

# Climate Crossroads

## Committee

### Arun Agrawal

#### Member

Arun Agrawal (NAS) is Samuel Trask Dana Professor at the School for Environment and Sustainability at the University of Michigan. His research and teaching emphasize the politics of international development, institutional change, and environmental conservation. Dr. Agrawal attempts to show through his work how institutions and institutional change interact with social processes to shape environmental and development outcomes. His substantive research interests include adaptation to climate change, land rights and gender, and the decentralization of environmental governance. He has written critically on indigenous knowledge, community-based conservation, common property, population and resources, social-ecological systems, social protection, and environmental identities. Dr. Agrawal is currently carrying out research in Latin America, East Africa, and South and Southeast Asia. His recent work has appeared in *Science*, *PNAS*, the *American Political Science Review*, various *Nature* journals, and *Conservation Biology*. Preceding his work at University of Michigan, Dr. Agrawal held teaching and research positions at Yale, Florida, McGill, Berkeley, and Harvard among other universities. Dr. Agrawal received his Ph.D. in Political Science (1992) from Duke University.

### Cynthia S. Atherton

#### Member

Cynthia "Cyndi" Atherton was the inaugural director of the Science program at the Heising-Simons Foundation from 2013-2023, where she developed a portfolio 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 a large scale commitment to Caltech. 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. She is now a consultant on scientific research, diversity, and philanthropic efforts.

## **Julia Bailey-Serres**

### **Member**

Julia Bailey-Serres (NAS) is a distinguished professor of genetics and MacArthur Foundation chair at the University of California, Riverside. A California native, she received a PhD in botany from the University of Edinburgh and began to research hypoxia and flooding biology of plants as postdoc at UC Berkeley. Bailey-Serres studies mechanisms that safeguard yields of rice and other crops in unpredictable environments, particularly floods and droughts. Her group dissected roles of the SUBMERGENCE 1A gene of rice in providing survival of complete submergence, which has a stabilizing effect on yield in flood-prone regions of Asia. Her group's research clarified the function of other genes that contribute to climate resilience in rice, and the translation of the knowledge to other crops. She pioneered technologies to uncover gene activity and regulatory networks in specific cells - from chromatin to mRNA translation. Her current research focuses on root traits that are beneficial in both waterlogged and dry soils, focusing on gene regulatory networks that control developmental plasticity. Their work also considers the interaction between rice and beneficial microbes in the context of water extremes. As director of UC Riverside's Center for Plant Cell Biology, she cultivates graduate student collaboration and entrepreneurship focused on climate challenges through the NSF NRT Plants3D program. Bailey-Serres is a member of the US National Academy of Sciences.

## **Mariette DiChristina**

### **Member**

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-in-chief 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.

## **Peter C. Frumhoff**

### **Member**

Peter C. 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.

## **Bruce G. Gellin**

### **Member**

Bruce Gellin, MD, MPH, is Professor of Medicine at Georgetown University School of Medicine. He is the former Senior Vice President/Chief of Global Public Health Strategy at The Rockefeller Foundation where he led the Foundation's global vaccination strategy and pandemic prevention programming. He drove work in mitigating the impact of climate-sensitive infectious diseases with epidemic and pandemic potential. Throughout his career, he has held numerous positions leading and advising on global immunization, strategic policy development, and pandemic preparedness and response at national (CDC and NIH/NIAID), multinational, and non-governmental organizations. Immediately prior to joining the Rockefeller Foundation he served as the inaugural President of Global Immunization at the Sabin Vaccine Institute (2017-2022). As Deputy Assistant Secretary for Health and Director of the National Vaccine Program Office at HHS (2002-2017), he was the principal advisor to the Assistant Secretary for Health on all matters related to vaccine science, programs, and policies. Dr. Gellin earned his BA (Human Biology) from the University of North Carolina at Chapel Hill where he was a Morehead Scholar; MD from Weill Cornell Medical College; and his MPH (Epidemiology) from Columbia University Mailman School of Public Health. He was a Henry Luce Scholar in the Philippines and a Warren Weaver Fellow at the Rockefeller Foundation. He trained in internal medicine (Vanderbilt University Medical College) and adult infectious diseases (New York Hospital). He is currently a member of FDA's Vaccine and Related Biological Products Advisory Committee (VRBPAC) and a member of the National Academy of Science, Engineering and Medicine's Forum on Microbial Threats. He is an affiliate faculty member at Georgetown University's Medical School and its Center for Global Health Science and Security.

## **David Goldston**

### **Member**

David Goldston has headed the MIT Washington Office since May 2017. He spent more than 20 years working on science policy and environmental issues on Capitol Hill, including serving as Chief of Staff of the House Science Committee from 2001- 2006. After leaving the Hill, he taught as a visitor at Princeton and Harvard and wrote a monthly science policy column for Nature before becoming the first Director of Government Affairs for the Natural Resources Defense Council in 2009. He is currently an adjunct professor at Georgetown University. Goldston has served on several boards and project committees at the National Academies, and is currently a member of the Board on Science Education. He authored a chapter in "The Science of Science Policy: A Handbook" (Stanford University Press, 2011). He completed the course work for a Ph.D. in American history at the University of Pennsylvania.

## **William K. Hallman**

### **Member**

William Hallman is Professor and Chair of the Department of Human Ecology and a member of the graduate faculties of Nutritional Sciences, Psychology, and of the Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey. Dr. Hallman's research examines public perceptions of risk, attitudes, and behaviors related to food, health, technology, and the environment, with a focus on improving risk and science communication. He is a member of the NASEM Standing Committee on Advancing Science Communication, served as co-Chair of the NASEM Climate Communications Initiative, and as Chair of the Planning Committee for the NASEM workshop: Effective Health Communication within the Current Information Environment and the Role of the Federal Government. He served as Chair of the Risk Communication Advisory Committee of the U.S. Food and Drug Administration and as Director of the Food Policy Institute at Rutgers. Dr. Hallman holds a B.S. in Psychology/Biology from Juniata College in Huntingdon, Pennsylvania, and an M.A. and Ph.D. in experimental psychology from the University of South Carolina. He is a Fellow of the American Association for the Advancement of Science, a Fellow of the Society for Risk Analysis, and a Distinguished Research Fellow of the Annenberg Public Policy Center of the University of Pennsylvania.

## **Eric Horvitz**

### **Member**

Eric Horvitz (NAE) serves as Microsoft's Chief Scientific Officer. In this role, Dr. Horvitz provides leadership and perspectives on advances and trends on scientific matters, and on issues and opportunities rising at the intersection of technology, people, and society. He has pursued principles and applications of AI with contributions in machine learning, perception, natural language understanding, and decision making. His research centers on challenges with uses of AI amidst the complexities of the open world, including uses of probabilistic and decision-theoretic representations for reasoning and action, models of bounded rationality, and human-AI complementarity and coordination. His efforts and collaborations have led to fielded systems in healthcare, transportation, ecommerce, operating systems, and aerospace. He received the Feigenbaum Prize and the Allen Newell Prize for contributions to AI. He received the CHI Academy honor for his work at the intersection of AI and human-computer interaction. He has been elected fellow of the National Academy of Engineering (NAE), the Association of Computing Machinery (ACM), Association for the Advancement of AI (AAAI), the American Association for the Advancement of Science (AAAS), the American Academy of Arts and Sciences, and the American Philosophical Society. Dr. Horvitz currently serves on the President's Council of Advisors on Science and Technology (PCAST) and is a member of the Computer Science and Telecommunications Board (CSTB) of the National Academies. He served as a commissioner for the National Security Commission on AI where he chaired the line of effort on ethical and responsible AI. He has served as president of the AAAI, and on advisory committees for the National Science Foundation, National Institutes of Health, DARPA, and the Allen Institute for AI.

## Lee Kindberg

### Member

B. Lee Kindberg is the former Head of Environment and Sustainability for Maersk in North America. She had been with Maersk since 2005 and manages environmental compliance, customer partnering on sustainability and decarbonization, and strategic initiatives. She serves on the Marine Board of the National Academies of Sciences, Engineering and Medicine and the Transportation Research Board's Standing Committee on Marine Environment. She served for six years on the US Environmental Protection Agency's Clean Air Act Advisory Committee and co-chaired the EPA Ports Workgroup in 2014-2016. She has also been active in Clean Cargo, a global group dedicated to assessing and improving the environmental impact of shipping. Dr. Kindberg received a B.S. in Chemistry from the University of Alabama and a Doctorate in Chemistry from the University of South Carolina. She completed the Competent Boards Certificate program and was granted their Global Competent Board Designation (GCB.D) in January 2020. She has an extensive background in the chemical industry, where she was Director of Government Relations & Environmental Science for the Hoechst Celanese Fibers & Specialty Chemicals Groups. She was active in national and state industry groups and served on the Boards of several state chemical and industry associations.

## Kate E. Lowry

### Member

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.

## **Michael A. Méndez**

### **Member**

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.

## **Rajul Pandya**

### **Member**

Raj Pandya is the Fulton Presidential Professor of Practice and Executive Director of the Global Futures Education Lab at Arizona State University. Before that he served as AGU’s Vice-President of Community Science and Founding Director of the Thriving Earth Exchange. His work focuses on how the sciences can be more participatory, how community participation contributes to scientific innovation and societal relevance, and how the sciences and universities can be allies in building shared sustainable futures. He has or is serving on advisory boards for the Cornell Lab of Ornithology, Public Lab, the Citizen Science Association, the Anthropocene Alliance, the Community and College Partners Program, The Denver Institute for Science and Policy, and ISET International. His PhD investigated how large thunderstorms grow and persist. Raj chaired the National Academies committee on “Designing Citizen Science to Support Science Learning,” and is a member of the Standing Committee on Science Communication and the Resilient America Roundtable Committee.

## **Teddie Potter**

### **Member**

Teddie Potter is a Clinical Professor, the Pauline A. Vincent Chair of Public Health, Director of Planetary Health, and co-director of the Katharine J. Densford International Center for Nursing Leadership at the University of Minnesota School of Nursing. Areas of scholarship include Planetary Health, interprofessional and transdisciplinary collaboration, and leadership and innovation in nursing. She co-edited the Planetary Health Education Framework (2021), a transdisciplinary guide for global Planetary Health education. She is co-founder of Health Professionals for a Healthy Climate and a member of the Alliance of Nurses for Healthy Environments. She serves on the consultative committee of Columbia University's Global Consortium on Climate and Health Education, is past chair of the Environment and Public Health Expert Panel for the American Academy of Nursing, she chairs Clinicians for Planetary Health and serves on the Steering Committee for the Planetary Health Alliance. She is a Fellow in the American Academy of Nursing and in the National Academies of Practice. She serves on the National Academy of Medicine's Action Collaborative on Decarbonizing the US Health Sector and the Health and Medicine Division of NASEM. She has a PhD in Cultural Transformation, and a Master of Science in Nursing Higher Education.

## **Benjamin Preston**

### **Member**

Benjamin Preston (he/him) is a senior policy researcher at the RAND Corporation 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 for climate change and disasters on the delivery of infrastructure services, assessing equity dimensions of renewable energy incentives, 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 took a leave of absence from RAND to serve 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 received a B.S. in biology from the College of William & Mary and a Ph.D. in environmental biology from the Georgia Institute of Technology.

## **A. R. Ravishankara**

### **Member**

A.R. "Ravi" Ravishankara (NAS) is a Professor in the Departments of Chemistry and Atmospheric Science at Colorado State University. He was at National Oceanic and Atmospheric Administration's (NOAA) Chemical Sciences Division (CSD) of Earth System Research Laboratory for nearly 30 years in Boulder, CO. There he served as the Director of CSD from 2006 through 2014, and was a Senior Scientist prior to the Directorship. Before joining to NOAA, he was at Georgia Institute of Technology in Atlanta. Dr. Ravishankara has worked over the past three and a half decades on the chemistry of the Earth's atmosphere as it relates to stratospheric ozone depletion, climate change, and regional air quality. His measurements in the laboratory and in the atmosphere have contributed to deciphering the ozone layer depletion, including the ozone hole; to quantifying the role of chemically active species on climate; and to advancing understanding of the formation, removal, and properties of pollutants. He is an author or coauthor of nearly 350 peer-reviewed publications. Dr. Ravishankara is a member of the U.S. National Academy of Sciences, as well as Fellow of the American Geophysical Union, of the Royal Society of Chemistry, of the American Association for the Advancement of Science, and of the International Union of Pure and Applied Chemistry. His many awards include the Polanyi Medal of the Royal Society of Chemistry, the Stratospheric Ozone Protection award of the U.S. Environmental Protection Agency, and the American Chemical Society's award for Creative Advances in Environmental Sciences. He is currently a co-chair of the World Meteorological Organization/United Nations Environment Programme (WMO/UNEP) Science Assessment Panel on Stratospheric Ozone and a member of the Science Advisory Panel of the Climate Clean Air Coalition of UNEP. He has served or continues to serve on many national and international committees. He is on the Editorial Board of Physical Chemistry Chemical Physics. He has previously served as an Editor of Geophysical Research Letters, and has been on the Editorial Board of Chemical Physics Research Letters and International Journal of Chemical Kinetics.

# Larry Robinson

## Member

Larry Robinson serves as Florida A&M University's (FAMU) 12th president and as a distinguished service professor at the University. Additionally, he is the Principal Investigator of the National Oceanic and Atmospheric Administration's (NOAA) Center for Coastal and Marine Ecosystems (CCME) II. Dr. Robinson formerly served as a member of the U.S. Congress authorized STEM Education Advisory Panel which was established "to provide advice and recommendations to the Committee on Science, Technology, Engineering, and Mathematics Education (CoSTEM)" among other responsibilities. In May 2010, Dr. Robinson took a leave of absence from FAMU to serve in a U.S. Senate-confirmed position as Assistant Secretary of Commerce for Conservation and Management at NOAA. In 2007-2009, Dr. Robinson served as Senior Scientific Advisor at the U.S. Department of Agriculture's Cooperative State Research, Education, and Extension Service. In 2008, Dr. Robinson was selected to serve on the Oceans Research and Resources Advisory Panel (ORRAP) and as a member of the National Science Foundation's National Ecological Observatory Network (NEON) Science Technology Education Advisory Committee. Dr. Robinson has served as chair of the Council of Academic Vice Presidents for the State University System of Florida; chair of the Biology and Medicine Division of the American Nuclear Society; and charter member of the National Council for Science and the Environment's Council of Environmental Deans and Directors. Dr. Robinson is a former member of the Board of Trustees of the Florida Chapter of the Nature Conservancy; the National Science Foundation's National Ecological Observatory Network (NEON) Education Tiger Team; the International Advisory Board to Florida Center for Research in Science, Technology, Engineering and Mathematics (FCR-STEM); the Leon County Research and Development Authority; the Leon County Water Resources Committee; and Florida A&M University's campus coordinator for Florida Sea Grant. Dr. Robinson served on the National Research Council (NRC) Committee on the Restoration of the Greater Everglades Ecosystem; the NRC Committee on Mine Placement of Coal Combustion Waste; and the NRC Committee to Review the Florida Aquifer Storage and Recover Regional Study Technical Data Report. He is a current member of the NRC Gulf Research Program's Division Committee.

## **Renee N. Salas**

### **Member**

Renee N. Salas, MD, MPH, MS (NAM) is an attending physician in the Department of Emergency Medicine and an Assistant Professor of Emergency Medicine at Harvard Medical School (HMS). She is also a Yerby Fellow at the Center for Climate, Health, and the Global Environment (C-CHANGE) at the Harvard T.H. Chan School of Public Health and Affiliated Faculty and a previous Burke Fellow at the Harvard Global Health Institute (HGHI). Dr. Salas has served as the lead author of the Lancet Countdown on Health and Climate Change U.S. Brief since 2018 and founded and leads its Working Group of over 70 U.S. organizations, institutions, and centers working at the nexus of climate change and health. Dr. Salas was a Co-Director for the first Climate Crisis and Clinical Practice Symposium, in partnership with The New England Journal of Medicine, and co-leads the broader Initiative. She was elected to the National Academy of Medicine in 2021 and serves on the planning committee for the Grand Challenge on Climate Change and Human Health Initiative. She has testified before Congress for the full House Committee on Oversight and Reform on how climate change is harming health. She engages in research on how climate change is impacting the healthcare system and developing evidence-based adaptation. She lectures and serves on committees at the nexus of climate and health nationally and internationally, advises and publishes in high impact journals, and her work and expertise are regularly featured in mainstream media outlets like the New York Times, NPR, Time, and the Associated Press. She is the recipient of the 2018 Clinician-Teacher Development Award from Massachusetts General Hospital (MGH) and a past recipient of the Shore Faculty Development Award at HMS. Dr. Salas received her Doctor of Medicine from the Cleveland Clinic Lerner College of Medicine and concurrently obtained a Master of Science in Clinical Research. Her alma mater later awarded her the Early Career Leadership Award for her outstanding career achievements. She completed a four-year emergency medicine residency at the University of Cincinnati and matriculated to a Fellowship in Wilderness Medicine at MGH. She graduated with a Master of Public Health from the Harvard School of Public Health in 2016, with a concentration in environmental health.

## **Susan F. Tierney**

### **Member**

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.

## **Gavin P. Towler**

### **Member**

Gavin Towler (NAE) is the Corporate Vice President and Chief Scientist, Sustainable Technologies for Honeywell, with broad technical accountability across Honeywell for driving thought leadership in Sustainable Technologies. Gavin has 30 years of broad experience of process and product design in the chemicals and fuels industries and has 77 US patents. Prior to his current role he served as Vice President and Chief Technology Officer of Honeywell UOP and of Honeywell Performance Materials and Technologies. He is co-author of "Chemical Engineering Design", a textbook on process design, and is an Adjunct Professor at Northwestern University and the National University of Singapore, where he helps teach the senior design classes. Dr. Towler has a bachelor's and master's degree in chemical engineering from Cambridge University and a doctorate from U.C. Berkeley. He is a Chartered Engineer and Fellow of the Institute of Chemical Engineers, and is a Fellow of the American Institute of Chemical Engineers.

## **Carlton Waterhouse**

### **Member**

Carlton Waterhouse is a Professor of Law and the founding director of the Environmental and Climate Justice Center at the Howard University School of Law School. In 2021, Carlton was appointed by President Joe Biden as Deputy Assistant Administrator for the Office of Land and Emergency Management at the Environmental Protection Agency and nominated to the United States Senate to serve as the Assistant Administrator for the office. During his two years leading the office, he oversaw the nation's programs for toxic waste site remediation, community revitalization and redevelopment through contaminated site cleanup, hazardous and solid waste materials management, chemical plant safety, and emergency response to toxic spills, fires, and explosions. Carlton is an international expert on environmental law and environmental justice, as well as reparations and redress for historic injustices. He is a Fulbright research scholar and is a former board member of the Environmental Law Institute and the Natural Resources Defense Counsel. Carlton holds a Ph.D. from Emory University in Social Ethics; a J.D. from the Howard University School of Law, a Master of Theological Studies degree from the Candler School of Theology at Emory University, and a Bachelor of Science Degree from the Pennsylvania State University.