Air and Radiation at the U.S. Environmental Protection Agency. Pat has spent the past 40 years working with EPA's partners in reducing air pollution. His experience includes a decade of working directly with Federally recognized Tribes on Air quality program implementation, training, and funding. This includes being the Tribal program lead for the Agency on the Inflation Reduction Act and the Clean Air Act. Prior to Pat's Tribal focus, he coordinated the Ozone Transport Commission for EPA and was the Designated Federal Official for the Clean Air Act Advisory Committee and the Clean Air Excellence Awards Program for 9 years. Increasing Tribal participation in those programs was one of Pat's priorities. Prior to that Pats input at the Agency included twenty years at OAR's Office of Transportation and Air Quality as Deputy Chief of staff and numerous other functions varying from enforcement officer to bicycle program coordinator. A majority of Pat's time was coordinating with State, Local and Tribal officials on mobile source regulatory and voluntary measures. Pat looks forward to focusing his remaining years at EPA on Tribal air programs and advancing healthier environments in Indian country.

José M. Cerrato is Professor and Regents' Lecturer at the University of New Mexico (UNM). He obtained a B.S. in Civil Engineering from the National Autonomous University of Honduras, and M.S. and Ph.D. in Environmental Engineering from Virginia Tech. He was also a Postdoctoral Researcher in Washington University in St. Louis. He serves as Director of the UNM METALS Superfund Research Center and the UNM CHANGES Center. His research interest is related to biogeochemical processes occurring at molecular and macro scales at the interface of water, energy, and environmental health. He has been a recipient of the National Science Foundation (NSF) CAREER Award, and Fulbright U.S. Scholar Senior Research Award to Spain.

Sebastian Dawiskiba serves as Senior Native American Program Specialist within the U.S. Department of Housing and Urban Development's (HUD) Office of Native American Programs –

Operations. In his capacity, he manages strategic initiatives, planning and efforts to strengthen the federal workforce. Mr. Dawiskiba has experience in legislative affairs and policy, along with business transformation and talent/leadership development. Prior to HUD, Mr. Dawiskiba was a Grants Manager and Aide for a U.S. Senator. His background also includes working for a national nonprofit and political campaigns. Through his career Mr. Dawiskiba has focused on building bridges and bringing in additional resources to empower organizations and communities.

Eleanor Feir is a graduate research assistant and master's student at Northern Arizona University. As a graduate research assistant, she assists other graduate chemistry students with their research, mentors undergraduate chemistry students in laboratory activities, and manages routine maintenance on an Agilent 8900 ICP-MS while working on her own research. With a special passion for environmental chemistry and how our actions are impacting the world around us, she also participates in community outreach programs. She hopes to pursue a career that allows her to use analytical chemistry to benefit the health and safety of her community. Eleanor earned a bachelor's degree in chemistry with a minor in Biology in May of 2024 from Northern Arizona University and is now working towards completing a master's in Analytical Chemistry.

Charles D. Ferguson is the Senior Board Director of the Nuclear and Radiation Studies Board and the Board on Chemical Sciences and Technology in the Division on Earth and Life Studies at the National Academies of Sciences, Engineering, and Medicine. Previously, he was the president of the Federation of American Scientists (FAS). Prior to FAS, he worked as the Philip D. Reed senior fellow for science and technology at the Council on Foreign Relations (CFR), where he specialized in nuclear issues, and served as project director for the Independent Task Force on U.S. Nuclear Weapons Policy chaired by William J. Perry and Brent Scowcroft. Before CFR, he was the scientist-in-residence at the Monterey Institute's Center for Nonproliferation Studies, where he co-authored the book The Four Faces of Nuclear Terrorism (Routledge, 2005) and was lead author of the January 2003 report Commercial Radioactive Sources: Surveying the Security Risks. For his work on security of radioactive sources, he was awarded the Robert S. Landauer Memorial Lecture Award from the Health Physics Society in 2003. He is also the author of Nuclear Energy: What Everyone Needs to Know (Oxford University Press, 2011). In addition, he has worked as a physical scientist in the Office of Nuclear Safety at the U.S. Department of State, and he has served as a nuclear engineering officer and submarine officer in the U.S. Navy. He is an elected fellow of the American Physical Society in recognition of his service to public policy and public education on nuclear issues. Dr. Ferguson earned a BS in physics with distinction from the U.S. Naval Academy and MA and PhD degrees, also in physics, from Boston University.

Roy Lee Hosteen is the Red Feather's Four Corners Area Project Coordinator and is a member of the Navajo Tribe. He resides in Upper Fruitland, New Mexico, one of the communities that is participating in Red Feather's Wood and Coal Burning Appliance Replacement and Home Weatherization Project (WCBAR), a stove replacement and home weatherization program for low-income families who use wood and coal stoves as the main heating source in their homes. Since 2019, Roy has served on the WCBAR project where he sees the need for these types of services, and really appreciate the positive health impacts the program is having in our

communities. Red Feather has serviced 360 homes at the end of the program in July 2023. The original goal was 300 homes to be serviced.

Secody Hubbard, a member of the Navajo Nation from Ganado, Arizona, has been with EPA for over 15 years. He has a lot of experience in the agency, having worked at Region 7 in the Office of Policy and Management; Region 6 as the Texas Tribal Program Coordinator; EPA Headquarters as the National American Indian/Alaska Native Program Manager in the Office of Civil Rights. Most recently, Secody previously worked in Region 9's Superfund Division on the implementation of the US EPA 5-Year Plan on Addressing Uranium Contamination on the Navajo Nation. Secody's background includes exceptional knowledge of federal Indian policy, Tribal governments, the US Federal System and intergovernmental relations. Before joining EPA, he worked with Tribal Governments on the Arizona Colorado Plateau Ecosystem Management Project as a Research Associate for Northern Arizona University and served as a Special Diabetes Project Consultant to the Navajo Area US Indian Health Service on the Navajo Nation. Secody earned his BS in Health Administration, Master of Public Administration, and a PhD in Public Policy from Northern Arizona University, Flagstaff, Arizona.

Michael T. Janicke, Ph.D., joined the National Academies of Sciences, Engineering, and Medicine in November 2021 as a Senior Program Officer for the Nuclear and Radiation Studies Board (NRSB). Prior to joining the National Academies, Michael worked at Los Alamos National Laboratory where he most recently headed REFOCUS, the Resonance Center for Chemical Signatures. In this role he spearheaded new methods to detect chemical threat agents and synthetic opioids using nuclear magnetic resonance techniques, meriting two R&D 100 Awards for this work. Also at Los Alamos, he participated in several Enhanced Surveillance Campaigns and Lifetime Extension Programs for the weapons community, collaborated with research programs on the fate and transport of radionuclides in the environment, supported Basic Energy Sciences heavy element programs, and assisted in medical isotope research. In 2013 he was a lead engineer on a LANL team that demonstrated ^{99}Mo production from irradiated low enriched uranium solutions. Michael has also been a member of the Scientific Advisory Panel at LANL for Engineering and Complex Systems assisting projects ranging from nuclear power plant design to muon tomography. Michael has over 50 published articles cited 6,000 times in peer reviewed journals including *Science*, *Nature*, the *Journal of the American Chemical Society*, and *Angewandte Chemie*. He received a B.S. *cum laude* in chemical engineering from Rice University and a Ph.D. in chemical engineering from the University of California Santa Barbara. He was an Alexander von Humboldt postdoctoral fellow at the *Max Planck Institut für Kohlenforschung* in Mülheim an der Ruhr, Germany and a Directors postdoctoral fellow at Los Alamos National Laboratory.

Dr. **Carrie Nuva Joseph** is a water and environmental scientist who oversees the Hopi Tribe's cultural – environmental programs within the Department of Natural Resources. Prior to returning home she worked in partnership with the University of Arizona's Center for Indigenous Environmental Health Research and was a Postdoctoral Scholar at Arizona State University's School of Sustainable Engineering and the Built Environment. As an Indigenous scientist and a citizen of the Hopi Nation, she uses Indigenous-driven knowledge and data to address the unjust implications of federal policy on Indigenous Peoples, their landscapes, and water resources. Her dissertation work focused on the chemical and bio geophysical relationships between natural and engineered landscapes impacted by uranium mining and extraction

processes as a result of U.S. defense purposes. Her partnership approach is guided by tribal sovereignty and community in the areas of remediation, water, sustainability, climate change, human exposure, and policy.

My name is **Jacqueline M. Kakos**, and I am the Health Education Consultant for the New Mexico Poison and Drug Information Center. I have been with the Center for over 14 years and love what I do. My passion is to improve the health of tribal populations through poison prevention. I worked with the Navajo Nation to do just that, and the results were very positive. I am currently looking to work with other interested tribal partners. I am a member of the New Mexico Injury Prevention Coalition and have served as the Chair. I earned a Bachelor of Arts in Biology from the University of New Mexico and a Master of Science in Health Promotion from the University of Montana. During my tenure at the University of Montana, I served on a Montana HIV Prevention Committee where I worked alongside members of the Blackfeet tribe. Other than my time in Montana, I have resided in my home state of New Mexico.

Darrell LaRoche, an enrolled member of the Lower Brule Sioux Tribe in South Dakota, is the director of the Office of Clinical and Preventive Services for the Indian Health Service. Mr. LaRoche retired as a captain in the United States Public Health Service Commissioned Corps and has more than 27 years of experience in facilities engineering, safety, and emergency services with IHS, the National Institutes of Health, and the U.S. Department of the Interior Office of the Assistant Secretary for Indian Affairs. The IHS, an agency within the Department of Health and Human Services, is the principal federal health care advocate and provider for American Indians and Alaska Natives. Mr. LaRoche started his career as a facilities staff engineer in the IHS Portland Area in 1992 and then served as the facility engineer for the IHS Santa Fe Service Unit from 1995 to 1998. He served as the deputy for the health facilities engineering program in the IHS California Area before accepting the position as the facilities director for the IHS Albuquerque Area in 2000. Mr. LaRoche then transferred to the IHS Headquarters in 2008 to serve as the director of emergency services and also on detail as the acting deputy director for the Office of Clinical and Preventive Services. After 20 years of service with the IHS, Mr. LaRoche transferred to the National Cancer Institute in Frederick, Maryland, where he provided oversight of the Environment, Health, and Safety Program. He retired from the USPHS Commissioned Corps and became a member of the Senior Executive Service in June of 2014 with the Office of the Assistant Secretary for Indian Affairs under the Department of the Interior. Most recently, he served as the director of the Office of Facilities, Property and Safety Management, overseeing a $250 million program that serves the Bureau of Indian Affairs and the Bureau of Indian Education. Mr. LaRoche received a Bachelor of Science in civil engineering from the University of New Mexico in Albuquerque in 1991 and has completed graduate coursework in industrial hygiene at Tulane University in New Orleans. He is a graduate of the Interagency Institute of Federal Healthcare Executives and the National Preparedness Leadership Initiative in the Kennedy School of Government at Harvard University. As a commissioned officer in the USPHS, he received the Meritorious Service Medal, Outstanding Service Medal, Achievement Medals, PHS Citation, and numerous unit and service awards. He is also certified as a fire inspector in the State of Maryland.

Formally trained as a toxicologist, Dr. **Johnnye Lewis** is currently co-Director of the Community Environmental Health Program (CEHP) which she founded at the University of New Mexico in 1996. Now in the College of Pharmacy, CEHP since inception has embraced a research

philosophy of partnership with communities to ensure that research addresses recognized community needs; is designed collaboratively to ensure both scientific integrity and cultural respect; and is implemented by trained community staff to build research capacity. In parallel to these goals, CEHP works to build understanding among community, clinical, research, and policy/regulatory stakeholders through open dialogue to build common language, facilitate effective translation, and inform evidence-based risk reduction. Currently CEHP is home to three Center-scale NIH-funded programs with Indigenous partners on Navajo Nation, Cheyenne River Sioux Tribe, and Apsáalooke (Crow) to understand and reduce multigenerational risks from exposure to metal mixtures in waste from abandoned uranium mines on and near tribal lands as the legacy of Cold War nuclear weapons development. Dr. Lewis's work has been recognized by awards from diverse groups throughout her career including the New Mexico Environmental Law Center for use of the precautionary principle in groundwater standard development (2004); the Citizens of Red Water Pond Road, Navajo Nation, for Service, Diligence and Dedication to Research on Uranium Health Effects on Navajo People (2012); the Navajo EPA Environmental Excellence Award (2018); and the Society of Toxicology Public Communication of Science Award (2021). In 2022, she received the University of New Mexico Annual Community Engaged Research Lectureship (CERL) in recognition of exemplary community engaged research and community engaged creative works. In 2023, Dr. Lewis was highlighted in the Scientific American series People Who Are Changing the Environment One Community at a Time.

Debra A MacKenzie, PhD, is a Co-Director at the Community Environmental Health Program (CEHP) and an Assistant Professor of Pharmaceutical Sciences at the University of New Mexico. MacKenzie's research is centered on understanding mechanisms of immune dysregulation induced by environmental exposure to environmental metals and metalloids such as uranium and arsenic. Ongoing studies include investigations into immune dysregulation and development of biomarkers of autoimmunity within three tribal communities (Navajo Nation, Cheyenne River Sioux, and Crow Nation) as part of the Center for Native American Environmental Health Equity P50 Center, studying how environmental metals interact with zinc-binding proteins with immune regulatory function as part of the UNM METALS Superfund Center, and investigating the effects of pre- and postnatal exposure to uranium and other metals on birth outcome and child development-potentially mediated by altered immune function. MacKenzie earned a Bachelor of Science in Biology (1983) from New Mexico State University and a PhD in Immunology/Virology from the University of New Mexico (1990). Post-Doctoral research was conducted at the University of Wisconsin.

Gillian Mittelstaedt, DrPH, MPA, is an Air Quality and Environmental Health professional who leads the Tribal Healthy Homes Network, an EPA-funded program of the Tulalip Tribes that addresses indoor air hazards through national Tribal training, research, and design of culturally tailored interventions. Dr. Mittelstaedt also directs the Partnership for Air Matters, providing low-cost indoor air toolkits to engage and empower environmental justice communities. In her advocacy work, Dr. Mittelstaedt recently co-chaired EPA's Clean Air Act 50th Anniversary Report, advised the White House on indoor air quality and infectious disease transmission, and served on a National Academies of Science workgroup on Indoor Air Chemistry. She co-chairs the National Safe and Healthy Housing Coalition and is past chair of the Washington Asthma Initiative and the Washington Leadership Council for the American Lung Association.

Mansel Nelson is the Environmental Education Outreach Program Manager for the Institute for Tribal Environmental Professionals (ITEP) Program at Northern Arizona University. Originally, he joined ITEP in 1998 as the Senior Program Coordinator for the Tribal Environmental Education Outreach Program (TEEOP). He works with professionals, educators, and students to show how mathematics, science, and technology can be applied to understanding local and global environmental issues. He also organizes support for tribes and schools on Indoor Air Quality. Mansel completed a BS in chemistry and an MS in chemical engineering. During fourteen years of military service in the US Army Chemical Corps, he held a variety of positions, including Platoon Leader, Company Commander, Chemical Operations Officer, Chemist, and Chemical Engineer. Following his military service, Mansel taught chemistry on the Navajo Nation for six years, exploring issues such as uranium mining and milling and solid waste management with his high school classes. Mansel continues to facilitate connections between science, and issues impacting tribal communities.

Nala Rain Nelson is a student athlete at Baker Middle School in Kayenta, AZ. She has presented at two National Tribal Forum on Air Quality Conferences. She conducted air quality investigations on impact of wood stoves and radon on air quality in the homes of her family and friends. She enjoys sharing air quality information with other professionals to show her perspective as a student. For the past two years, she has been serving her community as Miss Baker Middle School. Nala Rain also enjoys sharing her Navajo culture during her presentations through traditional songs.

Brian G. Perez is an accelerated master's candidate in Chemistry at Northern Arizona University (NAU) and currently serves as a Research Assistant investigating uranium and arsenic contamination in total suspended particulate matter (TSP) using a low-cost air collection apparatus. He is actively working with locations in the Navajo Nation, including Cameron, Tuba City, Monument Valley, and Oljato, by deploying the air collection apparatus to assess uranium and arsenic concerns. His research expertise includes routine maintenance and operation of the Agilent 8900 ICP-MS/MS, proficiency in 3D printing software (SolidWorks), and utilizing Scanning Electron Microscopy for particulate visualization. He previously served as a Teaching Assistant for junior-level chemistry lab courses (CHM320). Brian has a diverse background with a B.S. in Biomedical Science and a B.S. in Chemistry, along with two years of professional experience as a dental assistant. This interdisciplinary training supports his commitment to developing innovative solutions for environmental health challenges.

Dr. **Eliseo J. Pérez-Stable** is Director of the National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH). He earned his B.A. in chemistry in 1974 and M.D. in 1978 from the University of Miami. He then completed his primary care internal medicine residency and a research fellowship in general internal medicine at University of California, San Francisco (UCSF) before joining the faculty as an assistant professor in 1983. Dr. Pérez-Stable practiced primary care internal medicine for 37 years at UCSF. His research interests have centered on improving the health of individuals from racial and ethnic minority communities through effective prevention interventions, understanding underlying causes of health disparities, and advancing patient-centered care for underserved populations. Recognized as a leader in Latino health care and disparities research, he spent 32 years leading research on smoking cessation and tobacco control in Latino populations in the United States and Latin America. Dr. Pérez-Stable has published more than 300 peer-reviewed papers.

Mallery Quetawki is a member of Zuni Pueblo, an indigenous community in western New Mexico. She received her B.S. in Biology with a minor in Art studio in 2009 from The University of New Mexico in Albuquerque. She is currently the Communications and Outreach Specialist with the Community Environmental Health Program (CEHP) at the University of New Mexico-College of Pharmacy. Mallery has created culturally relatable art to translate scientific ideas, health impacts and research on abandoned uranium mines that are currently undergoing study in several Indigenous communities. Her work continues to bridge Traditional Ecological Knowledge or Indigenous Ways of Knowing with Western science and medicine in hopes to create better pathways in communication between scientists, practitioners and Native American communities.

A.J. Salkoski is the Government Technical Representative for the Tribal Healthy Homes Program at HUD's Office of Lead Hazard Control and Healthy Homes. He has managed a variety of environmental and environmental health projects throughout Alaska and is now working with Tribes and Tribal entities throughout the United States. He also managed a large respiratory health study that contributed to or earned the Gregg Cooke EPA Clean Air Excellence Award for Visionary Programs and the initial HUD Cross Sector Collaboration Award between the housing and health sectors. AJ holds a master's degree and undergraduate degrees from the University of Indianapolis.

Justin Wilbanks is a graduate student at Northern Arizona University. He is a member of Dr. Jani Ingram's analytical chemistry lab and is conducting research on water quality on the Western Navajo Nation. This research is focused on water analysis of wells throughout the Western Navajo Nation, specifically near Tuba City and Cameron, AZ. Analytes of interest include uranium, arsenic, antimony, and rare earth elements. Justin has presented a poster for his research at the SACNAS 2024 NDiSTEM conference and was a recipient of the SACNAS travel scholarship. He is working towards his bachelor's degree and master's degree both at Northern Arizona University. Additionally, he is receiving training on analytical chemistry and instrumentation, primarily ICP-MS, in Dr. Ingram's lab.