Review of the Draft Interagency Report on the Impacts of Climate Change on Human Health in the United States

Committee

Daniel S. Greenbaum

Chair

Mr. Daniel S. Greenbaum (Chair) joined the Health Effects Institute as its President and Chief Executive Officer on March 1, 1994. In that role, Mr. Greenbaum leads HEI’s efforts, supported jointly by US EPA and industry, with additional funding from US DOE, Federal Highway Administration, US AID, the Asian Development Bank, and foundations, to provide public and private decision makers – in the US, Asia, Europe, and Latin America - with high quality, impartial, relevant and credible science about the health effects of air pollution to inform air quality decisions in the developed and developing world. Mr. Greenbaum has been a member of the U.S. National Research Council Board of Environmental Studies and Toxicology and vice chair of its Committee for Air Quality Management in the United States. He served on the NRC Committee on The Hidden Costs of Energy and on their Committee on Science for EPA’s Future. Mr. Greenbaum also chaired the EPA Blue Ribbon Panel on Oxygenates in Gasoline which issued the report Achieving Clean Air and Clean Water and EPA’s Clean Diesel Independent Review Panel, which reviewed technology progress in implementing the 2007 Highway Diesel Rule. In May 2010, Mr. Greenbaum received the Thomas W. Zosel Outstanding Individual Achievement Award from the U.S. EPA for his contributions to advancing clean air. Mr. Greenbaum has over three decades of governmental and non-governmental experience in environmental health. Just prior to coming to HEI, he served as Commissioner of the Massachusetts Department of Environmental Protection from 1988 to 1994, where he was responsible for the Commonwealth's response to the Clean Air Act, as well as its award-winning efforts on pollution prevention, water pollution and solid and hazardous waste. Mr. Greenbaum holds Bachelor's and Master's degrees from MIT in City Planning.

Heidi E. Brown

Member

Dr. Heidi Brown has worked on a variety of human (e.g., valley fever, Helicobacter pylori), animal (e.g., rabies, canine heartworm) and vector-borne diseases (e.g., West Nile virus, dengue, chikungunya, Chagas, bluetongue, plague, tularemia) using tools ranging from math modelling to remote sensing to epidemiology to ecological niche modeling. Many of these diseases are endemic to the United States and many of the diseases will feel the effects of climate change. Moreover, her recent work spearheading the chapter, Human Health, in the Assessment of Climate Change in the Southwest United States (part of the US National Climate Assessment process) attests to both her commitment to the science and the communication of the impacts of climate change on health. She is adept at cross-discipline discussions as highlighted by her affiliation with multiple departments across the University of Arizona campus, for example, while her home department is in the College of Public Health, she is affiliate faculty at the Center for Insect Science and the School of Geography and Development, as well as multiple institutions on campus. She is also very active in the NOAA Regional Integrated Science and Assessment (RISA) Climate Assessment for the Southwest (CLIMAS) program. She received a Ph.D. in 2007 from Yale University.

Peter Daszak

Member

Dr. Peter Daszak is President of EcoHealth Alliance, a US-based organization which conducts research and outreach programs on global health, conservation and international development. Dr. Daszak's research has been instrumental in identifying and predicting the impact of emerging diseases across the globe. His achievements include identifying the bat origin of SARS, identifying the underlying drivers of Nipah and Hendra virus emergence, producing the first ever global emerging disease 'hotspots' map, identifying the first case of a species extinction due to disease, coining the term 'pathogen pollution', and discovering the disease chytridiomycosis as the cause global amphibian declines. Dr. Daszak is a member of the IOM's Forum on Microbial Threats, the NRC Advisory Committee to the USGCRP, the Supervisory Board of the One Health Platform, the One Health Commission Council of Advisors, the CEEZAD External Advisory Board; has served on the IOM Committee on global surveillance for emerging zoonoses, the NRC committee on the future of veterinary research, the International Standing Advisory Board of the Australian Biosecurity CRC; and has advised the Director for Medical Preparedness Policy on the White House National Security Staff on global health issues. Dr. Daszak won the 2000 CSIRO medal for collaborative research on the discovery of amphibian chytridiomycosis, is the EHA institutional lead for USAID-EPT-PREDICT and PREDICT-2, is on the Editorial Board of One Health, Conservation Biology, and Transactions Roy. Soc. Trop. Med. Hygiene, and is Editor-in-Chief of the journal EcoHealth. He received a Ph.D. in Parasitology from the University of East London.

Linda A. McCauley

Member

Dr. Linda McCauley began her tenure as Dean of the Nell Hodgson Woodruff School of Nursing at Emory University in May 2009. Dr. McCauley is a national leader in the area of research on environmental exposures and conducts interdisciplinary research using participatory research models to study pesticide exposures among minority communities. Her work aims to identify culturally appropriate interventions to decrease the impact of environmental and occupational health hazards in vulnerable populations, including workers and young children. Dr. McCauley has been awarded research funding from the National Institutes of Health, the Centers for Disease Control and Prevention, the Department of Defense, and the Department of Veterans' Affairs. Her research has resulted in more than 100 publications, ongoing consultations, leadership on occupational and environmental advisory panels, and testimony to governmental oversight bodies. Prior to coming to Emory, Dr. McCauley held academic appointments at the University of Cincinnati, Oregon Health & Science University, and the University of Pennsylvania. She received her BSN from the University of North Carolina-Chapel Hill and her master's in nursing from Emory University. She completed her doctorate in Environmental Health at the University of Cincinnati.

Sabrina McCormick

Member

Dr. Sabrina McCormick is a sociologist and filmmaker. Dr. McCormick takes an in-depth, mechanistic approach to understanding how climate change gets under the skin. She works on extreme impacts of climate-related phenomena like heat waves, emergent vector-borne disease, and climate-related disasters. She recently served as a Lead Author on the Special Assessment of the Nobel Prize-winning Intergovernmental Panel on Climate Change entitled Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. Dr. McCormick's award-winning documentary film work aims to transform science into stories that compel social action. She was an Associate Producer on The Years of Living Dangerously, an eight-part Showtime series that earned the Emmy Award for Best Documentary in 2014. Dr. McCormick was a Science & Technology Policy Fellow of the American Association for the Advancement of Science working in the Global Change Research Program at the Environmental Protection Agency from 2009 to 2011, during which time she advised Congress, the State Department, and the White House on climate change issues. She is currently Associate Professor in the Environmental and Occupational Health Department in the School of Public Health and Health Services at George Washington University, and Senior Fellow at the Wharton Risk Management and Decision Processes Center at the University of Pennsylvania. She completed her Ph.D. in Sociology at Brown University in 2005.

Christopher J. Portier

Member

Dr. Christopher J. Portier is an expert in the design, analysis, and interpretation of environmental health data. His research efforts and interests include such diverse topics as molecular biology, risk assessment, biostatistics, bioinformatics, epidemiology, carcinogenesis, development, genetically modified foods, genomics, climate change, EMF, and health economics. Dr. Portier has contributed to the development of risk assessment guidelines for national and international governments and agencies and has directed or contributed significantly to numerous scientific reviews and risk assessments, most notably those for dioxins, aflatoxins, electromagnetic fields, diesel particle emissions and climate change. Dr. Portier has served on US National Academy of Sciences committees, has served on USEPA's Science Advisory Board and USEPA's Science Advisory Panel, has served as an advisor to the Finnish Academy of Sciences, has been a member of numerous WHO/IARC scientific committees, and as a reviewer for grants in the United States, the European Union, and many other sponsoring organizations. He has received numerous awards including the Spiegelman Award from the American Public Health Association and the Outstanding Practitioner of the Year Award from the International Society for Risk Analysis. He is an elected Fellow of the International Statistics Institute, the World Innovation Foundation, and the American Statistical Association. Until 2013, Dr. Portier was the Director of the National Center for Environmental Health at the Centers for Disease Control and Prevention in Atlanta and the Director of the Agency for Toxic Substances and Disease Registry. Prior to CDC, Dr. Portier was with the National Institute of Environmental Health Sciences where he served as the NIEHS Associate Director, Director of the Environmental Toxicology Program, and Associate Director of the National Toxicology Program, and Senior Scientific Advisor to the Director. During his 32 years at NIEHS, Dr. Portier maintained his own research laboratory focused on the impact of the environment on human health. Dr. Portier received a B.Sc. degree (1977) in mathematics and M.S. (1979) and Ph.D. (1981) degrees in biostatistics.

Arthur L. Reingold

Member

Dr. Arthur Reingold is Professor and Head of the Division of Epidemiology at the School of Public Health at the University of California, Berkeley, and holds concurrent faculty positions at UCSF. Board-certified in internal medicine, Dr. Reingold has devoted the past 30+ years to the study and the prevention and control of various infectious diseases in the US and in countries in Africa, Asia, and Latin America, including epidemic meningitis in West Africa and Nepal; pneumonia in Indonesia; influenza, Lyme Disease, and other infectious diseases in the US; and numerous vaccine preventable diseases in multiple settings. He has served as a member and Vice Chair of WHO's Strategic Advisory Group of Experts (SAGE) on immunizations, the Advisory Committee on Immunizations Practices (ACIP) of the US Department of Health and Human Services, and the External Advisory Committee of NIH's Fogarty International Center, among many other advisory committees, as well as on numerous IOM committees, including a committee examining the US Quarantine system and committees on vaccines and vaccine preventable diseases. He has published almost 300 original research papers on a wide variety of infectious disease topics and has numerous research and training grants from NIH and CDC, including a cooperative agreement from CDC for the California Emerging Infections Program, which he has directed or co-directed since its inception in 1994. He was elected to membership in the IOM in 2003, as well as to Fellowship in the Infectious Diseases Society of America, the AAAS, and various other honorary and scientific societies, as well as having served as President of the Society for Epidemiologic Research and of the American Epidemiological Society. He received his M.D. from the University of Chicago.

Armistead G. Russell

Member

Dr. Armistead (Ted) G. Russell is the Howard T. Tellepsen Chair and Regents' Professor at the Georgia Institute of Technology. Professor Russell arrived at Georgia Tech in 1996, from Carnegie Mellon University, and has expertise in air quality engineering, with particular emphasis in air quality modeling, air quality monitoring and analysis. He has been a member of a number of the National Academies Committees, including chairing the Committee to Review EPA's Mobile Model and the Committee on Carbon Monoxide Episodes in Meteorological and Topographical Problem Areas, and serving on the committee on Tropospheric Ozone Formation and Measurement, the committee on ozone forming potential of reformulated fuels and the committee on Risk Assessment of Hazardous Air Pollutants. Dr. Russell was a member of the EPA's Clean Air Scientific Advisory Committee and the subcommittee on Air Quality Modelling Subcommittee of the Advisory Council on Clean Air Compliance Analysis. He was a member of the EPA FACA Subcommittee on Ozone, Particulate Matter and Regional Haze, the North American Research Strategy for Tropospheric Ozone and California's Reactivity Science Advisory Committee. Dr. Russell earned his MS and PhD degrees in Mechanical Engineering at the California Institute of Technology in 1980 and 1985, conducting his research at Caltech's Environmental Quality Laboratory. His BS is from Washington State University (1979).

M. Christina Tirado

Member

Dr. M. Cristina Tirado has been working on climate and environmental change, sustainable development, food and health issues with WHO, FAO, governmental and nongovernmental organizations and universities worldwide for 20 years. Currently she serves as adviser for the Pan American Health Organization and is adjunct professor at the School of Public Health of the University of California at Los Angeles. Her policy research focuses on the co-benefits to health of climate change of adaptation and mitigation in the food & agriculture systems (sustainable production, consumption and waste reduction), and the co-benefits of green urban development. Cristina is moderator of the U.N. Standing Committee on Nutrition's Working Group on Climate Change and Nutrition, contributing author of the Intergovernmental Panel on Climate Change's (IPCC) last assessment report and she is a health advocate at the UN Framework Convention on Climate Change Conferences of the Parties. As director of the Center for Public Health and Climate Change at PHI she has been mainstreaming Climate Change and Health at the UN Conference on Non Communicable Diseases at the UN General Assembly, she has contributed to UNFCCC work and she has been a partnerships driver at the UN Conference Rio+20. Cristina has co-authored numerous research and policy publications and books. She is a DVM and has M.S. and Ph.D. degrees in environmental sciences from Cornell University.

Benjamin Zaitchik

Member

Dr. Benjamin Zaitchik is an assistant professor within the Earth and Planetary Sciences Department at Johns Hopkins University. His research is directed at understanding, managing, and building resilience to climatic and hydrologic variability and change. He looks for new approaches to controlling human influences on climate and water resources at local, regional and global scales, and explores improved forecast systems and methods of risk assessment. His work has received funding from NASA, the National Institutes of Health and the National Science Foundation, and appeared in the Journal of Climate and Water Resources Research, among others. Dr. Zaitchik is interested in helping provide new insights in such crucial areas as transboundary water management, climate-informed disease early warning systems, and adaptation strategies in subsistence agricultural communities. He received his Ph.D. in climate science from Yale University.