## **Speakers & Panelists**

Sonia Aggarwal is the Chief Executive Officer of Energy Innovation, where she leads the organization and works closely with partners and policymakers on effective climate and clean energy policies across North America, Asia, and Europe.

Prior to this role, Sonia served as Special Assistant to the President for Climate Policy, Innovation, and Deployment in the Biden administration, where she helped to develop the Inflation Reduction Act and the Bipartisan Infrastructure Law and to set the nation's high-level climate targets including the commitment to cut economy-wide greenhouse gases by 50-52 percent below 2005 levels in 2030. Sonia also co-chaired the Biden administration's Climate Innovation Working Group and focused



federal initiatives to reinvigorate clean energy manufacturing across the country.

Sonia was a founding director of Energy Innovation, building Energy Innovation's policy research, modeling, and analysis teams over eight years until she was appointed to serve in the Biden administration. Sonia has deep experience in energy modeling, analysis, and policy design in many of the world's largest-emitting countries and regions. She spearheaded creation of America's Power Plan, a platform to identify innovative thinking on decarbonization policy solutions for affordable, reliable electric power.

Before Energy Innovation, Sonia managed global research at ClimateWorks Foundation, worked on the McKinsey carbon abatement cost curves, advised the International Energy Agency's "Accelerating Technology Transitions" project, advised clean energy companies on technology and financial communications, and worked in accident prevention design engineering at a nuclear power plant. In 2019, she received the U.S. Department of Energy's Clean Energy Education and Empowerment Award. Sonia holds a B.S. from Haverford College in astronomy and physics, and an M.S. from Stanford University in engineering, focused on energy.

John L. Anderson (NAE) is the president of the National Academy of Engineering since July 1, 2019. He was born in Wilmington, DE, and received his undergraduate degree from the University of Delaware in 1967 and a PhD degree from the University of Illinois at Urbana-Champaign in 1971, both in chemical engineering. He served as president of the Illinois Institute of Technology (IIT) and Distinguished Professor of Chemical Engineering from 2007 -2015. Before that he was provost and executive vice president at Case Western Reserve University (2004–2007), following 28 years at Carnegie Mellon University including 8 years as dean of the College of Engineering and 11 years as head of the chemical



engineering department. He began his professional career as assistant professor of chemical engineering at Cornell University (1971-1976).

Dr. Anderson was elected to the NAE in 1992 for contributions to the understanding of colloidal hydrodynamics and membrane transport phenomena. He was elected an NAE Councillor in 2015 and served on the Executive Compensation Committee and Temporary Nominating Committee on Member Diversity. He has also served on the Membership Policy Committee, Nominating Committee (chair), Chemical Engineering Section (chair, vice chair, section liaison, member), Chemical Engineering Peer Committee (chair), and Committee on Membership (immediate past chair, chair, vice chair, peer committee chair). His service also includes numerous National Academies activities, such as the Committee on Determining Basic Research Needs to Interrupt the Improvised Explosive Device Delivery Chain (chair); Committee on Review of Existing and Potential Standoff Explosives Detection Techniques (chair); Organizing Committee for the National Security and Homeland Defense Workshop (co-chair); Board on Chemical Sciences and Technology (co-chair); and Ford Foundation Minority Postdoctoral Review Panel on Physical Sciences, Mathematics, and Engineering.

In addition to his NAE membership, Dr. Anderson is a fellow of the American Academy of Arts and Sciences and the American Association for the Advancement of Science. He was appointed to the National Science Board in 2014 for a six-year term. He received the Acrivos Professional Progress Award from the American Institute of Chemical Engineers (AlChE) and an award from the Pittsburgh Section of AlChE for "Outstanding Professional Accomplishments in the Field of Academics," and he is listed on the Alumni Wall of Fame at the University of Delaware. In 2012 he received the National Engineering Award from the American Association of Engineering Societies. He has held visiting professorships at the Massachusetts Institute of Technology (fellow of the John Simon Guggenheim Foundation), University of Melbourne (Australia), and Landbouwuniversiteit Wageningen (the Netherlands). He has presented guest lectures at universities throughout the United States and is the author of numerous journal articles and book chapters. He has received honorary doctorates from Case Western Reserve University, Illinois Institute of Technology, Rensselaer Polytechnic Institute, and the University of Delaware.

Cynthia (Cyndi) Atherton is the director of the Science program at the Heising-Simons Foundation, where she oversees grantmaking in astronomy, climate change science, physics, and diversity within those fields. Prior to joining the foundation in 2013, she was a science program director at the Gordon and Betty Moore Foundation, where she oversaw portfolios that included astronomy, condensed matter physics, and seismology, as well as large scale commitments to Caltech and the Thirty Meter Telescope.

Dr. Atherton earned her doctorate in atmospheric science from the University of California, Davis, and has a master's degree in



chemical engineering from Massachusetts Institute of Technology and a bachelor's degree from Caltech in engineering and applied science. She conducted research in atmospheric chemistry and physics at the Lawrence Livermore National Laboratory prior to joining the Moore Foundation.

**Jared Cohon (NAE)** is University Professor in the Departments of Civil and Environmental Engineering and Engineering and Public Policy and President Emeritus at Carnegie Mellon University. He served as the President of Carnegie Mellon from 1997 to 2013.

Before his time in Pittsburgh, Dr. Cohon was a Professor of Geography and Environmental Engineering and an administrator at Johns Hopkins University from 1973 to 1992. Following his tenure at Johns Hopkins, he was Dean of the School of Forestry and **Environmental Studies and Professor of Environmental Systems** Analysis at Yale University from 1992 to 1997.



Dr. Cohon's presidentially appointed positions include the Chair of the Nuclear Waste Technical Review Board from 1997 to 2002 and the Homeland Security Advisory Council from 2001 to 2013. In 2014 and 2015, he co-chaired the congressionally mandated Commission to Review the Effectiveness of the National Energy Laboratories. A member of the National Academy of Engineering, he has served on several NASEM boards and committees including as chair of the Board on Energy and Environmental Systems from 2016 to 2022.

Dr. Cohon trained as a civil engineer with a specialty in environmental and water resource systems analysis. He received a Bachelor of Science degree from the University of Pennsylvania, and a Master's Degree and Ph.D. from the Massachusetts Institute of Technology.

Mariette DiChristina is dean of Boston University's College of Communication and professor of the practice in journalism. Before arriving at BU in 2019, DiChristina was the first female editor-inchief and executive vice president of Scientific American, as well as an executive vice president of its publisher, Springer Nature. In that capacity, she also oversaw the journalists for Nature's magazine, as well as the Nature Research custom content and publishing groups.

She is a past co-chair for the Climate Communications Initiative committee for the U.S. National Academies of Science, Engineering, and Medicine and an elected Fellow of the American

Association for the Advancement of Science. She serves on the Practice and Science of

Civic Science Advisory Committee for the Civic Science Fellows program; is on the board of Society for Science, publisher of Science News; and chairs the World Economic Forum's "Top 10 Emerging Technologies" Steering Group.

Previously, DiChristina was president of the National Association of Science Writers and executive editor of Popular Science. She enjoyed working with students as an adjunct associate professor and visiting scholar in the graduate Science, Health, and Environmental Reporting Program at New York University and as a science writer in residence at the University of Wisconsin-Madison.

Victor J. Dzau (NAM) is the President of the US National Academy of Medicine (NAM). In addition, he serves as Vice Chair of the US National Research Council. He is Chancellor Emeritus and James B. Duke Professor of Medicine at Duke University and the past President and CEO of the Duke University Health System. Previously, Dr. Dzau was the Hersey Professor of Medicine and Chairman of Medicine at Harvard Medical School's Brigham and Women's Hospital, as well as Bloomfield Professor and Chairman of Medicine at Stanford University.



He is an internationally acclaimed leader and scientist has made a significant impact through his seminal research in cardiovascular medicine and genetics. His important work on the renin

angiotensin system paved the way for the contemporary understanding of cardiovascular disease. He pioneered gene therapy for vascular disease and was the first to introduce DNA decoy molecules to block transcription as gene therapy in humans. His pioneering research in cardiovascular regeneration led to the Paracrine Hypothesis of stem cell action and the therapeutic strategy of direct cardiac reprogramming.

At the National Academies, Dr Dzau has designed and led important initiatives such as the Commission on a Global Health Risk Framework for the Future; the Human Genome Editing Initiative; the Vital Directions for Health and Health Care, and the Action Collaborative on Countering the U.S. Opioid Epidemic. The NAM Global Grand Challenge for Healthy Longevity represents his vision to inspire across disciplines and sectors to coalesce around a shared priority and audacious goal to advance health.

Marcius Extavour is the Chief Climate Solutions Officer at TIMECO2. His career combines science, innovation, business, capital, and storytelling to build and deploy climate and energy solutions. He has previously served as Chief Scientist and Executive Vice President for Climate and Energy at XPRIZE Foundation, and held roles at the University of Toronto, U.S. Senate Committee on Energy & Natural Resources, Ontario Power Generation, and Nortel Networks, and holds a PhD in quantum physics.



He was named 2019 VERGE Vanguard Fellow, an AAAS Science & Technology Policy Fellow, Board Member at the U.S. National

Academies of Science Energy & Environment Systems, and his work has been featured on CNBC, Business News Network, PBS NOVA, the Washington Post, and The Economist, and The Atlantic.

Peter Frumhoff teaches environmental science and public policy at Harvard University and is the senior science policy advisor at the Woodwell Climate Research Center. A global change ecologist, his research extends from the role of forests in climate mitigation to the climate responsibilities of fossil fuel companies to the responsible governance of solar geoengineering research. Dr. Frumhoff served through 2023 on the Board of Atmospheric Sciences and Climate at the National Academies of Sciences, Engineering and Medicine.



He is a Fellow of the American Association for the Advancement of Science and the 2022 Richman Distinguished Fellow in Public Life at Brandeis University. Through 2021, he was the longtime

director of science and policy and chief climate scientist at the Union of Concerned Scientists. There, he led strategies and initiatives to bring robust climate science to bear on informing public understanding and motivating public policies; guided science, equity and innovation post-doctoral fellowships; and served as senior liaison with the scientific community, policymakers, funders and the media. He was a lead author of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which was awarded the Nobel Peace Prize in 2007, and lead author of the IPCC Special Report on Land Use, Land-use Change and Forestry. He has guided multiple regional climate impacts assessments, including the 2007 Northeast Climate Impacts Assessment.

Dr. Frumhoff has taught at Stanford University, the Fletcher School of Law and Diplomacy at Tufts University and the University of Maryland. He was a AAAS Science and Diplomacy Fellow at the US Agency for International Development. He received a PhD in ecology and an MA in zoology from the University of California, Davis, and a BA in psychology magna cum laude from the University of California, San Diego.

Miriam Gay-Antaki is Assistant Professor in Geography & Environmental Studies at the University of New Mexico; Associate Director at the Center for Community Geography; and member of the National Academy of Sciences (NASEM) Committee to Advise the U.S. Global Change Research Program. Her work focuses on human-environment relations in the era of anthropogenic global climate change. She draws from political ecology and decolonial feminist geography to amplify voices that are not regularly part of the debate on climate change - from formal political spaces to scientific spaces- to make research on the topic more effective for vulnerable and underrepresented communities.



Angel Hsu is an Assistant Professor of Public Policy and the Environment at the University of North Carolina-Chapel Hill. She is Founder and Director of the Data-Driven EnviroLab, an interdisciplinary research group that applies data-driven approaches to pressing environmental issues. Her research explores the intersection of science and policy and the use of data science to understand environmental sustainability, particularly in the areas of climate change and energy, urbanization and air quality.



She was a contributing author to the IPCC Sixth Assessment
Report and was a contributing author to a 2022 report released by
the National Academy of Sciences on greenhouse gas emissions
information necessary for decision making. In addition to publishing in academic journals,
Dr. Hsu has been committed to public outreach and was a TED 2020 Climate Countdown
Speaker and was recognized as a 2022 Bloomberg New Economy Catalyst and inaugural
Grist 50 leader. She was also appointed to the World Economic Forum's Global Future
Council on Clean Air.

Dr. Hsu previously held a joint appointment as Assistant Professor of Environmental Studies at Yale-NUS College in Singapore, and the Yale School of Forestry and Environmental Studies as an adjunct. She holds a PhD in Environmental Policy from Yale University, an MPhil in Environmental Policy from the University of Cambridge, and a BS in Biology and BA in Political Science from Wake Forest University in Winston-Salem, NC.

Lucas Joppa is a Senior Managing Director and Chief Sustainability Officer at Haveli, a technology focused private equity firm. Previously, Dr. Joppa was Microsoft's first Chief Environmental Scientist, and then first Chief Environmental Officer, leading the development and execution of the company's sustainability strategy across its worldwide business including Microsoft's historic carbon negative, water positive, and zero waste sustainability commitments, also the establishment of their Al for Earth initiative and development of their Planetary Computer platform. With a combined background in both environmental science and data science, Dr. Joppa is committed to using the power of technology to advance a growing movement to address the world's sustainability needs. Along with his Ph.D., Dr. Joppa



holds a B.S. in Wildlife Ecology from the University of Wisconsin, former Peace Corps volunteer to Malawi, and remains an active scientist, speaking frequently on issues related to technology, AI, environmental science, sustainability, and ESG.

Linda Langston is the former Director of Strategic Relations for the National Association of Counties (NACo) in Washington DC and presently leads a small business, Langston Strategies Group assisting small not for profit organizations and local governments with leadership and resilience building. Langston previously served as an elected official on the Linn County, lowa Board of Supervisors from 2003-2016. She served on the NACo Executive Committee (2011-2015) and as President of NACo. Her presidential initiative was Ready and Resilient Counties which led to the founding of the Resilient Counties Advisory Board at NACo.



Langston is the former chair of the Resilient America Roundtable for the National Academy of Sciences (member 2011-2020) and serves on the Societal Experts Advisory Network at NAS. She served six years on the National Advisory Council for the Federal Emergency Management Agency (FEMA). She now serves as an adjunct instructor for EMI and has helped launch FEMA's Just in Time training. Langston now serves as Vice Chair of the Linn County Public Art Commission, the City of Cedar Rapids City Planning Commission, the Chair of the GEOS Institute in Ashland, OR and on the Linn Area Partners Active in Disaster (LAPAID). She continues to teach at the US War College.

Born in Chicago and raised in Chicago and Iowa, Langston graduated from Knox College in Galesburg, Illinois with a degree in history. She graduated from the Harvard Kennedy School of Government program for State and Local Elected Officials in 2007. She now lives in Iowa and continues her work to cultivate resilience in communities.

Kate E. Lowry, Ph.D., is the Strategy Director at the Science Philanthropy Alliance. In this role, she is responsible for leading the development and implementation of the Alliance's strategic plan. Trained as an interdisciplinary oceanographer and earth system scientist, Kate completed her Ph.D. at Stanford University and her postdoctoral fellowship at the Woods Hole Oceanographic Institution. Her research focused on studying phytoplankton in polar marine ecosystems using satellite remote sensing and oceanographic fieldwork, including eight expeditions aboard icebreaker research vessels to the Arctic and Antarctica.



She has been recognized with a NASA Group Achievement Award, a Scholarly/Academic Achievement Award in Earth System Science from Stanford University, the Weston Howland Jr. Postdoctoral Fellowship, the Gerald J. Lieberman Fellowship, a National Science Foundation Graduate Research Fellowship, and service medals from the National Science Foundation and the United States Coast Guard. She is a member of the Society for Science's National Leadership Council and serves on the board of multiple non-profit organizations, among other volunteer activities. Kate received her B.S. and M.S. in Earth Systems at Stanford University.

Glen MacDonald (NAS) is a Distinguished Professor and the Endowed Chair of California and the American West in Geography at UCLA. He also serves as the Director of the UC White Mountain Research Center and is a Co-principal Investigator of the Department of the Interior's Southwest Climate Adaptation Science Center, Glen works on issues of climatic and environmental change and the impacts of such changes on ecosystems, fire, natural resources and human societies. He recently chaired of the Council of Canadian Academies study of Canada's Natural Carbon Sink Potential, and led a consensus study by scientists of the Southwest Climate Adaptation Science Center on the drivers behind California's growing wildfire challenges. Glen



is a member of the National Academy of Sciences and a Fellow of the Royal Society of Canada.

Hussam Mahmoud is the George T. Abell Professor in Infrastructure at the Colorado State University Department of Civil and Environmental Engineering (CSU). He obtained his BSc and MSc in civil engineering from the University of Minnesota and his Ph.D. from the University of Illinois at Urbana-Champaign (UIUC). Before pursuing his Ph.D., he was the manager of the NEES Earthquake Laboratory at the UIUC and a research scientist at Lehigh University.

Dr. Mahmoud's research focuses on sustainable and resilient infrastructure and communities, emphasizing developing sociophysical and agent-based models to capture the recovery of systems as influenced by human behavior and socio-economic



policies. He is an international authority on infrastructure resilience and an advisor to the World Bank and other agencies on such topics. He has authored over 250 publications and given over 120 presentations, including 100 invited talks at national and international conferences and workshops. He has chaired and served on numerous technical committees, including the ASCE Committees on Fire Protection and Multihazard Mitigation.

Dr. Mahmoud is a Fellow of the Structural Engineering Institute and is the recipient of various awards, including the American Institute of Steel Construction early faculty career award, the American Iron and Steel Institute Robert J. Dexter Memorial Lecture Award, and the Air Force summer faculty fellowship award. He has recently been selected by the NASEM among the New Voices Cohort from across the U.S. He has been invited to various symposia by the U.S. National Academies, the Royal Academy of Engineering, and the Royal Institute of International Affairs. His research has received media coverage through citations and interviews in numerous venues, including Nature Climate Change, The U.S. National Academy of Engineering, Smithsonian Magazine, and CNN.

Marcia McNutt (NAS/NAE) is a geophysicist and the 22nd president of the National Academy of Sciences. From 2013 to 2016, she was editor-in-chief of Science journals. McNutt was director of the U.S. Geological Survey from 2009 to 2013, during which time USGS responded to a number of major disasters, including the Deepwater Horizon oil spill. For her work to help contain that spill, McNutt was awarded the U.S. Coast Guard's Meritorious Service Medal.

She is a fellow of the American Geophysical Union, Geological Society of America, the American Association for the Advancement of Science, and the International Association of Geodesy. McNutt is a member of the National Academy of



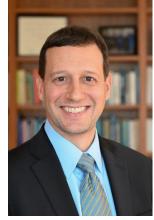
Engineering, the American Philosophical Society and the American Academy of Arts and Sciences, a Foreign Member of the Royal Society, UK, the Russian Academy of Sciences, and the Chinese Academy of Sciences, and a Foreign Fellow of the Indian National Science Academy. In 1998, McNutt was awarded the AGU's Macelwane Medal for research accomplishments by a young scientist, and she received the Maurice Ewing Medal in 2007 for her contributions to deep-sea exploration. She obtained her bachelor's degree in physics from Colorado College and her Ph.D. in Earth sciences from Scripps Institution of Oceanography.

Michael Méndez is an assistant professor of environmental policy and planning at the University of California, Irvine, an Andrew Carnegie Fellow, and Visiting Scientist at the National Center for Atmospheric Research (NCAR). He previously was the inaugural James and Mary Pinchot Faculty Fellow in Sustainability Studies and Associate Research Scientist at the Yale School of the Environment. Michael has more than a decade of senior-level experience in the public and private sectors, where he consulted and actively engaged in the policymaking process. This included working for the California State Legislature as a senior consultant, lobbyist, member of the California State Mining & Geology Board, and as vice-chair of the Sacramento City Planning Commission. In



2021, California Governor Gavin Newsom appointed Dr. Méndez to the Los Angeles Regional Water Quality Control Board. The board regulates water quality in a region of 11 million people. His award-winning book "Climate Change from the Streets," published through Yale University Press (2020), is an urgent and timely story of the contentious politics of incorporating environmental justice into global climate change policy.

**Evan S. Michelson**, Ph.D. is a Program Director at the Alfred P. Sloan Foundation. Dr. Michelson is responsible for overseeing the Foundation's Energy and Environment program, which seeks to inform the societal transition toward low-carbon energy systems in the United States by investigating economic, environmental, technological, and distributional issues. The Energy and Environment program is unique for its focus on supporting interdisciplinary research, training, networking, and dissemination efforts.



Dr. Michelson is the author of Philanthropy and the Future of Science and Technology (2020), which provides a detailed assessment of the current state of science philanthropy and explores opportunities to further enhance the societal responsibility of these institutions. Dr. Michelson received his Ph.D. from the Robert F. Wagner Graduate School of Public Service at New York University. He also received a M.A. in international science and technology policy from

The George Washington University, a M.A. in the philosophical foundations of physics from Columbia University, and a B.A. in philosophy of science from Brown University.

**Spencer Nelson** is Managing Director of Research and New Initiatives at ClearPath. He leads ClearPath's research on the cheapest path to energy system decarbonization. Spencer works with industry, national labs and other stakeholders to develop insights that guide both ClearPath's work and broader carbon mitigation advocacy efforts.

Prior to this role, Spencer worked for Chairman Lisa Murkowski on the Senate Energy and Natural Resources Committee, where he was the lead on all the Committee's clean energy and climate activities. He was a lead architect of the Energy Act of 2020, which is the first comprehensive energy legislation enacted in over a decade and comprises over 40 different clean energy bills.



Before his stint on the Hill, Spencer worked at ClearPath for four years during which he held multiple roles. Most significantly, he managed ClearPath's work on nuclear energy, energy innovation, and international engagement as a Policy Program Director.

Before that, Spencer worked on state-level solar policy and conducted environmental genetics research at both UNC Chapel Hill and the National Institute of Environmental Health Sciences.

Matthew Nisbet is Professor of Communication, Media & Public Policy at Northeastern University, Boston MA where he studies and teaches about science, technology, and environmental politics, communication, journalism, and climate change. On these topics, he is the author/co-author of more than 150 peer-reviewed studies, articles, and reports including the 2017 NASEM consensus study on "Communicating Science Effectively: A Research Agenda."

Among awards and recognition, he has served as a Health Policy Investigator at the Robert Wood Johnson Foundation, and as a visiting faculty fellow/scholar at Harvard University, Dartmouth

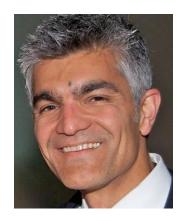


College, Dresden Technical University, the Google Foundation, and the Exploratorium science center. From 2016-2020, Nisbet served as Editor-in-Chief of the journal Environmental Communication. His three volume Oxford Encyclopedia of Climate Change Communication was named a top three Professional & Scholarly Excellence (PROSE) award finalist from the American Association of Publishers. He lives with his

wife and son in Newburyport, MA close to where the Merrimac River meets the Gulf of Maine.

Raj Pandya is the Vice President of Community Science at AGU. Raj invites everyone to be part of guiding and doing science, especially people from historically marginalized communities, so that the sciences can contribute to a world where all people and nature can thrive, now and in the future.

Raj chaired the National Academies committee on "Designing Citizen Science to Support Science Learning," serves on the boards for Public Lab and the Anthropocene Alliance and is a member of the Independent Advisory Committee on Applied Climate Assessment. He helped launch the Resilience



Dialogues – a public-private partnership that uses facilitated online dialogues to advance community resilience. He was a founding board member of the Citizen Science Association and served as Education and Human Resource Commissioner for the American Meteorological Society.

Before joining AGU, Raj led education, engagement, and diversity programs connected to the National Center for Atmospheric Research, led an international research and development project that used weather data to better manage meningitis in Africa, and held a faculty position at West Chester State University. Raj got his PhD from University of Washington exploring how large thunderstorms grow and persist. Raj lives in Colorado with his wife Amy (a physician his parents call 'the real doctor'), their daughter Maya, and their dog Nala.

Jonathan Patz (NAM) is director of the Global Health Institute at the University of Wisconsin Madison. He is a professor and the John P. Holton Chair of Health and the Environment with appointments in the Nelson Institute for Environmental Studies and the Department of Population Health Sciences. For 15 years, Dr. Patz served as a lead author for the United Nations Intergovernmental Panel on Climate Change (or IPCC)—the organization that shared the 2007 Nobel Peace Prize with Al Gore. He also co-chaired the health expert panel of the U.S. National Assessment on Climate Change, a report



mandated by the U.S. Congress. Dr. Patz has written over 90 peer-reviewed scientific papers, a textbook addressing the health effects of global environmental change and coedited the five-volume Encyclopedia of Environmental Health (2011). He, most recently, co-edited "Climate Change and Public Health" (2015, Oxford University Press) and is leading a Massive Open Online Course "Climate Change Policy and Public Health." He has been invited to brief both houses of Congress and has served on several scientific

committees of the National Academy of Sciences. Dr. Patz served as Founding President of the International Association for Ecology and Health. In addition to directing the university-wide Global Health Institute, Dr. Patz has faculty appointments in the Nelson Institute, Center for Sustainability & the Global Environment (SAGE) and the Department of Population Health Sciences. He also directs the NSF sponsored Certificate on Humans and the Global Environment (CHANGE). Dr. Patz is double board- ¬certified, earning medical boards in both Occupational/Environmental Medicine and Family Medicine and received his medical degree from Case Western Reserve University (1987) and his Master of Public Health degree (1992) from Johns Hopkins University.

Amanda Staudt is Senior Director for the Climate Crossroads initiative at the National Academies of Sciences, Engineering, and Medicine. Climate Crossroads is a major initiative to harness the full complement of expertise and skills across the National Academies to tackle the climate crisis. Dr. Staudt provides strategic direction and leadership for this initiative, develops new partnerships and climate-related activities, and advances communications and engagement efforts to extend the reach and impact of the National Academies.



From 2013-2023, Dr. Staudt directed the National Academies' Board on Atmospheric Sciences and Climate (BASC) and Polar

Research Board (PRB), leading a team that provides advice to the US government and the nation related to climate change, weather, air pollution, the Arctic, and Antarctica. Under her leadership, BASC and PRB provided stewardship for the National Academies' ongoing advice to the U.S. Global Change Research Program; convened large workshops related to Arctic research and policy; completed major studies on extreme event attribution, Antarctic research priorities, negative emissions technologies, greenhouse gas emissions, solar geoengineering, and Earth system science; ran an Academies-wide Climate Communication Initiative; and launched major roundtables on climate security and on climate and macroeconomics.

Prior to taking on this role, Dr. Staudt was a Senior Climate Scientist at the National Wildlife Federation, where she focused on communicating climate science and impacts, developing the intellectual and practical foundation for climate-informed ecosystem conservation, and advancing climate change science education. Dr. Staudt received her B.A. in environmental science and engineering and her Ph.D. in atmospheric sciences from Harvard University.

**Sue Tierney** is an expert on energy policy and economics, specializing in the electric and gas industries. She has consulted to companies, governments, nonprofits, and other organizations on energy markets, as well as economic and environmental regulation and strategy. Her expert witness and business consulting services have involved industry restructuring, market analyses, utility ratemaking and regulatory policy, clean energy regulatory policy, transmission issues, wholesale and retail market design, and resource planning and procurement. Dr. Tierney is a former assistant secretary for policy at the US Department of Energy, state cabinet officer for environmental affairs, and state public utility commissioner. She chairs the board of directors of



Resources for the Future, serves on the external advisory board of the National Renewable Energy Laboratory, and is a director of the World Resources Institute and of other boards. She has also served on several National Academies' Committees, including The Future of Electric Power and Accelerating Decarbonization of the U.S. Economy, and is current Chair of the Board on Energy and Environmental Systems. She is a National Associate of the National Academies. She has published widely, frequently speaks at industry conferences, and has lectured at many leading universities.

Michael Vandenbergh is the David Daniels Allen Distinguished Chair of Law at Vanderbilt University Law School, Director of the Climate Change Research Network, and Co-Director of the Energy, Environment and Land Use Program. An award-winning teacher, Professor Vandenbergh has published widely on bypassing climate polarization, private environmental governance, and the opportunity to harness law and social science to achieve a behavioral wedge of carbon emissions reductions.



Before joining the Vanderbilt faculty Vandenbergh was a partner at Latham & Watkins in Washington, D.C., and he served as Chief of Staff of the Environmental Protection Agency from 1993-95. He has been a visiting professor at Harvard, the University of Chicago,

and the Wharton School. His research has been discussed in major media outlets such as National Public Radio's All Things Considered, National Geographic, USA Today, Psychology Today, and the Washington Post.

He is a 2022 Andrew Carnegie Fellow, has served as a member of the Board on Environmental Change and Society of the National Academies of Science, Engineering and Medicine, and is a member of the American College of Environmental Lawyers.

Dan Walker is a Senior Geologist with EA Engineering, Science, and Technology, Inc. (PBC) and serves as the Associate Director of the Center for Technology and Systems Management within the U. of Maryland's Department of Civil and Environmental Engineering. Dan is also an active member of the American Society of Civil Engineers (ASCE). In addition to being a founding member and Chair of ASCE's Committee on Adaptation to a Changing Climate (CACC), Dan also serves as Co-Chair of the ASCE NOAA Task Force on Climate Resilience in Engineering Practice. With a PhD degree in geology from the University of Tennessee, Dr. Walker has been involved with strategic planning and management of state, federal, and private sector science for more than 30 years.



During an eleven-year tenure, Dr. Walker directed 19 National Academy studies over a range of topics from coastal and ocean science, water resource management, oil spill impacts and response, to the national security implications of environmental and climate information, eventually being named a National Academies' Scholar. Dr. Walker then served the White House Office of Science and Technology Policy (OSTP), completing his tenure at OSTP as Assistant Director for Environment. Dr. Walker has served as a Principal or Co-Chair of various U.S. federal interagency committees and bodies (including the U.S. Global Change Research Program and the U.S. Group of Earth Observing), as well as a U.S. Delegate to the International Panel on Climate Change (IPCC). Dan also served as Chief of the Climate Assessment and Services Division of NOAA's Climate Program Office, where he managed NOAA's Climate and Societal Interactions Program before accepting a position as Chief Climate Scientist for the Computer Science Corporation.

Dr. Walker's current professional practice, through both EA and the University of Maryland, focuses on understanding the role of nature-based engineering solutions to improve coastal resilience and promoting climate resilient infrastructure through the development of climate informed civil engineering codes and standards. Dan is also an author of the Coastal Effects chapter of the Fifth National Climate Assessment.

Sacoby Wilson is an Associate Professor with the Maryland Institute for Applied Environmental Health and Department of Epidemiology and Biostatistics, School of Public Health, University of Maryland College Park. Dr. Wilson has over 15 years of experience as an environmental health scientist in the areas of exposure science, environmental justice, environmental health disparities, community-engaged research including crowd science and community-based participatory research, water quality analysis, air pollution studies,



built environment, industrial animal production, climate change, community resiliency, and sustainability. He works primarily in partnership with community-based organizations to study and address environmental justice and health issues and translate research to action.

Dr. Wilson is Director of the Community Engagement, Environmental Justice and Health (CEEJH) laboratory. CEEJH is focused on providing technical assistance and research support to communities fighting against environmental injustice and environmental health disparities in the DMV region and across the nation. In addition, he is working with schools in the region on pipeline development efforts in the STEM+H disciplines (Science, Technology, Engineering, Mathematics, and Health).

Dr. Wilson has received many awards for his contributions and achievements as an environmental justice researcher and advocate. These include the 2018 Taking Nature Black Environmental Champion Award; the 2015 APHA Environment Section Damu Smith Environmental Justice Award; and the University of Maryland School of Public Health, George F. Kramer Practitioner of the Year Award (2014-2015) and the Muriel R. Sloan Communitarian Award (2012-2013). Dr. Wilson received his BS degree in Biology/Ecotoxicology with a minor in Environmental Science from Alabama Agricultural and Mechanical University in 1998, his MS degree in 2000 from UNC-Chapel Hill, and his PhD from UNC-Chapel Hill in 2005.

Cathie Woteki (NAM) is Professor of Food Science and Human Nutrition at Iowa State University and Visiting Distinguished Institute Professor in the Biocomplexity Institute of the University of Virginia. She currently is a member of President Biden's Council of Advisors on Science and Technology as well as Chair of the Board of Trustees of the American Society for Nutrition Foundation. She served as Chief Scientist and Under Secretary for USDA's Research, Education, and Economics (REE) mission area from 2010 to 2016. In that role, she developed the Office of the Chief Scientist, established the USDA Science Council, instituted the Department's first scientific integrity and open data policies, and was a founding member of the Meeting of Agricultural Chief



Scientists held under the auspices of the G-20. Dr. Woteki is an advocate for building the platforms needed to enhance domestic and international food and agricultural research.

Prior to joining USDA, Dr. Woteki served as Global Director of Scientific and Regulatory Affairs for Mars, Incorporated, where she managed the company's scientific policy on matters of health, nutrition, and food safety. From 2002 to 2005, she was Dean of Agriculture and also head of the Agricultural Experiment Station at Iowa State University. Dr. Woteki served as the first Under Secretary for Food Safety at the U.S. Department of Agriculture (USDA) from 1997 to 2001, where she oversaw the safety of meat, poultry and egg products. Dr. Woteki served in the White House Office of Science and

## **Speakers & Panelists**

Technology Policy (OSTP) as Deputy Associate Director for Science from 1994 to 1996. During that time, she co-authored the Clinton Administration's policy statement, "Science in the National Interest."