THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC

Climate Change and Human Health Symposium

Milken Institute School of Public Health

Friday April 24, 2015

9:00AM-12:00PM

Speaker Biographies

John Balbus, M.D., M.P.H., serves as a senior advisor to the Director on public health issues and as NIEHS liaison to its external constituencies, stakeholders, and advocacy groups. He also leads NIEHS efforts on climate change and human health. In this capacity he serves as HHS principal to the U.S. Global Change Research Program, for which he also co-chairs the Interagency Cross-Cutting Group on Climate Change and Human Health. Dr. Balbus' background combines training and experience in clinical medicine with expertise in epidemiology, toxicology, and risk sciences. He has authored studies and lectures on global climate change and health, transportation-related air pollution, the toxic effects of chemicals, and regulatory approaches to protecting susceptible subpopulations.

Before joining the NIEHS, Dr. Balbus was Chief Health Scientist for the non-governmental organization Environmental Defense Fund. He served on the faculty of The George Washington University, where he was founding Director of the Center for Risk Science and Public Health, founding co-Director of the Mid-Atlantic Center for Children's Health and the Environment, and Acting Chairman of the Department of Environmental and Occupational Health. He maintains an adjunct faculty appointment at the Johns Hopkins Bloomberg School of Public Health. Dr. Balbus received his A.B. degree in Biochemistry from Harvard University, his M.D. from the University of Pennsylvania, and his M.P.H. from the Johns Hopkins School of Public Health. In addition to current membership on the Institute of Medicine Roundtable on Environmental Health Sciences, Research and Medicine, Dr. Balbus has also served as a member of the EPA Science Advisory Board, the National Research Council's Board on Environmental Studies and Toxicology and the EPA Children's Health Protection Advisory Committee. He is a member of the American College of Physicians, the American Public Health Association, and the Society of Toxicology.

Charles Benjamin Beard, PhD, is Associate Director for Climate Change and Chief of the Bacterial Diseases Branch of CDC's Division of Vector-Borne Diseases in Fort Collins, Colorado, where he coordinates CDC's programs on Lyme disease, plague, and tularemia. DVBD is part of the National Center for Emerging and Zoonotic Infectious Diseases, which is a newly formed center in CDC (Centers for Disease Control and Prevention). Dr. Beard has a BS degree (1980, Auburn University), an MS degree (1983, Louisiana State University School of Medicine, and a PhD degree (1987, University of Florida). He served as a post-doctoral fellow and as an associate research scientist at Yale University School of Medicine from 1987 to 1991. In 1991, he joined the CDC's Division of Parasitic Diseases where he conducted applied research on the prevention and control

of malaria and Chagas disease, and studied the epidemiology of Pneumocystis pneumonia in persons with AIDS. From 1999 to 2003 he served as Chief of the Vector Genetics Section in the Entomology Branch of the Division of Parasitic Diseases before joining CDC's Division of Vector-borne Infectious Diseases in Fort Collins in 2003. From 2008 to 2009, he served additionally as the Associate Director for Vector-Borne Diseases in the National Center for Zoonotic, Vector-Borne, and Enteric Diseases at CDC. During his tenure at CDC, Dr. Beard has worked mostly in tropical medicine and international health. His scientific interests include public health and the biology, ecology, and genetics of insect-borne diseases and vectors. More recently he has been involved coordinating CDC's work in understanding and mitigating the potential impact of climate variability and change on infectious disease ecology. He has published over 100 scientific papers, books, and book chapters collectively, and has served on a variety of committees and panels both inside and outside of CDC. In 2002, he was awarded the CDC & ATSDR Honor Award in International Health. He is currently an Associate Editor for Emerging Infectious Diseases and past president of the Society for Vector Ecology.

Jesse E. Bell, Ph.D. is a research scientist at the Cooperative Institute for Climate and Satellites – NC at NOAA's National Centers for Environmental Information. He also works as a climate science advisor for the Climate and Health Program at the Centers for Disease Control and Prevention. Dr. Bell does a variety of research on understanding the signals and impacts of climate change and climate extremes. During his doctoral work at the University of Oklahoma, Dr. Bell was awarded two NSF Fellowships that provided him opportunities to perform environmental research in China and Thailand. He also serves as an adjunct professor at Emory University, where he serves as a committee member for graduate students working on projects dealing with climate and health.

Allison Crimmins, MS, MPP, is an environmental scientist in EPA's climate change division in the Office of Air and Radiation. She is the lead coordinator of the USGCRP Climate and Health Assessment, as well as lead author and contributor to multiple chapters. In addition to her work on climate change and health, Allison also works on the EPA Climate Change Indicators in the United States report, mitigation benefits modeling, development of climate communications materials, and other projects focused on the science and impacts of climate change. Allison has a Masters of Science in Paleoceanography, where she conducted a multi-proxy paleoclimate reconstruction of Monterey Bay, and a Masters of Public Policy in International and Global Affairs from the Harvard Kennedy School. Previous to joining the EPA, she worked as a communications manager for MIT's Joint Program on the Science and Policy of Global Change.

Daniel Dodgen, Ph.D., is the Director for At-Risk Individuals, Behavioral Health, and Community Resilience in the Office of the Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services (HHS). His office focuses on ensuring that at-risk individuals (including children), behavioral health, and community resilience are integrated into federal public health and medical preparedness and response activities. Before joining HHS, Dr. Dodgen served as Special Assistant to the CEO and Senior Legislative and Federal Affairs Officer at the American

Psychological Association (APA). Before joining APA, Dr. Dodgen was a Fellow with the U.S. House of Representatives Committee on Education. He has served on multiple federal advisory groups and authored numerous articles and book chapters on psychology and public policy. He received the APA 2005 Early Career Award for Contribution to Psychology in the Public Interest and was elected a Fellow of APA in 2012. He is a licensed clinical psychologist in the District of Columbia.

Neal Fann, MPP**,** after graduating from the Duke University Sanford School of Public Policy in 2003, Neal Fann began serving in the Office of Air and Radiation of the U.S. Environmental Protection Agency as a Presidential Management Fellow. Neal also manages the environmental Benefits Mapping and Analysis Program--Community Edition (BenMAP-CE), the open source PC-based program that EPA uses to estimate the health and economic benefits of air quality rules. Using this software, he characterizes the human health impacts, and monetized benefits, of changes in common air pollutants including ground level ozone and fine particles. Neal's research interests include estimating the health burden of poor air quality and characterizing the health impacts of air pollution among susceptible populations. He recently authored articles examining the public health burden of recent levels of fine particles and ground-level ozone in the U.S., exploring how classes of emission sources contribute to this burden.

Lynn R. Goldman, MD, MS, MPH**,** a pediatrician and an epidemiologist, is the Michael and Lori Milken Dean of George Washington University Milken Institute School of Public Health. Formerly she was a Professor at the Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences.

In 1993, Dr. Goldman was appointed by the President and confirmed by the Senate to serve as Assistant Administrator (AA) for the US Environmental Protection Agency, where she directed the Office of Chemical Safety and Pollution Prevention (OCSPP) from 1993 through 1998. As AA for OCSPP she was responsible for the nation's pesticide, toxic substances and pollution prevention laws. Under her watch, EPA overhauled the nation's pesticides laws to assure that children would be protected by pesticide regulations. At EPA she was successful in promoting children's health issues and furthering the international agenda for global chemical safety.

Prior to joining the EPA, from 1985 until 1993, Dr. Goldman served in several positions at the California Department of Public Health, most recently as chief of the Division of Environmental and Occupational Disease Control. She has a BS in Conservation of Natural Resources, an MS in Health and Medical Sciences from the University of California, Berkeley, an MPH from the Johns Hopkins Bloomberg School of Public Health, and an MD from the University of California, San Francisco. She completed pediatric training at Children's Hospital, Oakland, California and is board-certified in pediatrics.

She was elected a member of the Institute of Medicine in 2007. She has received several awards including the Woodrow Wilson Award for Distinguished Government Service from the Johns Hopkins University Alumni Association (1999), Alumna of the Year from

the UC Berkeley School of Public Health (2002), National Library of Medicine, Changing the Face of Women in Medicine (2003), election to the Delta Omega Honor Society (2007), and the Heinz Award for Global Change, (2010).

Dr. Goldman currently is member of the Institute of Medicine Council, vice chairman of the Institute of Medicine Roundtable on Environmental Health Sciences, a member of the NAS Board on Environmental Sciences and Toxicology and a member of the NAS Report Review Committee. She serves as a member of the U.S. Food and Drug Administration Science Board and the Advisory Council to the Director of the U.S. Centers for Disease Control and Prevention. She is a member of the Board of Trustees of the Environmental Defense Fund.

Melissa J. Perry, ScD, MHS**,** is a leading public health researcher whose wide-ranging epidemiologic and preventive intervention studies over the past two decades have investigated factors in occupational injury and disease and the influence of chemical and physical agents on reproduction. Dr. Perry's research has drawn international attention to the health effects of pesticide exposure. Her work has shed light on how people are exposed to pesticides, as well as the mutagenic and hormonal effects of these exposures on farming communities, agricultural workers, and the general public. After identifying risks to workers at meat-packing plants, construction sites, and agricultural operations,

Dr. Perry has developed engineering and behavioral interventions to address these risks. Dr. Perry is the chair of the Department of Environmental and Occupational Health at GW, where about half the students end up doing research on climate change or working on issues related to climate change. Dr. Perry believes that climate change is one of the most pressing issues currently facing humanity, and she has encouraged members of her department to address topics related to climate change in their research since arriving at George Washington University in 2010.

Before coming to GW, Dr. Perry spent 13 years on the Harvard School of Public Health's Department of Environmental Health faculty. She earned her Master of Health Science and Doctor of Science from the Johns Hopkins School of Hygiene and Public Health.

Dr. Perry is currently the President of the American College of Epidemiology and a member of the Board of Scientific Counselors, National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) of the Centers for Disease Control and Prevention (CDC). She serves as a standing member of the National Institute for Occupational Safety and Health research grant review panel, and she is an associate editor of the journal Reproductive Toxicology. Dr. Perry recently was elected as a member of the Collegium Ramazzini in recognition of her contributions to advancing occupational and environmental health and her personal and professional integrity. She is currently collaborating on occupational and environmental health projects in South Africa, Tanzania, China, New Zealand, and Albania.

Marcus C Sarofim, PhD, is an environmental scientist in EPA's climate change division in the Office of Air and Radiation. He is a lead author on the Temperature-Related Death

and Illness chapter of the USGCRP Climate and Health Assessment. In addition to his work on heat mortality, Marcus works on greenhouse gas metrics, short-lived climate forcers, the impacts of methane-derived ozone on health, and other projects focused on the science and impacts of climate change. Marcus received his doctorate from MIT, where he worked with the MIT Joint Program on the Science and Policy of Global Change on understanding the cobenefits and tradeoffs involved in simultaneous mitigation of multiple climatically important substances. He also earned a Masters degree in chemistry from Caltech, and an undergraduate degree in chemistry from MIT.

Juli Trtanj, MS, is the One Health and Integrated Climate and Weather Extremes Research Lead in NOAA's Climate Program Office. She is leading the integration of extreme weather and climate science in the Climate Program Office—initially focusing on the National Integrated Heat Health Information System. She is the One Health Lead responsible for developing and implementing the National Oceanic and Atmospheric Administration (NOAA) Health Strategy across NOAA and with other federal, state, local and international Agencies, academic and private sector partners. She is the NOAA Lead for the Memorandum of Understanding between NOAA and the Centers for Disease Control (CDC), and coordinates a burgeoning NOAA One Health Working Group and related Ecological Forecasting efforts on pathogens. Ms. Trtanj co-chairs the US Global Change Research Program, Climate Change and Human Health Group (CCHHG); the United States/European Union Task Force on Biotechnology, Marine Genomics Working Group; and the CDC- supported Environment and Public Health Tracking Network, Climate Change Content Working Group. She is also the Water-Related Illness Component Lead for the Group on Earth Observations (GEO) and is directly involved with European, South African, Asian partners and the World Health Organization (WHO) in the development of the Early Warning Systems, specifically for cholera and other vibrios. Ms. Trtanj is an active collaborator in the NSF-funded Research Collaboration Network on Marine Emerging Diseases and is on the American eteorological Society Board on Health and the Environment. From 1996 to present she has developed and directed multidisciplinary and multi-partner programs on Oceans and Human Health, and Climate Variability and Human Health. She has contributed to, reviewed, or edited sections of several IPCC and US National Climate Assessment reports and authored several book chapters and journal articles. Ms. Trtanj earned her Master in Environmental Science from Yale School of Forestry and Environmental Studies in 1994, and her Bachelors in 1986 from the University of California Santa Barbara.

Lewis Ziska, PhD is a Plant Physiologist with the USDA's Agricultural Research Service in Beltsville, Maryland. After graduating from the University of California, Davis, he began his career as a Smithsonian fellow, and then took up residence as the Project Leader for global climate change at the International Rice Research Institute in the Philippines before joining USDA. Since joining USDA, Dr. Ziska has published over 100 peer-reviewed research articles related to climate change and rising carbon dioxide that address: (1) Agriculture and Food Security; (2) Weeds and weed management; (3) Invasive species; (4) Plant biology and public health. Dr. Ziska is a recent contributor to the 2014 International Panel on Climate Change report (Food Security Chapter) and the 2014 National Climate Assessment (Public Health Chapter).