

## Climate Change and Human Health: Assessing the Climate Information Gap Participants and Biographies

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<p><b>David R. Easterling, PhD</b> Chief, Scientific Services Division NOAA’s National Climatic Data Center 151 Patton Ave. Asheville, NC 28801 Phone: (828) 271-4675 Email: <a href="mailto:David.Easterling@noaa.gov">David.Easterling@noaa.gov</a></p>	<p>Dr. Easterling is currently Chief of the Scientific Services Division at NOAA’s National Climatic Data Center in Asheville, NC. He received his Ph.D. from the University of North Carolina at Chapel Hill in 1987 and served as an Assistant Professor in the Atmospheric Sciences Program, Department of Geography, Indiana University-Bloomington from 1987 to 1990. In 1990 he moved to the National Climatic Data Center as a research scientist, was appointed Principal Scientist in 1999, and Chief of Scientific Services in 2002. He has authored or co-authored more than eighty research articles on climate change issues in journals such as <i>Science</i>, <i>Nature</i> and the <i>Journal of Climate</i>. Dr. Easterling was a Lead Author for the Nobel Prize winning Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, a Convening Lead Author for the U.S. Climate Change Science Program (CCSP) Synthesis and Assessment Product (SAP) 3.3 on Climate Extremes and was a Contributing Author to the IPCC Second and Third Assessment Reports. Dr. Easterling is a Fellow of the American Meteorological Society and his research interests include the detection of climate change in the observed record, particularly changes in extreme climate events and the assessment of climate model simulations for changes in extreme climate events.</p>
<p><b>Kristie L. Ebi, PhD, MPH</b> Executive Director Technical Support Unit, WG II IPCC c/o Carnegie Institution 260 Panama Street Stanford, CA 94305 Phone: (650) 521-3310 Email: <a href="mailto:krisebi@ipcc-wg2.gov">krisebi@ipcc-wg2.gov</a></p>	<p>Keywords: climate change, health impacts, assessing vulnerability and adaptation, early warning systems, adaptation</p> <p>Kristie L. Ebi is Executive Director of the Technical Support Unit for Working Group II (Impacts, Adaptation, and Vulnerability) of the Intergovernmental Panel on Climate Change (IPCC). Prior to this position, she was an independent consultant. She has been conducting research on the impacts of and adaptation to climate change for more than a dozen years, including on extreme events, thermal stress, foodborne safety and security, and vectorborne diseases. She has worked with the World Health Organization, the United Nations Development Programme, USAID, and others on implementing adaptation measures in low-income countries. She facilitated adaptation assessments for the health sector for the states of Maryland and Alaska. She was a lead author on the “Human Health” chapter of the IPCC Fourth Assessment Report, and the “Human Health” chapter for the U.S. Synthesis and Assessment Product “Analyses of the Effects of Global Change on Human Health and Welfare and Human Systems.” She has edited four books on aspects of climate change and has more than 80 publications. Dr. Ebi’s scientific training includes an M.S. in toxicology and a Ph.D. and a Masters of Public Health in epidemiology, and two years of postgraduate research at the London School of Hygiene and Tropical Medicine.</p>
<p><b>Paul Epstein, MD, MPH</b> Instructor Harvard Medical School 401 Park Dr., 2<sup>nd</sup> Floor East Boston, MA 02215 Phone: (617) 384-8530 Email: <a href="mailto:paul_epstein@hms.harvard.edu">paul_epstein@hms.harvard.edu</a></p>	<p>Keywords: health and climate change, health early warning systems, climate forecasting</p> <p>Paul R. Epstein, M.D., M.P.H. is Associate Director of the Center for Health and the Global Environment at Harvard Medical School (<a href="http://chge.med.harvard.edu">http://chge.med.harvard.edu</a>) and is a medical doctor trained in tropical public health. Paul has worked in medical, teaching and research capacities in Africa, Asia and Latin America and in 1993, coordinated an eight-part series on Health and Climate Change for the British medical journal, <i>Lancet</i>. He has worked with the Intergovernmental Panel on Climate Change (IPCC), the National Academy of Sciences (NAS), the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA) to assess the health impacts of climate change and develop health applications of climate forecasting and remote sensing.</p>

	<p>Dr. Epstein also served as a reviewer for the Health chapter of the Millennium Ecosystem Assessment and coordinated Climate Change Futures: Health, Ecological and Economic Dimensions, an international project with Swiss Re and the United Nations Development Programme assessing the new risks and opportunities presented by a changing climate. He has also prepared the report Healthy Solutions for the Low Carbon Economy: Guidelines for Investors, Insurers and Policy Makers that examines the "stabilization wedges" through the lens of health and ecological safety.</p> <p>Paul has coordinated two Cat Modeling Forums with A.I.G., Lloyd's of London and other insurers and insurance brokers, facilitating integration of dynamic and statistical models for better risk assessment and reduction. Paul received recognition for his contributions to the work of the Intergovernmental Panel on Climate Change, awarded the Nobel Peace Prize in 2007.</p>
<p><b>Christopher M. Fuhrmann</b>  Research Associate and Climatologist  NOAA's Southeast Regional Climate Center  PhD Candidate in Geography  205 Saunders Hall  UNC Campus Box 3220  Chapel Hill, NC 27599  Phone: (919) 612-2952  Email: <a href="mailto:fuhrmann@unc.edu">fuhrmann@unc.edu</a></p>	<p>Keywords: synoptic climatology; applied climatology; weather and society; winter weather; influenza</p> <p>Chris Fuhrmann is a physical geographer with training in environmental systems science and atmospheric science. His primary field of research is synoptic climatology where he investigates the relationships between the large-scale atmospheric environment and the ingredients associated with winter precipitation across the southeastern U.S. Chris also maintains strong interests in two other fields of study: weather and society; extreme and hazardous weather events. Current projects in these areas include the socio-economic impacts of winter storms in the southeastern U.S., the atmospheric dynamics and hazards associated with high wind events over the Great Lakes, the role of weather and climate in the seasonality of influenza virus, and the long-term trends in winter precipitation in the eastern U.S.</p> <p>Chris is a PhD candidate in the Geography Department at UNC and a Research Associate/Climatologist with the NOAA-Southeast Regional Climate Center. He holds a Bachelors degree in Geography from UNC and a Master of Science degree in Geography from the University of Georgia. He is an active member of the Association of American Geographers (southeastern division and climate specialty groups), the American Meteorological Society, the University Corporation for Atmospheric Research, the Eastern Snow Conference, and the Mount Washington Observatory.</p>
<p><b>Tamara G. Houston</b>  Physical Scientist  NOAA's National Climatic Data Center  151 Patton Ave.  Asheville, NC 28801  Phone: (828) 271-4266  Email: <a href="mailto:Tamara.Houston@noaa.gov">Tamara.Houston@noaa.gov</a></p>	<p>Tamara Houston received her Bachelor of Science Degree in Meteorology from Northern Illinois University in 1995 and began her career that year at the Midwestern Regional Climate Center in Champaign, IL. As the Service Climatologist, she answered and processed requests for climate data and information from public and private user communities. She then returned to Northern Illinois University, receiving her Master of Science Degree in Geography with an emphasis in Applied Climatology in 1999. Tamara began working as a Physical Scientist at NOAA's National Climatic Data Center in Asheville, NC in 1998. She has worked on various applied research projects and is currently working on user engagement activities with climate sensitive sectors such as agriculture, energy, insurance, and health.</p>
<p><b>Patrick L. Kinney, ScD</b>  Associate Professor  Department of Environmental Health Sciences  Mailman School of Public Health  Columbia University  60 Haven Ave. B1-113A  New York, NY 10032  Phone: (212) 305-3663  Email: <a href="mailto:plk3@columbia.edu">plk3@columbia.edu</a></p>	<p>Keywords: outdoor air pollution and health; urban air quality in Africa; indoor biomass smoke and childhood disease; climate and health; pollen, allergy and asthma</p> <p>Patrick Kinney is Professor of Environmental Health Sciences at the Mailman School of Public Health at Columbia University. He directs the new Climate and Health Program (CCHP) and serves on the Academic Committee of the Earth Institute at Columbia University. The CCHP fosters and coordinates multi-disciplinary research, teaching and translation on the human health dimensions of climate change, with the goal of advancing society's capacity to understand, anticipate, and prevent adverse health consequences. Prof Kinney's teaching and research address issues at the intersection of global environmental change, human health, and policy, with an emphasis on the public health impacts of climate change and air pollution. He has published extensively on the human health effects and environmental justice aspects of air pollution in urban areas. Working with climate and air quality modelers, he has examined future health impacts of alternative climate change and emissions scenarios in the U.S. Current research initiatives examine climate influences on meningitis outbreaks in Africa and on pollen and allergy in New York. He also directs ongoing research on indoor and outdoor air quality and health in Africa.</p>
<p><b>Charles E. Konrad II, PhD</b>  Associate Professor of Geography  Deputy Director and Regional Climatologist  NOAA's Southeast Regional Climate Center  205 Saunders Hall  Campus Box 3220  Chapel Hill, NC 27599  Phone: (919) 962-3873  Email: <a href="mailto:konrad@unc.edu">konrad@unc.edu</a></p>	

<p><b>Maggie M. Kovach</b>  Research Associate  NOAA's Southeast Regional Climate Center  MA Student in Geography  205 Saunders Hall  UNC Campus Box 3220  Chapel Hill, NC 27599  Phone: (828) 337-2261  Email: <a href="mailto:mkovach@email.unc.edu">mkovach@email.unc.edu</a></p>	<p>Maggie holds a Bachelor of Science from the University of North Carolina in Biology and minors in both Geography and Chemistry. She is currently a Research Associate for the Southeast Regional Climate Center and first year graduate student in Geography at UNC. This past summer she interned at the National Climate Data Center and assisted in preparations for this workshop. By compiling various journals articles from both health and climate sources, she was able to assess the information needs of both sectors and the degree of certainty of current health and climate knowledge. In her graduate studies, Maggie hopes to pursue further research within the climate and health sectors and use the outputs of this workshop to begin the process.</p>
<p><b>Sharon LeDuc, PhD</b>  Deputy Director  NOAA's National Climatic Data Center  151 Patton Ave.  Asheville, NC 28801  Phone: (828) 271-4848  Email: <a href="mailto:Sharon.Leduc@noaa.gov">Sharon.Leduc@noaa.gov</a></p>	
<p><b>George Luber, PhD</b>  Associate Director for Global Climate Change  National Center for Environmental Health  Centers for Disease Control and Prevention  4770 Buford Hwy, MS F-57  Atlanta, GA 30341  Phone: (770) 488-3429  Email: <a href="mailto:gluber@cdc.gov">gluber@cdc.gov</a></p>	
<p><b>Jeffrey T. Lutz, PhD</b>  Adjunct Professor  NOAA's Southeast Regional Climate Center  205 Saunders Hall  UNC Campus Box 3220  Chapel Hill, NC 27599  Phone: (919) 967-9335  Email: <a href="mailto:lutzjt@state.gov">lutzjt@state.gov</a></p>	<p>Keywords: health impacts, climate change, international collaboration, interagency coordination, public-private outreach</p> <p>Jeff Lutz has a PhD in applied climatology and served as a specialist in Environment, Science, Technology and Health (ESTH) Affairs in the Foreign Service. Since 2005 he has served as the State Department's POC for details on the overall USG support for international pandemic preparedness and response efforts. He is liaison to the World Bank and provides periodic updates on overall USG support for international avian and pandemic influenza (API) assistance. Based in the Research Triangle of North Carolina, Jeff Lutz also serves as liaison to the National Institute of Environmental Health Sciences (NIEHS) and participates as a member of the NIEHS-led ad hoc interagency working group on climate change and health.</p>
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<p><b>Gino Marinucci, MPH</b>  Senior Director, Environmental Health Policy  Association of State and Territorial Health  Officials  2231 Crystal Dr., Suite 450  Arlington, VA 22202  Phone: (571) 527-3158  Email: <a href="mailto:gmarinucci@astho.org">gmarinucci@astho.org</a></p>	<p>Keywords: Environmental Public Health; State Health Agency Capacity; Model climate change state health agency programs; Land use planning; Health Impact Assessment</p> <p>Senior Director, Environmental Health at the Association of State and Territorial Health Officials (ASTHO). Directs ASTHO's Environmental Health Policy and Programs. Portfolio includes cooperative agreements and grants for projects that support developing policy and building the capacity of State and Territorial Health Agencies on issues that range from climate change and the natural environment, built environment and community design, chemical exposure, food and water protection, and environmental public health infrastructure and capacity development.</p>

<p><b>Tanya Maslak, MPH</b> U.S. Global Change Research Program 1717 Pennsylvania Ave., Suite 250 Washington, D.C. 20006 Phone: (202) 419-3474 Email: <a href="mailto:tmaslak@usgcrp.gov">tmaslak@usgcrp.gov</a></p>	<p>Keywords: Public health impacts of climate change and extreme events; stakeholder engagement; decision support; risk communication</p> <p>Climate Change Program Specialist, Coordinator for the Human Contributions and Responses Inter Agency Working Group and the Global Water Cycle Inter-Agency Working Group at the U.S. Global Change Research Program. Responsible for coordination of various inter-agency working groups supported by the USGCRP. This includes the human contributions and responses working group, which focuses on the complex interactions between human societies and natural systems as they related to climate change impacts and vulnerability, mitigation and adaptation options, as well as emerging opportunities. This also includes the global water cycle working group, which focuses on the role of the water cycle in climate variability and change, and the influence climate has on aspects of the global water cycle on which society and nature both depend upon. Other areas of responsibility include climate change decision support activities, stakeholder engagement with a variety of audiences, and programmatic outreach efforts.</p>
<p><b>David Richardson, PhD, MPH</b> Associate Professor Department of Epidemiology Gillings School of Global Public Health University of North Carolina at Chapel Hill Chapel Hill, NC 27599 Phone: (919) 966-2675 Email: <a href="mailto:david_richardson@unc.edu">david_richardson@unc.edu</a></p>	<p>Keywords: emergency department data, climate, heat waves, air pollution, water pollution, analytical methods</p> <p>Dr. Richardson is Associate Professor of Epidemiology in the School of Public Health at the University of North Carolina at Chapel Hill. He is an Associate Editor of Occupational &amp; Environmental Medicine, and director of the Program in Occupational Epidemiology, North Carolina Occupational Safety and Health Education and Research Center. His research interests are in occupational and environmental causes of disease, with a particular focus on development of analytical methods for longitudinal data. He directs a program of research on environmental causes of hospitalization in North Carolina using a statewide near real-time emergency department admissions surveillance system. He has worked at the World Health Organization's International Agency for Research on Cancer in Lyon, France and at the Radiation Effects Research Foundation, in Hiroshima, Japan. He teaches upper level graduate courses in epidemiological methods and data analysis as part of the core graduate training program for the UNC Department of Epidemiology.</p>
<p><b>Peter J. Robinson, PhD</b> Professor of Geography Director, NOAA's Southeast Regional Climate Center 205 Saunders Hall UNC Campus Box 3220 Chapel Hill, NC 27599 Phone: (919) 843-4527 Email: <a href="mailto:pjr@email.unc.edu">pjr@email.unc.edu</a></p>	<p>Peter Robinson has been involved in Applied Climatology since arriving in North Carolina in 1971. He was the State Climatologist from 1976 until 1980, at which time he left the state on assignment as Assistant Director of the National Climate Program in Washington DC. There he was responsible for Federal-State Climate relationships and was in charge of the climate data and information services. During this time he laid the administrative foundations for the program which evolved into the Regional Climate Centers. At the end of the assignment he returned to the Geography Department at the University of North Carolina, teaching courses in atmospheric science and being involved in applied climatic research. He served for a period as the Chair of the Regional Climate Centers National Oversight Committee. He is a Certified Consulting Meteorologist, and served in 2008 as the Chair of the Administrative Board for the program. He is also the US Representative to the International Geographical Union Commission for Water Sustainability. He became Director of the Southeast Regional Climate Center when it was relocated to the University of North Carolina in April 2007.</p>
<p><b>Lori H. Schwacke, PhD</b> Principal Scientist Center of Excellence in Oceans and Human Health Hollings Marine Laboratory 331 Fort Johnson Rd. Charleston, SC 29412 Phone: (843) 762-8868 Email: <a href="mailto:Lori.Schwacke@noaa.gov">Lori.Schwacke@noaa.gov</a></p>	<p>Keywords: Oceans and Human Health, wildlife epidemiology, sentinel species, zoonotic diseases/pathogens</p> <p>Principal Scientist, Oceans and Human Health (OHH) Center of Excellence. Direct research at the OHH Center of Excellence at Hollings Marine Laboratory to develop tools and technologies to forecast threats and characterize long-term risks to human health related to microbial pathogens, biological toxins and chemical contaminants that are transmitted through or originate from the marine environment. Research involves a multi-agency team and focuses on genomic applications, use of sentinel species and habitats for predicting human health threats, diagnostic tools for zoonotic pathogens, microbial pathogen source tracking, and analytical methods for emerging chemical contaminants.</p>
<p><b>Daniel Strickman, PhD</b> USDA Agricultural Research Service National Program Leader Veterinary, Medical, and Urban Entomology Animal Production and Protection GWCC-BLTSLV 5601 Sunnyside Ave. Beltsville, MD 20705 Phone: (301) 504-5771 Email: <a href="mailto:Daniel.Strickman@ars.usda.gov">Daniel.Strickman@ars.usda.gov</a></p>	<p>Keywords: Invasive species; Vectorborne diseases; Zoonotic diseases; Relations with industry</p> <p>National Program leader of the USDA Agricultural Research Service's Veterinary, Medical, and Urban Entomology Program. This position involves coordination of research goals for some 50 scientists at 10 laboratories in the US and Panama. In addition, serves as Acting Director of the USDA ARS Overseas Biological Control Laboratories located in France, Argentina, Australia, and China. These labs perform exploration and evaluation of potential natural enemies of weeds and pests in more than 25 countries.</p> <p>Current post is administrative, but formerly had research and operational responsibilities in the Army and county government. Author of 90 peer reviewed publications, 7 book chapters, and two books.</p>
<p><b>James Studnicki, ScD</b> Irwin Belk Endowed Chair in Health Services Research College of Health and Human Services University of North Carolina at Charlotte Phone: (704) 687-8981 Email: <a href="mailto:jstudnic@uncc.edu">jstudnic@uncc.edu</a></p>	<p>Keywords: health services research, cybernetic systems, community health status assessment, provider volume and surgical outcomes, complex adaptive systems, disparities in healthcare use and health status outcomes.</p> <p>Dr. James Studnicki is Irwin Belk Endowed Chair in Health Services Research and Professor of Public Health Sciences at the University of North Carolina, Charlotte. Previously, he was Chairman of the department of Health Policy and Management and Director of the Center for Health Outcomes Research, University of South Florida Health Sciences Center. In addition, he was the founding Director of the program in Hospital Finance and Management at the Johns Hopkins Bloomberg School of Public Health. He holds Sc.D. and M.P.H. degrees from Johns Hopkins and a M.B.A. from the George Washington University.</p>

	<p>For two decades, Dr. Studnicki has evolved a research agenda based upon the application of large scale databases and associated technologies to health outcomes at individual, system and population levels. As part of this process, his research team has developed and deployed specialized data warehouses in Florida, California, and North Carolina. An area of particular interest is community health status assessment as characterized by multidimensional analyses utilizing staged, linked, and definition conformed databases such as vital statistics, hospital discharges, emergency room visits, disease registries, and others. The relationships of climate and environmental hazard /exposures to variation in human health , and the methodological, statistical, and data related limitations associated with ecological analyses of geographically defined populations are integral to this research.</p>
<p><b>Wassila Thiaw, PhD</b>  International Projects Lead  NOAA's Climate Prediction Center  Camp Springs, MD 20746  Phone: (301) 763-8000 (extension 7566)  Email: <a href="mailto:Wassila.Thiaw@noaa.gov">Wassila.Thiaw@noaa.gov</a></p>	
<p><b>Juli M. Trtanj, M.E.S.</b>  Program Director  NOAA Oceans and Human Health Initiative/NOS  1315 East-West Highway, SSMC3 #10353  Silver Spring, MD 20910  Phone: (301) 713-0524, ext. 197  Email: <a href="mailto:Juli.Trtanj@noaa.gov">Juli.Trtanj@noaa.gov</a></p>	<p>Key Words: oceans and human health, climate and health, el nino, contaminants, pathogens, disease surveillance, climate observations, satellites, early warning.</p> <p>Director of the Oceans and Human Health Initiative (OHHI) at the National Oceanic and Atmospheric Administration (NOAA). The main goals of the OHHI are to lead the development and delivery of health early warning systems to reduce ocean-related health risks, and to enhance the health benefits from ocean-derived food and natural products. Ms. Trtanj started and managed the Climate Variability and Health Program for NOAA to develop capacity to use climate information to reduce health risks in Africa, Asia, and Latin America. She also developed and managed a joint climate and health program with the National Science Foundation (NSF), the Environmental Protection Agency (EPA), and EPRI (formerly the Electric Power Research Institute). Research funded under these programs has informed the IPCC and the US Climate Change Science Program. She has contributed to, reviewed, and edited, health-related sections of the past three IPCC reports and two recent Climate Change Science Program reports. In addition, she has authored several papers including the US National Assessment-Potential Consequences of Climate Variability and Change, Health Section. She earned her Master's in Environmental Management from Yale School of Forestry and Environmental Studies, and her Bachelors from the University of California Santa Barbara, and has an extensive background in foreign commodities trading, portfolio management, and venture capital.</p>
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