

Executive Committee Biosketch**Edward W. Carney**

Dr. Carney is Associate Director of Predictive Toxicology at The Dow Chemical Company, where he has worked since 1992. He also leads Dow's Chemicals & Health Science Policy team and serves on the Toxicology Department leadership team. He holds an appointment on the NTP Board of Scientific Counselors, is Vice President and Program Chair of the Teratology Society, President of the Society of Toxicology Reproductive & Developmental Toxicology Specialty Section, and serves on the Board of Toxicology Forum, various ILSI-HESI project teams, and the Humane Society's Human Toxicology Project Consortium. Dr. Carney also is an adjunct professor at The University of Michigan School of Public Health and a lecturer in the University of Surrey (UK) Master's Programme in Toxicology. Dr. Carney has published approximately 75 peer-reviewed papers to date, including work on *in vitro* teratogenicity methods, developmental toxicokinetics and assessment of chemical mixtures. He holds a B.S. from Cornell University (1981) and graduate degrees in reproductive physiology from the University of Wisconsin-Madison (M.S., 1986) and Cornell University (Ph.D., 1990). Dr. Carney conducted postdoctoral research in molecular developmental biology in the laboratories of Drs. Janet Rossant and Stephen Lye at Mount Sinai Hospital Research Institute in Toronto.

Susan E. Cozzens

Dr. Cozzens is Professor of Public Policy, Director of the Technology Policy and Assessment Center, and Associate Dean for Research in the Ivan Allen College. Dr. Cozzens's research interests are in science, technology, and innovation policies in developing countries, including issues of equity, equality, and development. She is active internationally in developing methods for research assessment and science and technology indicators. Her current projects are on water and energy technologies; nanotechnology; social entrepreneurship; pro-poor technology programs; and international research collaboration. From 1998 through 2003, Dr. Cozzens served as Chair of the Georgia Tech School of Public Policy. From 1995 through 1997, Dr. Cozzens was Director of the Office of Policy Support at the National Science Foundation. The Office coordinated policy and management initiatives for the NSF Director, primarily in peer review, strategic planning, and assessment. Before joining Georgia Tech, Dr. Cozzens spent eleven years on the faculty of Rensselaer Polytechnic Institute. Dr. Cozzens has served as a consultant to the Committee on Science, Engineering, and Public Policy of the National Research Council, Office of Science and Technology Policy, National Science Foundation, Institute of Medicine, Office of Technology Assessment, General Accounting Office, National Cancer Institute, National Institute on Aging, the National Institutes of Health, and the National Institute on Occupational Safety and Health. She has served on advisory committees for the Institute of Medicine, National Academy of Sciences, the American Association for the Advancement of Science, the National Academy of Sciences, and the Office of Technology Assessment. Dr. Cozzens has a distinguished record of service, funding, and publication in the fields of science policy and science and technology studies. Her Ph.D. is in sociology from Columbia University (1985) and her bachelor's degree from Michigan State University (1972, *summa cum laude*). She is a recipient of Rensselaer's Early Career Award, a member of Phi Beta Kappa and Phi Kappa Phi, and a Fellow of the American Association for the Advancement of Science.

Kenneth L. Demerjian

Dr. Demerjian is the Ray Falconer Endowed Chair and Director of the Atmospheric Sciences Research Center and Professor in the Department of Atmospheric and Environmental Sciences, University at Albany, State University of New York. He also holds appointments in the Department of Environmental Health and Toxicology in the School of Public Health at SUNY and is a Visiting Scientist at Harvard University. He has a B.A. degree in Chemistry from Northeastern University and M.S. and Ph.D. degrees in Physical Chemistry from the Ohio State University. Dr. Demerjian has served on and chaired professional committees and advisory panels including state and federal legislative advisory boards, National Academy of Science Committees, editorial boards and national and international research programs. He co-chaired the NARSTO Ozone Assessment and the NARSTO Assessment on Multi-pollutant

Air Quality Management and Accountability and is an associate editor for Atmospheric Environment. He currently serves on the U.S. EPA Clean Air Science Advisory Committee's (CASAC) Air Monitoring and Methods Subcommittee (AMMS). He has published over one hundred journal articles and book chapters in the areas of atmospheric chemistry, air quality measurement and atmospheric modeling and process science. He has maintained active research programs in the study of polluted and clean atmospheres for over three decades.

Lisa Dilling

Dr. Dilling is Assistant Professor of Environmental Studies, a Fellow of the Cooperative Institute for Research in Environmental Sciences (CIRES) and a member of the Center for Science and Technology Policy Research at the University of Colorado, Boulder. She studies decision making, the use of information and science policies related to climate change, adaptation, and carbon management. Her current projects include studying decision making involving drought in urban water systems and evaluating public lands management in the context of climate change. Her career has spanned both research and practice arenas of the science-policy interface, including program leadership for NOAA and the U.S. Global Change Research Program. She has authored numerous articles and is co-editor of the book, "Creating a Climate for Change: Communicating climate change and facilitating social change" from Cambridge University Press. She received her PhD in Biological Sciences from the University of California, Santa Barbara.

Henry Falk

Dr. Falk was most recently the Acting Director for the National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR). He retired from CDC on 12/31/10. In 1999, Dr. Falk was appointed as ATSDR Assistant Administrator, and in 2003, he was appointed Director for both the National Center for Environmental Health, CDC and the Agency for Toxic Substances and Disease Registry when they were consolidated. From 2004 to January 2010, he served as Director of the Coordinating Center for Environmental Health and Injury Prevention at CDC. Before that time, Dr. Falk was director of the Division of Environmental Hazards and Health Effects at CDC for 14 years. Dr. Falk earned his medical degree from the Albert Einstein College of Medicine in 1968. He received a master's degree from the Harvard School of Public Health in 1976, and he is board certified in pediatrics and in public health and general preventive medicine. Dr. Falk arrived at the CDC in 1972 and is a 30-year veteran of the U.S. Public Health Service Commissioned Corps. This service culminated with his being named Rear Admiral and Assistant U.S. Surgeon General. Highlights of Dr. Falk's work include contributions to the federal responses to Three Mile Island, Mount St. Helens, Hurricanes Hugo and Andrew, the September 11th attacks, and Hurricane Katrina. In the 1980s, he was instrumental in starting the injury prevention programs at CDC. He has authored or coauthored more than 140 publications and has received numerous awards, including the Vernon Houk Award for Leadership in Preventing Childhood Lead Poisoning, the American Public Health Association's Homer C. Calver Award in environmental health, CDC's William C. Watson, Jr. Medal of Excellence, and the Distinguished Service Award from the U.S. Public Health Service. Dr. Falk currently serves as a consultant to the Deputy Director, ONDIEH, CDC for global health issues related to non-communicable diseases, injuries and environmental health; he is also Adjunct Professor of Environmental Health at the Rollins School of Public Health, Emory University.

Charles N. Haas

Dr. Haas is the L.D. Betz Professor of Environmental Engineering and head of the Department of Civil, Architectural and Environmental Engineering, at Drexel University, where he has been since 1991. He directs the Drexel Engineering Cities Initiative. He also has an adjunct appointment in the Department of Emergency Medicine of the Drexel University College of Medicine. He received his BS (Biology) and MS (Environmental Engineering) from the Illinois Institute of Technology and his PhD in Environmental Engineering from the University of Illinois at Urbana-Champaign. He has served on the faculties of Rensselaer Polytechnic Institute and the Illinois Institute of Technology prior to joining Drexel. He co-directs the USEPA/DHS University Cooperative Center of Excellence – Center for Advancing Microbial Risk Assessment (CAMRA). He is a fellow of the American Academy for the Advancement of Science, the Society for Risk Analysis, the American Society of Civil Engineers and the American Academy of Microbiology. He is a Board Certified Environmental Engineering Member by eminence of the American Academy of Environmental Engineers. For over 30 years, Professor Haas has specialized in the assessment of risk from and control of human exposure to pathogenic microorganisms, and in particular the treatment of water and wastewater to minimize microbial risk to human health. Professor Haas has served on numerous panels of the National Research Council. He is a past member of the Water Science and Technology Board of the National Academies.

Earthea A. Nance

Dr. Nance is an assistant professor of environmental planning and hazard mitigation at the University of New Orleans. Her expertise is in the social and environmental dimensions of engineering projects, and in environmental management in complex settings, including post-disaster areas, high-hazard regions, vulnerable communities, and developing countries. She is currently involved in funded studies on the social impacts of the BP oil spill, the impact of disasters on social and ecological diversity, policy adaptation to future hurricane risk under climate change, executive education in resilience and risk management, community-based environmental monitoring in Gulf Coast communities, and participatory water and sanitation systems in developing countries. In addition to her academic career, Dr. Nance has over 15 years of environmental engineering practice in the areas of hazard mitigation, floodplain management, sustainable urban development, water and wastewater treatment, water resources, hazardous and nuclear waste, alternative energy, environmental remediation, and international water and sanitation development. Dr. Nance assisted the City of New Orleans after Hurricane Katrina by establishing hazard mitigation and alternative energy divisions in city government, and by developing a sustainability plan for the city. She has held engineering positions at Lawrence Livermore National Laboratory and at several environmental engineering firms in California, and she currently serves as a consultant to local environmental groups. Dr. Nance holds an interdisciplinary Ph.D. degree from Stanford University, emphasizing environmental planning and management, anthropology, and Latin American Studies. She graduated from the University of California at Davis with traditional B.S. and M.S. degrees in civil and environmental engineering. Dr. Nance is a board-licensed professional engineer and a certified flood plain manager. She has held previous faculty positions in the Department of Urban Studies and Planning at Massachusetts Institute of Technology, and in the Urban Affairs and Planning Program at Virginia Tech, and she serves on the Environmental Engineering Committee of the EPA Science Advisory Board.

Kenneth Olden

Dr. Olden is Founding Dean of the School of Public Health at the City University of New York. From 1991-2005, Dr. Olden was director of the National Institute of Environmental Health Sciences (NIEHS) and the National Toxicology Program (NTP) in the U.S. Department of Health and Human Services. In 2005, he returned full time to his research position as chief of The Metastasis Group in the Laboratory of Molecular Carcinogenesis at the NIEHS, which he also held while director. He held the position of Yerby visiting professor at the Harvard School of Public Health for the academic year 2006-2007. He received his PhD in cell biology/biochemistry from Temple University. He is the recipient of several honorary degrees, namely, Sc.D. degrees from Metropolitan University, San Juan, Puerto Rico; the University of Medicine and Dentistry of New Jersey; North Carolina State University, the University of Rochester; and from Tulane University. He also holds an honorary LHD from the College of Charleston. After completing his PhD degree, he was a research staff fellow and instructor of physiology at Harvard University (1970-1974); a senior staff fellow and then a research biologist at the laboratory of Molecular Biology in the Division of Cancer Biology and Diagnosis at the National Cancer Institute, NIH (1974-1979); associate director for research in the Howard University Cancer Center and associate professor of oncology at the Howard University Cancer School (1979-1982); professor of oncology and deputy director at the Howard University Cancer Center (1982-1985); and director (1985-1991), professor, and chair of the Department of Oncology (1985-1991). Dr. Olden's honors and awards include the Toxicology Forum's Distinguished Fellow Award, the Presidential Distinguished Executive Rank Award; and the Presidential Meritorious Executive Rank Award for sustained extraordinary accomplishments; the HHS Secretary's Distinguished Service Award; the American College of Toxicology's First Distinguished Service Award, the National Minority Health Leadership Award (2005); and invitations to participate in the International Conference of Disaster Prevention and Mitigation sponsored by the Harvard School of Public Health (2006) and the Think Tank on 21st Century Public Health Challenges co-sponsored by the Harvard Schools of Business and Public Health (2009). He has received the Calver Award (2002), the Sedgwick Medal (2004), and the Julius B. Richmond Award (2005). He was elected to membership in the Institute of Medicine at the National Academy of Sciences in 1994 and appointed member of the Visiting Committee, Board of Overseers, Of Harvard College (2007-2010).

Diane E. Pataki

Dr. Pataki is an ecologist who studies the role of plants and ecosystems in the climate system. She holds a dual appointment in the Dept. of Earth System Science and the Dept. of Ecology and Evolutionary Biology at the University of California, Irvine, and is the Director of the UC Irvine Center for Environmental Biology. Her research focuses on the influence of vegetation on hydrology, water resources, greenhouse gases, and climate with measurements of plant physiology, soil processes, and atmospheric composition. Her recent work focuses on the role of urban plants and landscapes in climate change mitigation and pollution remediation in cities. There is increasing interest in implementing “greening” programs in cities, but the environmental costs and benefits of these programs are highly uncertain. She has studied tree planting programs, greenhouse gas emissions, and climate change mitigation options in Salt Lake City, Utah and the Los Angeles metropolitan area. She received a B.A. in environmental science from Barnard College, an M.S. and Ph.D. in ecology from Duke University, and post-doctoral training at the Desert Research Institute in Nevada. From 1999-2003 she served as a Scientific Officer for the Global Change and Terrestrial Ecosystems (GCTE) core project of the International Geosphere-Biosphere Programme (IGBP) with an appointment at the University of Utah. In 2008 she was the recipient of the American Geophysical Union Macelwane Medal for geophysical sciences. She has been on the faculty of UC Irvine since 2004.

Martin A. Philbert

Dr. Philbert received his Ph.D. in 1988 in neurochemistry and experimental neuropathology from the Royal Postgraduate Medical School of London University in England. There he received a Medical Research Council Scholarship in experimental neuropathology. In the spring of 1988, Dr. Philbert was recruited as a postdoctoral fellow in neurotoxicology at Rutgers University. While at Rutgers, Dr. Philbert investigated mechanisms by which chemicals that gain access to the central nervous system produce specific neurotoxic effects. In 1995 he joined the Toxicology Faculty at the University of Michigan as an assistant professor. Dr. Philbert is a Professor of Toxicology, Executive Director of the Center for Risk Science and Communication, and Senior Associate Dean for Research at the University of Michigan School of Public Health. He has provided service on a variety of committees at the University including the President’s Commission on Undergraduate Education, University Taskforce on Multidisciplinary Teaching, and the University Committee on the Use and Care of Animals. Currently, Dr. Philbert provides consultation to the National Cancer Institute, National Institute of Environmental Health Sciences, the National Toxicology Program, and is a scientific advisor to the International Life Sciences Institute in Washington, D.C. He teaches courses in general pathology, toxicologic pathology, and mechanisms of neurotoxicity. Dr. Philbert’s research interests include the development of nanotechnology for intracellular measurement of biochemicals and ions, and for the early detection and treatment of brain tumors. He is also actively engaged in the investigation of mechanisms of chemically-induced energy deprivation syndromes in the central nervous system. He has published more than 100 scholarly manuscripts, book chapters and abstracts, and is the recipient of the 2001 Society of Toxicology Achievement Award. Dr. Philbert holds or has held grant awards from the National Cancer Institute, National Institute of Environmental Health Sciences, the DoD-Defense Advanced Research Projects Administration (DARPA), the Environmental Protection Agency, and the W.M. Keck Foundation.

Dennis J. Paustenbach

Dr. Paustenbach is a board-certified toxicologist, industrial hygienist and chemical engineer with nearly 35 years of experience in risk assessment, environmental engineering, ecotoxicology, and occupational health. He is currently the President of ChemRisk, Inc., a 75 person consulting firm which specializes in human and ecological risk assessment, as well as the risk analysis of Pharmaceuticals and food. He was previously a Vice President of Exponent, and prior to that, President and Chief Executive Officer (CEO) of McLaren-Hart Environmental, a nationwide consulting firm of 600 persons. In 1985, he founded ChemRisk, perhaps the nation’s largest non-governmental human and ecological risk assessment group. Dennis has conducted nearly 1,000 different risk assessments during his career. These have addressed contaminated soils and sediments, air and water emissions, contaminated foods, contaminated crops, and literally hundreds of workplace conditions. He has provided expert witness testimony in public meetings and trials concerning the health effects of chemicals in various media. Dr. Paustenbach has been an invited technical reviewer for prominent journals and of proposed regulations (both in the US and abroad). He has published approximately 300 peer-reviewed articles and written nearly 400 book chapters in the fields of industrial hygiene, human and aquatic toxicology, engineering, and risk assessment. His textbooks on risk assessment are among the most popular ever published and they have been adopted at a number

of universities. He has served on nearly 25 science advisory boards during his career. He has been an adjunct professor at several universities and is currently lecturing at the University of Michigan.

P. Barry Ryan

Dr. P. Barry Ryan is Professor of Exposure Science and Environmental Chemistry in the Department of Environmental Health, Rollins School of Public Health, Emory University. He is jointly appointed in the Department of Chemistry at Emory University. Prior to joining the faculty at Emory in 1995, he was on the faculty at Harvard School of Public Health. He received a BS in Chemistry from the University of Massachusetts, an MS in Physical Chemistry from the University of Chicago, and PhD in Computational Chemistry from Wesleyan University. He has been active in the exposure assessment field for over 25 years publishing in excess of 100 peer-reviewed manuscripts and book chapters and making over 190 presentations of his work to the scientific community. His work has included both cross-sectional and longitudinal studies of community-based exposure for multiple pollutants in multiple media. Dr. Ryan is Principal Investigator of a retrospective study of exposure to perfluorooctanoic acid in a large area surrounding a manufacturing facility using this compound. Recently, he began work assessing exposure to pesticides experienced by individuals in a community in Northern Thailand. In addition, he is Co-Principal Investigator and Co-Investigator on three separate Formative Research projects associated with the National Children's Study. Recent work completed by Dr. Ryan's group includes a U.S. EPA-funded STAR Grant designed to assess the effectiveness of biological markers of exposure to organophosphate and pyrethroid pesticides and a study if the impact on the surrounding community of airport emissions of various airborne compounds. Dr. Ryan is a member of the Executive Committee of the Emory/Battelle/Morehouse consortium for the National Children's Study. He was Principal Investigator on the U.S. EPA funded longitudinal study of exposures to pollutants known as the National Human Exposure Assessment (NHEXAS) - Maryland study, and was Co-Principal Investigator of a study on health-compromised individuals assessing the impact of particulate matter exposure on heart rate variability, and Co-Principal Investigator on a study of the impact of air pollution exposure on hiker lung-health in the Great Smoky Mountain National Park. Dr. Ryan completed a four-year term on the Federal Advisory Committee for the National Children's Study being undertaken by the National Institutes of Health. He has served on numerous advisory panels for the U.S. EPA, most recently as the Chair of the external evaluation committee on the Draft Exposure Factors Handbook update and on the FIFRA SAP on Chlorpyrifos PBPK-Cares Modeling Review. Dr. Ryan has also served on several National Academy of Science panels.

Rosemarie Szostak

Dr. Szostak advises companies on technology and innovation in materials, energy and environmental sustainability, and advanced technologies. With more than 20 years of experience as a thought leader and analyst with broad technical knowledge, she provides innovative solutions to difficult technology challenges. Before joining Nerac, Dr. Szostak managed the Philip Morris USA Environmental Footprint Program, assessing corporate operational environmental sustainability needs and leading efforts to reduce the company's environmental footprint. Dr. Szostak also was a program manager for defense sciences at the U.S. Department of Defense's Defense Advanced Research Projects Agency (DARPA), where her role was to identify and advance radically new technologies that promised to enhance national security and lead to revolutionary new military capabilities. As a technology expert at the Army Environmental Policy Institute, she coordinated the response to a Presidential task force on the use of depleted uranium and its role in Gulf War Illness. Dr. Szostak spearheaded the DoD directive on sustainable ranges that changed the way the military trains so that it could do so in an environmentally sustainable manner. She was a professor in the Clark Atlanta University Department of Chemistry and a principal research scientist at the Georgia Tech Research Institute. Dr. Szostak earned her doctoral degree in chemistry at University of California Los Angeles and was a post-doctoral fellow in chemical engineering at Worcester Polytechnic Institute.

John P. Tharakan

Dr. Tharakan is Professor of Chemical Engineering at Howard University, where he has established an extensive record of teaching, research, and service since he joined the University in August 1990. He has served as Chair of the Department of Chemical Engineering, Director of its Graduate Studies Program, and Chair of its Educational Programs and Policies Assessment Committee, for program accreditation purposes. He also directs the department's Biochemical and Bioenvironmental Engineering Research Laboratory where he conducts research on bioremediation of hazardous compounds. In addition, Dr. Tharakan serves as Faculty Advisor to Howard's Student Chapter of Engineers Without Borders-USA, which recently returned from an assessment trip to Kenya.

where engineering students developed a plan to fulfill water resource needs for a rural community and an HIV-affected children's orphanage. He served as Senior Fulbright Research Scholar to India in 2006-07, focusing on documenting biological waste treatment and management technologies in south India, while lecturing at the New College in Chennai, as well as numerous other institutions of higher education across southern India. Dr. Tharakan has made significant contributions to engineering education, bio-environmental engineering, and appropriate technology education and research. He has served as a Fellow at the Howard Center for Excellence in Teaching, Learning and Assessment where he engaged faculty in enhanced uses of technology resources in teaching and learning and also providing faculty mentorship and training.

Russell S. Thomas

Dr. Thomas is a senior investigator at The Hamner Institutes for Health Sciences. Dr. Thomas is also the Director of the Center for Genomic Biology and Bioinformatics and Associate Director of the Program in Chemical Safety Sciences at the Hamner Institutes. His laboratory has diverse interests that range from basic research in cancer biology to applied research in chemical risk assessment. Dr. Thomas completed his M.S. in radiation ecology and Ph.D. in Toxicology at Colorado State University. Following his doctoral studies, Dr. Thomas performed postdoctoral research in molecular biology and genomics at the McArdle Cancer Research Laboratory at the University of Wisconsin. Prior to coming to The Hamner, Dr. Thomas worked in the biotech and biopharmaceutical industry.

Katherine von Stackelberg

Dr. Stackelberg specializes in developing risk-based tools and methods to support sustainable approaches to environmental decision-making. An emerging area of interest is in the exploration of approaches and tools for quantifying changes in ecosystem services, and identifying relationships between ecosystem services and expected benefits with the goal of integrating economics and risk assessment to better quantify the benefits of proposed risk reductions as a result of management or regulatory actions for use in cost-benefit, cost-effectiveness, and value of information analyses. Much of her work has focused on incorporating quantitative uncertainty analysis (e.g., analytical, probabilistic, and fuzzy methods) into the environmental management process, and she has been at the forefront of the effort to explore methods for effectively communicating and interpreting scientific uncertainty to support environmental decision-making. Dr. von Stackelberg is a Principal at E Risk Sciences, LLP, a consulting firm focused on risk-based decision making related to human health and the environment. She is currently working on a project to integrate environmental models within an integrated GIS-multi-criteria decision framework (DECERNS) to better support and inform environmental decision-making. Dr. von Stackelberg is also a Research Manager for the Harvard Center for Risk Analysis, where she leads several research projects related to ecosystem services. Dr. von Stackelberg serves as peer reviewer for numerous journals, and is on the editorial board for *Risk Analysis* and *Human and Ecological Risk Assessment*, and is a member of the Scientific Advisors on Risk Assessment for the European Commission in Brussels. She is a member of the Society for Risk Analysis, Society for Environmental Toxicology and Chemistry (Chair of the Technical Committee), Ecological Society of America, International Society for Ecological Economics, and the Association of Environmental and Resource Economists. Dr. von Stackelberg received an A.B. *cum laude* from Harvard College, and a Sc.M. and Sc.D. from the Harvard School of Public Health in Environmental Science and Risk Management.

Marie E. Zhuikov

Marie Zhuikov is an award-winning science writer, specializing in environmental and medical topics. She has published hundreds of articles, publications, videos and radio programs, and coordinated the production of many web sites. Zhuikov also has extensive experience in media relations for organizations such as Mayo Clinic, the U.S. Forest Service, Sea Grant and the University of Minnesota. She is a published poet and her first novel will be coming out in fall of 2011. Zhuikov has a BA in science journalism and an MA in public health journalism. She currently works as an environmental project administrator for the St. Louis River Alliance in Duluth, Minnesota.