

Workshop Speaker Bios
(alphabetical order by last name)

John Balbus M.D., M.P.H., is the Interim Director of the new Office of Climate Change and Health Equity within OASH. A physician and public health professional with over 25 years of experience working on the health implications of climate change, Dr. Balbus has served as HHS Principal to the U.S. Global Change Research Program and co-chair of the working group on Climate Change and Human Health for the U.S. Global Change Research Program since he joined the federal government in 2009. Before coming over to the new Office, Dr. Balbus served as Senior Advisor for Public Health to the Director of the National Institute of Environmental Health Sciences. Prior to joining NIEHS, Dr. Balbus was the Chief Health Scientist at the Environmental Defense Fund and an Associate Professor of Environmental and Occupational Health at the George Washington School of Public Health and Health Services. He received his MPH degree from the Johns Hopkins School of Hygiene and Public Health, his MD degree from the University of Pennsylvania, and his undergraduate degree in Biochemistry from Harvard University.

Ana Cristina Cardoso, Ph.D., studied marine biology, concluding a 'Licenciatura' (long cycle academic degree) in marine biology and fisheries, and a Ph.D. in marine biology. She is since 1995 a scientific officer at the European Commission, Joint Research Centre (JRC). Since then, she has contributed and coordinated several JRC research and science-policy interface projects in the fields of freshwater, marine ecology and biodiversity. Since 2012, she coordinates the European Alien Species Information Network (EASIN), an initiative of the JRC, and carries out research and scientific support to EU policy on the thematic of alien species.

Ann Marie Chischilly, Esq., (she/her) was named Vice President for the Office of Native American Initiatives (ONAI) in February 2022. ONAI is tasked with advancing Northern Arizona University's strategic goal, 'to become the nation's leading university serving Indigenous Peoples,' with initiatives focusing on student retention, tribal leadership, environmental stewardship in communities, culturally responsive K-12 pedagogy and mentorship. Ms. Chischilly also continues to assist the Institute for Tribal Environmental Professionals (ITEP). For the last 11 years, she was responsible for managing ITEP's work with Northern Arizona University, state and federal agencies, Tribes and Alaska Native villages. This year, ITEP celebrates 30 years serving over 95% of all 574 Tribes, Alaska Native villages and Indigenous Peoples. ITEP continues to be the premier Tribal environmental organization training Tribes and Indigenous Peoples. Ms. Chischilly is an enrolled member of the Navajo Nation (Diné). She earned her Juris Doctorate (J.D.) degree from St. Mary's University School of Law and a Master's in Environmental Law (LL.M) from Vermont Law School. She is licensed in Arizona and is also a member of the International Bar Association.

Gretchen C. Daily, Ph.D., is focused on understanding human dependence and impacts on nature and the deep societal transformations needed to secure people and Earth's life support systems. Her work spans fundamental research and action-oriented initiatives. She engages pragmatically with governments, multilateral development banks, investors, businesses, farmers and ranchers, communities, and NGOs. Daily is co-founder and Faculty Director of the Stanford Natural Capital Project, a global partnership whose goal is to integrate the values of nature into planning, policy, finance, and operations. Its science innovations are made accessible and actionable through the free, open-source InVEST Software Platform, now applied in 185 nations. Daily is a fellow of the U.S. National Academy of Sciences, the American Academy of Arts, and Sciences and the American Philosophical Society.

Angela Fernandez, PhD, MPH, LCSW (Menominee)., is an Assistant Professor in the University of Wisconsin-Madison School of Nursing and member of the Native American Environment, Health, and Community faculty cluster. Her research program is built on over two decades of combined national and international social work and public health research, practice, teaching, and service experience with Indigenous, Latinx and other children, families and communities in inpatient and outpatient health care, educational institutions, non-profit organizations, and the Peace Corps. As a clinician, she has worked with interprofessional teams in inpatient and outpatient care, and holds clinical social work licenses as a psychotherapist in the states of Wisconsin and Washington. As an educator, she has designed and taught graduate-level courses on historical trauma and healing and critical social theories in population health. As a prevention scientist, she examines the role of Indigenous cultural practices and human interconnectedness within Nature as protective factors in the prevention of chronic and co-occurring diseases and in the promotion of health, social and environmental equity and justice. Dr. Fernandez is working on developing an intergenerational environmental health intervention aimed at risk prevention and health promotion of mental health and well-being among Indigenous children and families.

Anne Guerry, Ph.D., is the Chief Strategy Officer and Lead Scientist of Stanford's Natural Capital Project and Senior Research Associate at the Stanford Woods Institute for the Environment. She spearheads the Natural Capital Project's Sustainable Livable Cities program, leads the team's marine and coastal work, and charts strategic directions for the global partnership. She and her team work to advance scientific understanding of nature's benefits, create practical tools and approaches to use that understanding to inform decisions, and partner with leaders around the world to improve outcomes for people and nature. Dr. Guerry has published over 60 peer-reviewed articles and other publications. Formerly, she served as a National Research Council fellow at NOAA's Northwest Fisheries Science Center in Seattle. She is a Science Advisor for the US National Ocean Protection Commission and a Strategy Group member for the NAS Response and Resilient Recovery Strategic Science Initiative on Ecosystem Services in the Built Environment. She received her PhD in Zoology from Oregon State University, her MS in Wildlife Ecology from the University of Maine, and her BA in English and Environmental Studies from Yale University.

James Hassall, Ph.D., is an epidemiologist and wildlife veterinarian with the Smithsonian's Global Health Program and Adjunct Faculty at Yale School of Public Health. His research interests focus on disease transmission between wildlife, livestock and humans in natural and urban settings in Africa, and using technological advances (both geospatial and diagnostic) to determine how transfer of pathogens between species is determined by the ecosystems they inhabit. Such evidence is crucial to securing healthier and more resilient populations of humans and animals by linking public and ecosystem health. As a conservationist, he works to improve the health of endangered species (including rhino and Old World vultures) and supports African veterinarians through training programs in conservation medicine. He received his Bachelor of Veterinary Science and Medicine from the Royal Veterinary College in London, before pursuing a master's degree in wild animal health. He completed his doctorate in epidemiology with the University of Liverpool and International Livestock Research Institute, investigating the role of urbanization on the ecology and epidemiology of disease transmission between wildlife, livestock and humans in Nairobi. He recently completed a European College of Zoological Medicine residency in the specialty of Wildlife Population Health, and was runner-up for the Springer Nature Research Award for Driving Global Impact in 2021.

Caroline Hickman, M.Sc., is a psychotherapist and lecturer at the University of Bath researching children and young people's emotional responses to climate change around the world for 10 years, *examining eco-anxiety & distress, eco-empathy, trauma, moral injury and intergenerational stresses*. She is co-lead author on a 2021 quantitative global study into children & young people's emotions & thoughts about climate change published in The Lancet Planetary Health. She has been developing a range of therapeutic & educational tools for ecological distress, a psychological assessment model for eco-anxiety, and delivered workshops in climate psychology, emotional resilience and mental health internationally.

Mahtab Jafari, Pharm D., Dr. Mahtab Jafari is professor of Pharmaceutical Sciences, the Founding Director of "The UCI Center for Healthspan Sciences", and the Equity Advisor at the School of Pharmacy and Pharmaceutical Sciences at the University of California, Irvine. She received her Doctorate in Pharmacy (Pharm.D.) and completed her residency at the University of California, San Francisco. She is also a Master Certified Health Coach and a Nationally Board-Certified Health and Wellness Coach. She currently serves as the president of the UCSF School of Pharmacy Alumni Association. She has over 28 years of experience in basic, translational, data mining, educational, and clinical sciences research in academic and private settings. Over the past 18 years, using fruit flies and mice as her main model systems in her research laboratory, she has focused on identifying and evaluating botanicals and dietary supplements that extend lifespan and improve healthspan through a science that she introduced as Healthspan Pharmacology. In the main 3 courses that she teaches, Life101: Mental and Physical Self-Care, Healthspan Sciences, and Evidence-Based Self-Care, she emphasizes the importance of science-based interventions to improve healthspan. The living lab for her educational research is the Life101 course where she evaluates the impact of intervention such as Nature Therapy on the mental health of her students. Life101 is offered to students on all 10 University of California campuses and for free on the Coursera platform (coursera.com) She is also passionate about educating the community about topics on scientific wellness and is the author of the award-winning book, "The Truth About Dietary Supplements: An Evidence-Based Guide to a Safer Medicine Cabinet"

Josh Lawler, Ph.D., is the Orin and Althea Soest Professor in the School of Environmental and Forest Sciences, the Director of Nature & Health, and the Faculty Director of the UW Botanical Gardens at the University of Washington. He received his AB from Bowdoin College and his MS and PhD in ecology from Utah State University. Josh is a landscape ecologist and conservation biologist driven by applied conservation questions and their real-world applications. He is most interested in how anthropogenic factors affect species distributions, animal population dynamics, and community composition at regional and continental scales, as well as how time spent in more natural environments can affect human health. His research involves investigating the effects of climate change on species distributions and populations, exploring the influence of landscape pattern on animal populations and communities, climate-change adaptation for natural and human systems, and multiple aspects of the connections between time spent in nature and mental and physical health

Steve Luby, MD., is a physician, epidemiologist and researcher who lived and worked in Pakistan for 5 years and in Bangladesh for 8 years. He has led research teams who have advanced global scientific understanding of hepatitis C transmission and safe injections; water, sanitation and handwashing; Nipah virus epidemiology and prevention; typhoid fever epidemiology and prevention and low cost approaches to disease surveillance. Currently, he is a Professor Medicine in the Infectious Disease Division at Stanford. He is also a Senior Fellow at Stanford's Woods Institute and the Freeman Spogli Institute.

Catherine Machalaba, Ph.D., M.P.H., is the Principal Scientist for Health and Policy at EcoHealth

Alliance. She was a lead author of the World Bank Operational Framework for Strengthening Human, Animal and Environmental Public Health Systems at their Interface (“One Health Operational Framework”) published in 2018 to assist countries and donor institutions in implementing One Health approaches. She serves in leadership roles in the American Public Health Association, Future Earth, and the International Union for the Conservation of Nature. In 2021 she was appointed to the One Health High-Level Expert Panel (OHHLEP). Catherine holds an undergraduate degree in biology, a master’s in public health, and a PhD in environmental and planetary health sciences. She has worked in national, state and local government offices.

Sam Myers, M.D., M.P.H., studies the human health impacts of accelerating disruptions to Earth’s natural systems, a field recently dubbed Planetary Health. He is a Principal Research Scientist at the Harvard T.H. Chan School of Public Health and is the founding Director of the Planetary Health Alliance (www.planetaryhealthalliance.org). Sam’s current work spans several areas of planetary health including 1) the global nutritional impacts of rising concentrations of CO₂ in the atmosphere; 2) the health impacts of land management decisions in SE Asia associated with biomass burning and particulate air pollution 3) the global consequences of fisheries decline for human nutrition and health; 4) the global impact of animal pollinator declines on human nutrition today and in the future; and 5) the impact of climate shocks on human nutrition as mediated through global food trade. As the Director of the Planetary Health Alliance, Sam oversees a multi-institutional effort (over 240 organizations in over 40 countries) focused on understanding and quantifying the human health impacts of disrupting Earth’s natural systems and translating that understanding into resource management decisions globally. Dr. Myers serves as a Commissioner on the Lancet-Rockefeller Foundation Commission on Planetary Health and a member of the Lead Expert Group of the Global Panel on Agriculture, Food Systems, and Nutrition. He was the inaugural recipient of the Arrell Global Food Innovation Award in 2018. He has also been awarded the Prince Albert II of Monaco—Institut Pasteur Award for research at the interface of global environmental change and human health. He is the co-editor with Howard Frumkin of Planetary Health: Protecting Nature to Protect Ourselves.

Sarah Olson, Ph.D., joined WCS in 2011 and is currently the Director of Health Research for the Health Program. She received a joint PhD in Population Health and Environment & Resources from the University of Wisconsin-Madison and studied how deforestation and climate affect malaria incidence in the Amazon. Based in Bozeman, Montana, she provides leadership and research support to field veterinarians and conservation staff around the world. Trained in environmental research and public health, her research with WCS has focused on front-line wildlife conservation and One Health challenges, including the wildlife trade and emerging infectious diseases, Ebola virus in great apes and bats, avian influenza in wild birds, and white-nose syndrome in North American bats. She is currently focused on understanding and mitigating wildlife health and zoonotic disease threats, often associated with anthropogenic drivers, and helping grow sustainable and effective wildlife health surveillance systems.

Teddie Potter, Ph.D., is deeply committed to climate change and planetary health education including membership in the Alliance of Nurses for Healthy Environments, and membership on the American Academy of Nursing Environment and Public Health Expert Panel. She is a member of the Coordinating Committee of Columbia University’s Global Consortium on Climate and Health Education and a Fellow in the Institute on the Environment at the University of Minnesota. She chairs Clinicians for Planetary Health (C4PH) and is a member of the Steering Committee of the Planetary Health Alliance at Harvard. She currently serves on the National Academy of Medicine’s Action Collaborative on Decarbonizing the US Health Sector. In 2019, Dr. Potter was appointed the first Director of Planetary Health for the School of Nursing at the University of Minnesota.

Nicole Redvers, N.D., M.P.H., is a member of the Deninu K'ue First Nation in Denendeh (NWT, Canada) and has worked with Indigenous patients, scholars, and communities around the globe her entire career. She is an assistant professor in the Department of Family and Community Medicine and the Department of Indigenous Health at the University of North Dakota where she helped develop and launch the first Indigenous health PhD program. Dr. Redvers is co-founder and past board chair of the Canadian charity the Arctic Indigenous Wellness Foundation based in Yellowknife, NWT, providing traditional Indigenous-rooted Land-based wellness supports to northerners. She has been actively involved at regional, national, and international levels promoting the inclusion of Indigenous perspectives in both human and planetary health research and practice. She is author of the trade paperback book titled, 'The Science of the Sacred: Bridging Global Indigenous Medicine Systems and Modern Scientific Principles'.

Taylor Ricketts, Ph.D., is Gund Professor and Director of the Gund Institute for Environment at the University of Vermont. Taylor's research centers on the overarching question: How do we meet the needs of people and nature in an increasingly crowded, changing world? His recent work has focused on the economic and health benefits provided to people by forests, wetlands, reefs, and other natural areas. He is co-founder of the Natural Capital Project, a partnership among universities and NGOs to map and value these natural benefits. Taylor has also served as an author and editor for two UN-sponsored efforts to assess global ecosystems and their contributions to human wellbeing. Before arriving at UVM in 2011, he led World Wildlife Fund's Conservation Science Program for nine years. These and other roles are part of a continuing effort to link rigorous research with practical conservation and policy efforts worldwide. Taylor is an elected Fellow of both the American Association for the Advancement of Science and the Ecological Society of America. Thompson-Reuters has named him one of the world's most cited and influential scientists.

Cristina Romanelli is the interagency liaison for the UN Biodiversity Convention under its joint work programme on biodiversity and health with the World Health Organization. She has over 17 years of experience as a sustainability professional working in policy evaluation and development, multistakeholder engagement, and interdisciplinary research with the United Nations, specialized agencies, the public and private sectors, and nongovernmental organizations. She has provided high-level scientific and policy advice in research and regulatory-compliance settings, primarily in the areas of biodiversity and ecosystem management and conservation, global and public health, One Health, climate change, and regulatory energy policy. She also jointly organized and led capacity-building workshops convened by the UN Biodiversity Convention and WHO, bringing together Ministries of health and environment, experts and local community representatives across over 85 countries in Latin America, Africa, Europe and the ASEAN region. She was principal lead coordinating author of the WHO & CBD-led State of Knowledge Review, Connecting Global Priorities: Biodiversity and Human Health, and has contributed to several other UN reports, most recently leading the development of biodiversity-inclusive policy guidance on One Health adopted at the 2018 UN Biodiversity Conference (COP 14).

Josh Rosenthal, Ph.D., is a Senior Scientist at the Fogarty International Center of the U.S. National Institutes of Health (NIH). He is an ecologist with a longstanding interest in the integration of public health, environment, and international development. He led the pioneering interagency program, International Cooperative Biodiversity Groups, and subsequently conceived and led the NIH NSF collaborative program on the Ecology of Infectious Diseases. Dr. Rosenthal currently leads NIH research and policy activities in Household Air Pollution research, including the Clean Cooking Implementation Science Network, and the multi-national HAPIN trial to define the health benefits achievable through a

clean cooking intervention in low and middle-income countries. He founded and co-leads the NIH Climate and Health working group, and is a project scientist on NIH supported GEOHealth (Global Environmental and Occupational Health) projects. Dr. Rosenthal completed his Ph.D. and post-doctoral research at the University of California, Berkeley. He completed an AAAS Science and Diplomacy Fellowship at the NIH, was a Senior Fulbright Fellow at the University of Buenos Aires, Argentina, and has been awarded three NIH Director's Awards for work across the agency in support of public health and environment.

Jan Semenza, Ph.D., served as an Epidemic Intelligence Service Officer at the US Centers for Disease Control and Prevention (CDC) in Atlanta, USA when he led the CDC response to the 1995 heat wave in Chicago, that killed over 700 people. He was a faculty member at UC Berkeley, UC Irvine, Oregon Health and Science University, and at Portland State University where he taught in the Oregon Master Program of Public Health. Over the last 15 years he led the work on environmental and climatic drivers of infectious disease transmission at the European Centre for Disease Prevention and Control (ECDC), based in Stockholm, Sweden. He is a lead author of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report and the co-lead of Working Group 1 and 2 of the Lancet Countdown in Europe. Currently, he is associated with the Heidelberg Institute of Global Health, at the University of Heidelberg in Germany.

Craig Stephen, D.V.M., Ph.D., has devoted his career to developing ideas, peoples, policies and evidence to concurrently promote the health of people and animals and their shared environments. He uses population health and health promotion concepts on a wide set of issues ranging from conservation, to global health, to emerging threat preparedness. Craig works globally with all levels of government, the non-profit sector, community groups, universities and industry to examine complex health issues at the nexus of people, animals and environments. His aim is to help develop sensible, practical and evidence-based policies and promote an inter-species and inter-generational approach to health. Craig has held several One Health and Environmental Health leadership positions including being the CEO of the Canadian Wildlife Health Cooperative, the founder and director of the Centre for Coastal Health, the Scientific Director of the Animal Determinants of Emerging Diseases Research Unit and the founding director of the BC Environmental and Occupational Health Research Network. He held a Canada Research Chair in integrating human and animal health. Craig is currently the Director of the McEachran Institute, a Clinical Professor at the School of Population and Public Health (University of British Columbia) and a Clinical Professor at the Ross University School of Veterinary Medicine.

Judith Van Hoorn, Ph.D., is professor emerita at the University of the Pacific and has expertise in early childhood development and education. Her work currently focuses on the global impacts of the climate crisis on children. Dr. Van Hoorn writes widely on children's play, including *Play at the Center of the Curriculum* (ed.1-6) and, recently, *The Gift of Play*. Her research in peace psychology examines adolescents' responses to rapid social change. Dr. Van Hoorn has been active in the American Psychological Association's and received APA's Presidential Citation for Outstanding Psychologists. She advises organizations that work to improve the lives of children and families. Judith Van Hoorn has expertise in early childhood development and received the American Psychological Association's Presidential Citation for Outstanding Psychologists. Her books include *Adolescent Development and Rapid Social Change* and *Play at the Center of the Curriculum* (ed.1-6) her recent work examines the global impacts of climate change on children.

Neil Vora, M.D., is a policy fellow at Conservation International where he leads its efforts on pandemic prevention. He served for nearly a decade with the US Centers for Disease Control and Prevention (CDC),

including as an Epidemic Intelligence Service officer and a Commander in the US Public Health Service. Neil deployed for CDC to Liberia in 2014 and to the Democratic Republic of the Congo in 2019 to assist in the responses to the two largest Ebola outbreaks ever. He also led the investigation of a newly discovered smallpox-like virus in the country of Georgia in 2013. From 2020-2021, Neil developed and led New York City's COVID-19 contact tracing program, overseeing a team of over 3,000 people. He has published more than 60 articles in leading journals such as the New England Journal of Medicine and The Lancet. He is an Associate Editor at CDC's Emerging Infectious Diseases journal and an Adjunct Professor of Internal Medicine and Infectious Diseases at Columbia University. He still sees patients in a public tuberculosis clinic in New York City. Outside of work, Neil loves to spend time with his rescue pets and to train in Brazilian jiu jitsu.

Kinari Webb, MD., founded Health In Harmony as a response to the devastation she saw in the rainforests of West Kalimantan, Indonesia. With a mission to recognize the inextricable link between human and environmental health and a focus on providing healthcare as an incentive to protect natural resources, Health In Harmony is working toward a healthy planet for all. The seeds of a future in Indonesia were first sown for Kinari Webb in 1993, while studying orangutans in Gunung Palung National Park. Bearing witness to the dichotomy of a beautiful and simultaneously threatened rainforest, and experiencing firsthand the travesties befalling local communities with regards to healthcare, Kinari vowed to complete medical training and return to Indonesia. Dr. Webb graduated from Yale University's School of Medicine with honors and completed her residency in family medicine at Contra Costa Regional Medical Center in Martinez, California in 2005; Health In Harmony was founded shortly thereafter. She then moved to Indonesia and began work around arguably the most precious national park in the country called Gunung Palung National Park in West Kalimantan. In listening to local rainforest communities, Dr. Webb and her Indonesian colleagues found that the need for affordable healthcare and training in sustainable agricultural techniques were driving illegal logging. Through a co-designed healthcare system and integrated economic development work, over 10 years illegal logging households dropped by 90%, infant mortality declined 67%. Loss of primary forest was halted and over 52,000 acres of new forest grew back. The carbon impact is estimated conservatively at \$53 million dollars. With Health In Harmony's support, this model is now being tested around another national park in Indonesian Borneo and began in Madagascar as well in 2019. Dr. Webb was honored with an Ashoka Social Entrepreneur Fellowship in 2014 and was selected as a Rainier Arhnold Fellow through the Mulago Foundation in the same year. In 2017 she gave the commencement address at Yale medical school. Kinari's work has been profiled in Oprah Magazine, BBC, PBS's News Hour with Jim Lehrer, National Geographic, the Sierra Club, Mongabay, Four Indonesian TV channels, Tempo Magazine, Kompas Newspaper and the Voice of America. Her memoir *Guardians of the Trees* was published in 2021 to critical acclaim.

Louise Willemen, Ph.D., holds the chair of Spatial Dynamics of Ecosystem Services at the University of Twente, the Netherlands. Her research primarily focuses on making quantitative spatial information on ecosystem services available to support multi-objective decision making. Her current research includes RS-based ecosystem service mapping and monitoring, impact assessments of integrated restoration, incorporating citizen science in impact research, and prioritization of investments in land degradation neutrality actions. She contributes to bridging science-policy through her roles as Coordinating Lead Author of the Land Degradation and Restoration assessment of IPBES, as member of the Executive Committee of the international Ecosystem Services Partnership, through active science communication, and editorial work for several journals. She has worked at several science and policy organizations including Bioversity International- CIAT in Colombia, the European Commission's Joint Research Centre in Italy, Cornell University in the USA, and has collaborated with many on-the-ground partners.

Liz Willetts, M.E.M., M.M.Sc., is a Health-Environment Advisor for the International Institute for Sustainable Development and leads international projects on policy approaches to this nexus. She has 20 years of interdisciplinary experience as a practitioner, policy advisor, and communications expert. She began her career in public health implementation to address social and environmental determinants of nutrition at the Netter Center for Community Partnerships, and then earned degrees in nature valuation (ecosystem services) and in medicine. She has served long-term roles in community medicine on a remote island in Micronesia, at a bilingual Spanish clinic nested in Harvard–Brigham & Women’s Hospital system, and in an indigenous hospital in Central America. For the last 15 years, Liz has also attended and tracked global decision-making processes on environment and development, including on climate change (UNFCCC), biodiversity (CBD, IPBES, ITPGRFA), food security, (UN Committee on World Food Security), chemicals and waste pollution (Basel and Rotterdam conventions), water (UN-Water, Budapest Water Summit), and sustainable development (CSD, HLPF). She is a consultant to the WHO Environment, Climate Change, and Health team and a Newsdesk writer for The Lancet-Planetary Health. She studied biology at the University of Pennsylvania (2002), environmental economics and policy at Duke University (2008), and medicine at Emory University (2014).