

Advice for the US Global Change Research Program

Committee

Deb A. Niemeier

Co-Chair

Deb Niemeier (NAE) is the Clark Distinguished Chair in Energy and Sustainability at the University of Maryland, College Park, a professor in the Dept. of Civil and Environmental Engineering and affiliate professor in the College of Information Studies. Her current research includes collaborations with sociologists, planners, geographers, veterinary medicine and education faculty to examine formal and informal governance processes in urban landscapes and to better characterize risk associated with outcomes in the intersection of finance, housing and infrastructure and environmental hazards. Her international development work is aimed at agricultural sustainability and her current education research is focused on data science in engineering and the operational challenges of K-12 infrastructure. She is a Fellow of the American Association for the Advancement of Science (AAAS) for “distinguished contributions to energy and environmental science study and policy development;” a Guggenheim Fellow for foundational work on pro bono service in engineering and a member of the National Academy of Engineering and the American Philosophical Society.

Julie A. Vano

Co-Chair

Julie Vano is the Research Director at the Aspen Global Change Institute, an organization dedicated to advancing global change science and solutions. Dr. Vano’s research integrates elements of hydrology, water resource management, science policy, and climate impacts. She works closely with water utilities and US federal agencies to connect climate science and decision making. This has included being a lead in developing the Water Utility Climate Alliance’s Leading Practices in Climate Adaptation report and the Bureau of Reclamation’s Water Reliability in the West - 2021 SECURE Water Act Report. She helped co-found the Mountain West Climate Services Partnership, an initiative to make science more relevant and accessible for communities across the Mountain West. Dr. Vano has served as president of the Science and Society section of the American Geophysical Union and holds an MS in Land Resources from the University of Wisconsin and a PhD in Civil and Environmental Engineering from the University of Washington. Her previous National Academies activities include work with the Water Science and Technology Board as a Christine Mirzayan Science and Technology Policy Fellow.

Sarah K. Fortner

Vice Chair

Sarah Fortner is the Director of Sustainability at Carleton College taking a comprehensive approach to advancing sustainability and environmental justice through operations, education, and community engaged projects. She has a long history of developing research and education collaborations to advance climate resilience and environmental justice. This includes projects engaging grassroots organizations, community development and health leaders, and faculty networks. Dr. Fortner leads civic visioning in the geosciences and higher education including serving on the steering committee for the NAS Workshop on Service Learning in the Undergraduate Geosciences (2018) and advising the Association of American Colleges and Universities Civic Prompts in the Major (2018). Through collaboration with the Science Education Resource Center and national organizations including the Union of Concerned Scientists, the American Geosciences Institute, the National Association of Geoscience Teachers, and the American Geophysical Union she has led workshops and webinars helping faculty and interdisciplinary programs plan and strengthen sustainability education and local partnerships. Dr. Fortner also has 20 years of biogeochemical expertise including collaboration with the McMurdo Long Term Ecological Research Program. She also serves on the Academic and Research Council for the longest running glacier field education program, the Juneau Icefield Research Program. She holds a B.S. in Geology and Geophysics (1999) from the University of Wisconsin-Madison and a M.S. (2002) and Ph.D. (2009) in Earth Sciences from The Ohio State University.

Susan Anenberg

Member

Susan Anenberg is an Associate Professor of Environmental and Occupational Health and of Global Health at the George Washington University Milken Institute School of Public Health. Dr. Anenberg studies the health implications of air pollution and climate change, from local to global scales. Dr. Anenberg has been a Co-Founder and Partner at Environmental Health Analytics, LLC, the Deputy Managing Director for Recommendations at the U.S. Chemical Safety Board, an environmental scientist at the U.S. Environmental Protection Agency, and a senior advisor for clean cookstove initiatives at the U.S. State Department. Her research has been published in top academic journals such as Science, Nature, and Lancet Planetary Health. She has also led or contributed to many science-policy reports on air quality and climate change published by U.S. EPA, World Bank, World Health Organization, United Nations Environment Programme, and others. She has previously served on National Academies' planning committees for workshops on understanding air pollution from wildfires and leveraging remote geospatial technologies for precision environmental health. She also serves as the Secretary of the American Geophysical Union's GeoHealth section and as Editor of the GeoHealth journal. She received an MS and PhD in Environmental Sciences and Engineering and Environmental Policy from the University of North Carolina and a BA in Biology and Environmental Science from Northwestern University.

Eduardo S. Brondizio

Member

Eduardo S. Brondizio is a Distinguished Professor of Anthropology, Directs the Center for the Analysis of Social-Ecological Landscapes, and Senior Fellow at the Ostrom Workshop at Indiana University-Bloomington. Brondizio's career has uniquely weaved environmental and agricultural sciences, economic and environmental anthropology and geospatial analysis to address questions of human-environmental interactions from the local to global scales. Brondizio's work has documented, examined, and responded to the social and environmental transformation and governance challenges of Amazônia and contributed to numerous international initiatives and assessments of global environmental and climate change. Brondizio's research has contributed new methodologies for linking in-depth and participatory ethnographic research, Indigenous and local knowledge, and satellite remote sensing, contributing to multiscalar understandings of land-use processes such as deforestation and reforestation, agricultural intensification, and urbanization; value-chain of biodiversity products and rural-urban social networks; population vulnerability to climate change; and the governance of complex landscape arrangements. He served as co-chair of the Global Assessment Report of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), approved by 132 countries in 2019. Brondizio is a fellow of the Society for Applied Anthropology and the International Science Council, foreign member of the French Academy of Agriculture, and elected member of the American Academy of Arts and Sciences and the United States National Academy of Sciences.

William D. Collins

Member

William D. Collins is Associate Laboratory Director in Earth and Environmental Sciences Area at Lawrence Berkeley National Laboratory and a Professor in Residence in the Department of Earth and Planetary Science at University of California, Berkeley. He is an expert in climate modeling and climate change science. Previously, Dr. Collins was a senior scientist at the National Center for Atmospheric Research (NCAR) and served as Chair of the Scientific Steering Committee for the DOE/NSF Community Climate System Model project. His personal research concerns the interactions among greenhouse gases and aerosols, the coupled climate system, and global environmental change. Dr. Collins is a Fellow of the American Association for the Advancement of Science (AAAS), the American Physical Society (APS), the American Geophysical Union (AGU), and the American Meteorological Society (AMS). He was awarded the AGU's Tyndall History of Global Environmental Change Lectureship in 2019 and their Jule Charney Lectureship in 2024. He was a Lead Author on the Fourth, Fifth, and Sixth Assessments of the Intergovernmental Panel on Climate Change (IPCC). His role as Chief Scientist in launching the Department of Energy's Accelerated Climate Model for Energy (ACME) program was awarded the U.S. Department of Energy Secretary's Achievement Award in 2015. Dr. Collins holds a M.S. and a Ph.D. in Astronomy and Astrophysics from the University of Chicago.

Sara R. Curran

Member

Sara R. Curran is a demographer and Professor of International Studies, Sociology, and Public Policy & Governance at the University of Washington. She holds an Adjunct Professor of Global Health appointment at the University of Washington. She currently serves as the Director of the Center for Studies in Demography & Ecology and manages an NICHD research infrastructure grant to advance population science. Her research examines population dynamics (migration, settlement, and population change) in relation to climate and environmental change, as well as economic development. She received her PhD in Sociology & Demography from the University of North Carolina at Chapel Hill in 1994.

Lesley-Ann Dupigny-Giroux

Member

Lesley-Ann Dupigny-Giroux is a Professor of Climatology in the Department of Geography & Geosciences at the University of Vermont, the Vermont State Climatologist since 1997, and the immediate Past President of the American Association of State Climatologists. In 2020, she was appointed by the Vermont House of Representatives to the Vermont Climate Council as the member with expertise in climate change science. An applied climatologist by training, Dr. Dupigny-Giroux' research interests intersect a number of interdisciplinary fields including hydroclimatic natural hazards and climate literacy, geospatial climate and land-surface processes, all within the context of our changing climate. She is an expert in floods, droughts and severe weather and the ways in which these affect the landscape and peoples of Vermont and the US Northeast. A Fellow of the American Meteorological Society, Dr. Dupigny-Giroux was invited by the White House Office of Science and Technology Policy Program (OSTP) to be a presenter on the "Climate Science Leading the Way" panel at the COP26 meeting in Glasgow, Scotland in 2021. She has contributed to all five National Climate Assessments (NCAs), serving as the lead author for the Northeast Chapter of NCA4, and is an author on the national Water chapter of NCA5. Dr. Dupigny-Giroux received her PhD from McGill University in Climatology & Geographic Information Systems. She is currently serving on the National Academies' Board of Atmospheric Sciences and Climate.

Karen Fisher-Vanden

Member

Karen Fisher-Vanden is Distinguished Professor of Environmental and Resource Economics and Public Policy at Pennsylvania State University. She was a Lead Author of the IPCC's Fifth Assessment Report Working Group III. She is currently President of the Association of Environmental and Resource Economists (AERE) where she previously served on the Board of Directors, and was a member of the EPA Science Advisory Board on Economy-wide modeling. Her areas of research include economic and integrated assessment modeling for climate change impacts and policy analysis. She has led a number of large externally-funded research programs and is currently co-Director and Principal Investigator of the Program on Coupled Human and Earth Systems (PCHES), a large Cooperative Research Agreement with the US Department of Energy. Professor Fisher-Vanden holds a B.S. in Mathematics/Computer Science and a B.A. in Economics both from UC Davis, a M.S. in Management Science from the Anderson Graduate School of Management at UCLA, and a Ph.D. in Public Policy from Harvard University.

Miriam Gay-Antaki

Member

Miriam Gay-Antaki is Assistant Professor in Geography & Environmental Studies at the University of New Mexico; and Director of the RH Mallory Center for Community Geography at the University of New Mexico. Her work focuses on human-environment relations in the era of anthropogenic global climate change. She traces climate change policy development ranging from formal political spaces, such as the UN Conference of the Parties, to scientific spaces such as the Intergovernmental Panel on Climate Change, to the towns and communities where climate policies are implemented. 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. Dr. Gay-Antaki holds a B.A. in Neuroscience from Wellesley College, and a M.S. and Ph.D. in Geography and Development from the University of Arizona.

Alison M. Grantham

Member

Alison Grantham (she/her) is a scientist who brings a methodical, analytical, and quantitative approach to her work with nonprofits, private sector businesses, and foundations to improve our food system through her practice, Grow Well Consulting. Current and recent projects include improving climate impacts of pasture-raised poultry, GHG, water and waste footprinting for an indoor ag business, a national urban food waste and food insecurity analysis and report, global seafood traceability to support food safety and sustainability outcomes, and a FLAG sector scope 3 engagement for an international environmental NGO. Prior to launching Grow Well, she led Food Systems R&D and then Food Procurement at Blue Apron, overseeing food sourcing and procurement and implementing a national program to increase employee access to surplus product, as well as local communities through partnerships with Feeding America. There, she also served on the National Academies' Ad Hoc Reducing Food Loss and Waste Committee. Previously, she led research at the Rodale Institute, including all aspects of organic and sustainable agriculture research. Alison holds a dual-title PhD in Ecology and Biogeochemistry from Penn State (2015) and BA summa cum laude in Biological Sciences and Environmental Studies from Mount Holyoke College (2008).

Kimberly L. Jones

Member

Kimberly L. Jones is Associate Provost (Office of the Provost and Chief Academic Officer) and Professor (Department of Civil and Environmental Engineering) at Howard University. She also serves as Chair of the US Environmental Protection Agency's Science Advisory Board. She is Chair of the National Science Foundation's Advisory Committee on Environmental Research and Education and serves on the Engineering Advisory Committee. Dr. Jones' areas of expertise are environmental equity and justice, water quality and reuse, resource recovery, environmental management, engaged research, and environmental nanotechnology. She is a fellow of the Association of Environmental and Science Professors and a Board Certified Environmental Engineer Member of the American Association of Environmental Engineers and Scientists. Dr. Jones holds a B.S. in Civil Engineering from Howard University, a M.S. in Civil and Environmental Engineering from the University of Illinois, and a Ph.D. in Environmental Engineering from The Johns Hopkins University. She has served on numerous NRC committees.

Jane A. Leggett

Member

Jane A. Leggett was a Specialist in Energy and Environmental Policy at the Congressional Research Service (CRS) from 2006 to 2023. She led CRS work on climate change, including for responses on climate change science, federal funding, greenhouse gas (GHG) reduction options, and international cooperation. From 1991 to 2006, Leggett served in the U.S. Environmental Protection Agency (EPA), sequentially as Branch Chief for Mitigation, Director of the Climate Change Division, and Senior Policy Advisor, leading work on climate change mitigation, integrated assessment modeling, climate change indicators, and risk analysis topics. Leggett collaborated in many inter-agency initiatives, including the U.S. Global Change Research Program and the Interagency Carbon Cycle Working Group. She was a negotiator for the United States on the Kyoto Protocol, shared in the 2007 Nobel Peace Prize awarded to the Intergovernmental Panel on Climate Change, and was the convening lead author on the 1992 GHG scenarios report (IS92). Leggett was an Administrator at the Organisation for Economic Cooperation and Development in Paris, and has also served in the Department of Energy, and in the Office of Management and Budget. Leggett has a Master's in City and Regional Planning from the Harvard University Graduate School of Design, and a Bachelor of Arts in Political Science from Middlebury College.

Julie Maldonado

Member

Julie Maldonado is the co-founder and Associate Director for the Livelihoods Knowledge Exchange Network (LiKEN), a link-tank nonprofit organization that works in collaborations to create, sustain, and regenerate local livelihoods, community wellbeing, and mutual care by meeting basic life needs through stewardship of local life commons. Dr. Maldonado serves primarily as the Disaster Resilience Program Director. She is also an associate professor at Future Generations University, a continuing lecturer in the University of California-Santa Barbara's Environmental Studies Program, and collaborates with the Institute for Tribal Environmental Professionals' Tribes and Climate Change Program. Dr. Maldonado served as an author on the 3rd, 4th, and 5th US National Climate Assessments. Her disciplinary background is in public anthropology, focusing primarily on collaborations with Tribal communities in coastal Louisiana experiencing and responding to repeat disasters and climate chaos, including collaborative efforts to restore marsh ecosystems, reduce land loss and flood risk, and protect sacred sites. She has worked for local, national, and international institutions on disaster and climate change risk reduction, recovery, and adaptation strategies, and co-initiated a network for justice-driven disaster recovery. Dr. Maldonado holds a Ph.D. in Anthropology from American University.

Philip W. Mote

Member

Philip Mote is Vice Provost and Dean of the Graduate School at Oregon State University and remains active in the Oregon Climate Change Research Institute (OCCRI). As Dean, he has established a number of strategic initiatives to accelerate student-centered and equitable graduate education including implementing holistic admissions, launching a new interdisciplinary program, training all graduate faculty in effective mentoring, and offering all graduate students opportunities to acquire transferrable skills. As Vice Provost, he has replaced the university's cumbersome approach to reviewing undergraduate and graduate programs with a holistic review of entire academic units. He served for several years in leadership of the 60,000-member American Geophysical Union: six years in leadership of the Global Environmental Change section, four years as member of the Council, two years as Vice Chair of the Council Leadership Team, and two years as a member of the Board of Directors. Dr. Mote was the founding director (2009-19) of OCCRI and remains involved in communicating climate science. He has served as a lead author for the Fourth and Fifth Assessment Reports of the Intergovernmental Panel on Climate Change, on three US National Climate Assessments, and on nine committees of the National Academies, including chair of the Review of the Climate Science Special Report.

Benjamin Preston

Member

Benjamin Preston is a senior policy researcher at RAND and director of Community Health and Environmental Policy, a program of RAND Social and Economic Well-Being. He is also a professor at Pardee RAND Graduate School. Preston's recent research efforts include advancing understanding of the implications of climate change and disasters on the delivery of infrastructure services, analyzing and communicating the environmental justice dimensions of climate change, scenario analysis for low-carbon technology pathways, and analysis of disaster recovery options and their implementation in Puerto Rico and the U.S. Virgin Islands. From 2021 to 2023 he served as the assistant director for Climate Services and Adaptation in the White House Office of Science and Technology Policy. Previously, he held research positions with the Climate Change Science Institute at Oak Ridge National Laboratory, the CSIRO's Division of Marine and Atmospheric Research, and the Pew Center on Global Climate Change. Preston has contributed to national and international scientific assessments including the U.S. National Climate Assessment and the Intergovernmental Panel on Climate Change's fifth and sixth Assessment Reports. Preston received a Ph.D. in environmental biology from the Georgia Institute of Technology and a B.S. in biology from the College of William & Mary.

Nancy N. Rabalais

Member

Nancy Rabalais is Professor and Shell Endowed Chair at the Louisiana State University's College of the Coast and Environment, Department of Oceanography and Coastal Sciences. Dr. Rabalais' research includes the dynamics of oxygen depletion in aquatic ecosystems, interactions of large rivers with the coastal ocean, estuarine and coastal eutrophication, environmental effects of habitat alterations and contaminants, and the impacts of the Deepwater Horizon Oil Spill on the Louisiana continental shelf, coastal waters, and intertidal wetlands. Dr. Rabalais is an AAAS Fellow, an AGU Fellow, an Aldo Leopold Leadership Program Fellow, and a member of the National Academy of Science. She received the 2002 Ketchum Award for coastal research from the Woods Hole Oceanographic Institution and shares the Blasker award with R.E. Turner. She was awarded the American Society of Limnology and Oceanography Ruth Patrick Award and the National Water Research Institute Clarke Prize. She was named a MacArthur Fellow in 2012. Dr. Rabalais received her PhD in zoology from the University of Texas at Austin in 1983. Dr. Rabalais has served on several National Academies committees, most recently "Oil in the Sea IV" and served as member and chair of the National Academies' Ocean Studies Board (2000-2005).

David Reidmiller

Member

David Reidmiller is the Director of the Climate Center at the Gulf of Maine Research Institute (GMRI) where he leads a team focused on delivering climate services to coastal and marine stakeholders. Soon after moving to Maine, Dave was appointed as a climate advisor to the Biden-Harris Presidential Transition Team. Prior to joining GMRI, Dave served in a number of climate science policy positions in the federal government, including as Director of the Northeast & Southeast Climate Adaptation Science Centers with the U.S. Geological Survey, Director of the Fourth National Climate Assessment with the White House Office of Science & Technology Policy, and as Chief Climate Scientist at the State Department where he led U.S. engagement in the Intergovernmental Panel on Climate Change (IPCC), as well as negotiations on science and technology for the Paris Agreement. Dave also served as a Fellow in the U.S. Senate working on energy and natural resource issues, as well as a Mirzayan Fellow at the National Academies of Sciences, Engineering, and Medicine. He received his Ph.D. in atmospheric sciences from the University of Washington, his BA in chemistry from Colgate University.

Osvaldo E. Sala

Member

Osvaldo Sala is the Julie A. Wrigley, Regents' and Foundation Professor, at Arizona State University, where he contributes to both the School of Life Sciences and School of Sustainability. He is also the Founding Director of the Global Drylands Center. He came to ASU in 2010 from Brown University where he was the founding Director of the Environmental Change Initiative and the Sloan Lindemann Professor of Biology. Osvaldo has been trained as an ecologist working from the local to the global levels. He is known for his large-scale field manipulative experiments simulating climate change around the world. At the global scale, he has developed highly-cited scenarios of biodiversity change for the year 2100. His work has been truly interdisciplinary, collaborating with geologists, social scientists, mathematicians and humanists. Osvaldo Sala received PhD (1982) and MSc (1980) from Colorado State University and BSc from University of Buenos Aires (1973). Osvaldo Sala served in numerous international institutions from the Millennium Ecosystem Assessment and IPCC (Intergovernmental Panel on Climate Change) to President of the Ecological Society of America. He has been a contributor to several reports associated with global change including IPCC, Global Biodiversity Assessment and Millennium Ecosystem Assessment. His publications have been impactful as reflected in the more than 53,000 citations. He has received several recognitions to his academic work including being an elected Member of the American Academy of Arts and Sciences, the Academy of Sciences of Argentina, Fellow of the American Geophysical Union, the American Association for the Advancement of Science and the Ecological Society of America.

Aaron Salzberg

Member

Aaron Salzberg is the Director of the Water Institute and Holzworth Distinguished Professor in the Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill. Dr. Salzberg previously served as the Special Coordinator for Water at the U.S. Department of State where he managed the development and implementation of U.S. foreign policy on drinking water and sanitation, water resources management, and transboundary water issues. In this role, Dr. Salzberg led the development of the first U.S. Global Water Strategy and was the lead representative or the lead water advisor for the United States at major international events on water including the G8, the World Summit on Sustainable Development and the UN Commission on Sustainable Development. Dr. Salzberg has a Ph.D. in Genetic Toxicology and an M.S. in Technology and Policy from the Massachusetts Institute of Technology and holds an M.S. in Aerospace Engineering from the University of Maryland. He has appointments at the Woodrow Wilson Center and the Center for Strategic and International Studies and serves on the Scientific Research Board of the World Meteorological Organization. Dr. Salzberg is also a member of the National Academies of Sciences Climate Security Roundtable assessing climate-related risks to U.S. national security.

Rachael Shwom

Member

Rachael Shwom is an associate professor in the School of Environmental and Biological Science's Department of Human Ecology and Acting Director of the Rutgers Energy Institute. She conducts research that links sociology, psychology, engineering, economics, and public policy to investigate how social and political factors influence society's responses to energy and climate problems. Rachael is currently a Co-PI on a multi-university, \$3 million National Science Foundation grant on "Reducing Household Food, Energy and Water Consumption: A Quantitative Analysis of Interventions and Impacts of Conservation" and a newly awarded grant "Responses to complex disruptive events: Cognition in a socio-political context." She is Chair of the American Sociological Association's Environmental Sociology Section. Rachael was a Christine Mirzayan Science Technology and Policy Fellow at the National Academies of Sciences and a Michigan State University Environmental Science and Policy Fellowship recipient (Ph.D., Sociology 2009). From 2001-2004, Rachael worked in the utility demand side management sector and before that earned her Masters in Environmental Management from the Nicholas School at Duke University (2001) and BA in English and Textual Studies from Syracuse University (1999).

Joel B. Smith

Member

Joel B. Smith has been analyzing climate change impacts and adaptation issues for over three decades. He was a coordinating lead author or lead author on the on Third, Fourth and Fifth Assessment Reports of the Intergovernmental Panel on Climate Change. Mr. Smith was an author on three U.S. National Climate Change Assessments (NCA), including Chapter Lead on the International Chapter for the fourth NCA. He was a member of the National Academy of Sciences "Panel on Adapting to the Impacts of Climate Change." Mr. Smith has provided technical advice, guidance, and training on assessing climate change impacts and adaptation to people around the world and to international organizations, the U.S. government, states, municipalities, and the non-profit and private sectors. He worked for the U.S. EPA from 1984 to 1992, where he was the deputy director of Climate Change Division. He has been a consultant since 1992, having worked for Hagler Bailly, Stratus Consulting, and Abt Associates. Mr. Smith received a BA from Williams College in 1979 (graduating magna cum laude), and a Masters in Public Policy from the University of Michigan in 1982.

Robert H. Socolow

Member

Robert Socolow is professor emeritus, Department of Mechanical and Aerospace Engineering, Princeton University; he taught a Freshman Seminar in the fall semester through 2021. Rob earned his Ph.D. from Harvard University in theoretical high-energy physics in 1964, was an assistant professor of physics at Yale University from 1966 to 1971, and joined the Princeton University faculty in 1971 with the assignment of inventing interdisciplinary environmental research. Rob is a member of the American Academy of Arts and Sciences, a fellow of the American Physical Society, and a fellow of the American Association for the Advancement of Science. His awards include the 2009 Frank Kreith Energy Award from the American Society of Mechanical Engineers and the 2005 Axelson Johnson Commemorative Lecture award from the Royal Academy of Engineering Sciences of Sweden (IVA). In 2003 he received the Leo Szilard Lectureship Award from the American Physical Society ("for leadership in establishing energy and environmental problems as legitimate research fields for physicists, and for demonstrating that these broadly defined problems can be addressed with the highest scientific standards"). Rob is an associate of the National Research Council of the National Academies, in recognition of NASEM committee work. He served as a member of the Grand Challenges for Engineering Committee of the National Academy of Engineering and of the National Academies Committees on America's Climate Choices and America's Energy Future. Earlier committees included the Committee on Alternatives and Strategies for Future Hydrogen Production and Use (2002-2004) and the Committee on the Human Dimensions of Global Change (1992-98). From 2000 to 2019, Rob and Steve Pacala were the co-principal investigator of Princeton's Carbon Mitigation Initiative, cmi.princeton.edu, a twenty-five-year (2001-2025) project supported by BP. His best-known paper, with Pacala, was in *Science* (2004): "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies." Rob has also introduced "one billion high emitters," "committed emissions," and "destiny studies," as further conceptual decade-scale frameworks useful for climate change policy. His interests include energy efficiency in buildings, CO₂ capture and storage, technological "leapfrogging" by developing countries, and the conditionalities required for safe climate-change "solutions"— notably to protect against nuclear weapons proliferation and misuse of the land. Rob was the editor of *Annual Review of Energy and the Environment*, 1992-2002. He was on the Board of the National Audubon Society, the Deutsche Bank Climate Change Advisory Board, and the Advisory Board of Lawrence Berkeley National Laboratory. He was the chair of the Panel on Public Affairs of the American Physical Society (APS), during which time he co-chaired the APS Technology Assessment, "Direct Air Capture of CO₂ with Chemicals" (2011). He is currently a member of the Science and Security Board of the Bulletin of the Atomic Scientists.

Cathy L. Whitlock

Member

Cathy Whitlock is Regents Professor Emerita of Earth Sciences at Montana State University and a Fellow of the Montana Institute on Ecosystems. Her research focuses on understanding vegetation and fire history as it relates to past climate and anthropogenic change. She has spent the last 40 years studying the environmental history of the northern Rockies and comparable mountainous landscapes around the world. She has authored over 225 scientific publications and served as lead author of the Montana Climate Assessment (2017) and Greater Yellowstone Climate Assessment (2021). Whitlock is a member of the National Academy of Sciences (2018) and a fellow of General Services Agency, American Association for the Advancement of Science, and American Geophysical Union. She was awarded the E.O. Wilson Biodiversity Technology Pioneer Award (2014), the Association for Women Geoscientists Professional Excellence Award (2015), the American Quaternary Association Distinguished Career Award (2017), and the A. Starker Leopold Award from Yellowstone National Park (2022). Whitlock received a PhD (1983) and MS (1979) in Geological Sciences from the University of Washington and a BA (1975) in Geology from Colorado College, and she was a North Atlantic Treaty Organization Postdoctoral Fellow at Trinity College Dublin (1983-4). She has served as a member of the NASEM Board on Environmental Change and Society since 2019.

Gabrielle Wong-Parodi

Member

Gabrielle Wong-Parodi is an Assistant Professor in the Department of Earth System Science and Center Fellow at the Stanford Woods Institute for the Environment at Stanford University. Her research focuses on applying behavioral decision research methods to address challenges associated with global environmental change. Dr. Wong-Parodi seeks to understand the psychosocial and contextual factors that influence people's responses to environmental change – especially extremes – over time, with a particular focus on those communities that have been historically marginalized or disproportionately impacted by climate change. She also uses behavioral decision science approaches to create and evaluate evidence-based strategies for informed decision making, with a particular focus on building resilience and promoting sustainability in the face of a changing climate. Dr. Wong-Parodi has a background in climate change adaptation and mitigation, energy technologies and resources, extreme weather events, and low-carbon technologies. She was an invited speaker at the Sackler Colloquia at the National Academy of Sciences on the Science of Science Communication. She recently served on the National Academy of Sciences committee titled "Long-term Coastal Zone Dynamics: Interactions and Feedbacks between Natural and Human Processes and their Implications for the U.S. Coastline." Dr. Wong-Parodi is an adjunct assistant professor in the Department of Engineering and Public Policy at Carnegie Mellon University. Dr. Wong-Parodi received her B.S. in Psychology at the University of California Berkeley, and her M.A. and Ph.D. in Risk Perceptions and Communication from the University of California, Berkeley.