

**ENVIRONMENTAL MONITORING, EVALUATION AND
PROTECTION: LINKING SCIENCE AND POLICY**

NOVEMBER 15-16, 2007

SPEAKER BIOGRAPHIES

NYSERDA



**New York State
Energy Research and
Development Authority**

SPEAKER BIOGRAPHIES

PRAVEEN K. AMAR

Northeast States for Coordinated Air Use Management

Dr. Praveen Amar is the Director of Science and Policy at NESCAUM (Northeast States for Coordinated Air Use Management). NESCAUM, located in Boston, Massachusetts, is an interagency association of eight northeastern states (New York, New Jersey, Connecticut, Maine, Massachusetts, Vermont, Rhode Island, and New Hampshire), which provides high-level scientific and policy-relevant input to its member states on regional air pollution issues. His key area of expertise is to “translate” the implications of scientific findings and technological developments into workable and cost-effective policy options for the northeastern states. He recently completed two EPA-funded multi-year, policy-relevant research projects with the Harvard Center for Risk Analysis, and the Georgia Institute of Technology and MIT.

While at NESCAUM, he has served as member of the Science Advisory Committee (1993-2001) for the EPA-funded, MIT-Caltech-New Jersey Institute of Technology Center on Airborne Organics. He served as a member of the Synthesis Team (1996-2000) for NARSTO that produced a July 2000 report on Tropospheric Ozone Pollution, and a February 2003 report on particulate matter. He has testified numerous times before the United States Congress on air pollution control. He is currently serving on the EPA’s CASAC national panel for review of secondary standards for SO₂ and NO₂. Since 1999, he has served on the Science Advisory Committee for NYSERDA EMEP.

Before joining NESCAUM, Dr. Amar worked for the California Air Resources Board for fifteen years (1977-1992), where he managed programs on air pollution research, strategic planning, and industrial source pollution control. For over 10 years, he has been a part-time faculty member at the University of California, Davis, California State University at Sacramento, and Tufts University in Boston, teaching courses in air pollution science and policy, atmospheric sciences, and fluid mechanics and heat transfer processes. Dr. Amar received his Ph.D. in engineering from UCLA in 1977. He is a licensed Mechanical Engineer in the State of California.

ELLEN BURKHARD

New York State Energy Research and Development Authority

Dr. Ellen Burkhard is a Project Manager in NYSERDA’s Environmental Research and Development Program, where she manages air quality, health, emissions characterization, and product development projects. Ellen received her Ph.D. from the State University of New York’s School of Public Health, where her research focused on long-range transport and chemical reactions of atmospheric pollutants.

DOUGLAS A. BURNS

United States Geological Survey

Dr. Douglas Burns is a Hydrologist at the U.S. Geological Survey in Troy, New York and the Director of the National Acid Precipitation Assessment Program. He studies the effects of air pollutants on ecosystems at local and regional scales, as well as the effects of land use and land management on hydrology and water quality. He holds a Ph.D. in Water Resources from the SUNY College of Environmental Science and Forestry, an M.S. in Environmental Sciences from the Univ. of Virginia, and a B.A. in Geology from Hope College. He is the author of more than 50 scientific papers and reports.

JENNIFER R. COX

Regional Plan Association

Ms. Jennifer R Cox is a Senior Planner and a Geographic Information Systems Manager at the Regional Plan Association. Her research focuses on the interrelation between land use, transportation, and energy policies and climate change.

Since 2001, Jennifer has served on numerous stakeholder and steering committees and co-authored reports on urban development, regional landscapes, neighborhood vulnerability, and climate change. Ms. Cox oversees the GIS program where she is developing several regional development and impact models for alternative scenario planning. Jennifer maintains and coordinates a wide range of local, regional, and national geo-spatial project datasets.

Jennifer is a Ph.D. Candidate in Earth and Environmental Sciences at City University of New York Graduate Center. Her research focuses on land development patterns impact on the regional urban heat island effect. She serves as a Consultant to the CUNY Institute for Sustainable Cities and an Adjunct Lecturer at CUNY- City College. From 2001-2007, she was the Coordinator of the NYC ARC Users Group, which is a regional GIS support group. Prior to her work at RPA, Jennifer was the Acting GIS Director for the NYS Department of Environmental Conservation in Region 2 and a GIS Specialist for the Town of East Fishkill. Jennifer received a Masters Degree in Geography from CUNY Hunter College and a Bachelors Degree from SUNY at New Paltz.

KENNETH L. DEMERJIAN

State University of New York, University at Albany

Dr. Kenneth Demerjian is the Ray Falconer Endowed Chair and Director of the Atmospheric Sciences Research Center (1986-present) and Professor in the Department of Earth and Atmospheric Sciences, University at Albany, State University of New York. He also holds appointments in the Departments of Environmental Health and Toxicology in School of Public Health at SUNY and is a Visiting Scientist at Harvard University. He holds a B.A degree in Chemistry from Northeastern University and M.S. and Ph.D. degrees in Physical Chemistry from the Ohio State University.

Prior to joining the University at Albany, he was director of National Oceanic and Atmospheric Administration, Meteorology Laboratory, which was assigned under an interagency agreement to the U.S. Environmental Protection Agency. 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 is currently co-chair of the NARSTO Assessment on Multi-pollutant Air Quality Management and Accountability. He serves on the Research Committee of the Health Effects Institute (HEI), the U.S. EPA Clean Air Science Advisory Committee's (CASAC) Ambient Air Monitoring Strategy Subcommittee and U.S. EPA Board of Scientific Counselors (BOSC) Executive Committee. He is also on the Science Advisory Committee for the Johns Hopkins PM Health Center and is an associated editor for Atmospheric Environment. He has published over one hundred journal articles and book chapters in the area of atmospheric chemistry, air quality measurement and modeling and atmospheric process science. His research interests in the photochemistry and reaction mechanisms of polluted and clean atmospheres were initiated during his graduate education and he has maintained active research programs in these and related areas for over three decades.

CHARLES T. DRISCOLL

College of Engineering and Computer Science, Syracuse University

Dr. Charles T. Driscoll is the University Professor of Environmental Systems Engineering at Syracuse University. Dr. Driscoll received his B.S. degree in Civil Engineering from the University of Maine in 1974, and his M.S. in 1976 and Ph.D. in 1980 in Environmental Engineering from Cornell University. Dr. Driscoll's teaching and research interests are in the areas of environmental engineering, environmental chemistry, biogeochemistry and environmental quality modeling.

A principal research focus of Dr. Driscoll's research has been the effects of air pollution on forest, aquatic and coastal ecosystems, including acidic deposition, and mercury. Dr. Driscoll has authored or co-authored more than 300 peer-reviewed articles and has been acknowledged by the Institute for Scientific Information (ISI) as one of the most highly cited researchers in both engineering and environmental science. He has led synthesis efforts on ecosystem effects of air pollution organized by the Hubbard Brook Research Foundation, through their Science-Links program. He is currently a principal investigator of the National Science Foundation's Long-Term Ecological Research project at the Hubbard Brook Experimental Forest, New Hampshire. In 1984, the National Science Foundation designated Dr. Driscoll as a Presidential Young Investigator. In 2007 he was elected to the National Academy of Engineering. He has provided expert testimony to U.S. Congressional and State legislative committees. Dr. Driscoll has served on many local, national and international committees, including the National Research Council Panel on Process of Lake Acidification, Committee of Air Quality Management, and Committee on Independent Scientific Review of the Everglades Restoration Program, and the Heinz Center Committee on the State of the Nation's Ecosystems. Dr. Driscoll is on the Board of Directors of the Hubbard Brook Research Foundation and the Upstate Research Institute.

DAVID EVERS

BioDiversity Research Institute

Dr. David Evers is the founder and Executive Director of the BioDiversity Research Institute. He specializes in research on avian toxicology with an emphasis on the patterns of mercury availability and effects in the common loon. Current research projects include injury assessments of mercury impacts on wildlife in Maine, Massachusetts and Virginia for the federal government, development of a wildlife criterion for mercury using empirical studies at the population level in Maine and New York; investigating the relationship between water management and biotic mercury uptake throughout New England; and determining spatio-temporal mercury exposure profiles in sharks, birds and mammals across North America and Belize. Dave served as a co-guest editor of 2005 special issue of the journal *Ecotoxicology* devoted to mercury in the environment. Dave also is an adjunct professor at the University of Maine and the University of Southern Maine. He earned a Ph.D. in conservation biology from the University of Minnesota and has published more than 50 scholarly papers.

STUART E. G. FINDLAY

Institute of Ecosystem Studies

Dr. Stuart Findlay is a Scientist at the Institute of Ecosystem Studies. His research interests can be broadly grouped into three areas: characterization and microbial assimilation of dissolved organic carbon in aquatic ecosystems, importance of hyporheic metabolism in stream ecosystems, and approaches to generalizing studies of function in vegetated aquatic habitats. He has been conducting research on the Hudson River ecosystem for over 15 years and is interested in watershed restoration issues. Dr. Findlay received a B.A. in Environmental Science from the University of Virginia, an M.S. in Marine Science from the University of South Carolina, and a Ph.D. in Zoology from the University of Georgia.

PETER C. FRUMHOFF

Union of Concerned Scientists

Dr. Peter C. Frumhoff is Director of Science and Policy at the Union of Concerned Scientists (UCS), and Chief Scientist of the UCS Climate Campaign. A global change ecologist, he has published and lectured widely on topics that include climate change impacts, climate science and policy, tropical forest conservation and management, and biological diversity. He is a lead author of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and was previously a lead author of the IPCC Special Report on Land Use, Land-use Change and Forestry. He is the Chair of the Northeast Climate Impacts Assessment (NECIA). Major UCS reports developed under his guidance include *Climate Change in California: Choosing Our Future* (2004), *Confronting Climate Change in the Great Lakes Region* (2003), and *Logging Off: Mechanisms to Stop or Prevent Industrial Logging in High Conservation Value Forests* (2001).

Dr. Frumhoff has taught at Fletcher School of Law and Diplomacy at Tufts University, Harvard University and the University of Maryland. He also served as an AAAS Science and Diplomacy Fellow at the U.S. Agency for International Development, where he designed and led conservation and rural development programs in Latin America and East Africa. He holds a Ph.D. in Ecology and an M.A. in Zoology from the University of California, Davis and a B.A. in Psychology from the University of California, San Diego.

DAVID ALLEN GAY

Illinois State Water Survey, University of Illinois

Dr. Allen Gay is Associate Research Scientist at the Illinois State Water Survey at the University of Illinois. He has also served as the Assistant Coordinator of the National Atmospheric Deposition Program since 2003. Dr. Gay received his B.S. in Environmental Sciences from McNeese State University (1985), his M.S. with concentration in air quality and biogenic hydrocarbons from Washington State University (1987) and his Ph.D. with concentration in climatology of air pollution from University of Virginia (1996).

Dr. Gay's current research interests include monitoring of wet deposition of mercury, dry deposition of mercury, and monitoring of ammonia/ammonium across the Midwest. He has also worked in consulting engineering (CH2M Hill, Inc.) and on faculty at UNC Charlotte.

JOHN GRAHAM

Northeast States for Coordinated Air Use Management

Dr. John Graham is a Senior Scientist with NESCAUM, an interagency association of eight northeastern states (New York, New Jersey, Connecticut, Maine, Massachusetts, Vermont, Rhode Island, and New Hampshire). Since joining NESCAUM in 2002, John has been responsible for investigating air quality issues in the NESCAUM region and providing technical advice to its member states. He assists in managing the Science and Technology Team, with a focus on fine particulate matter, regional haze, mercury and ozone. With his NESCAUM colleagues, he has authored several recent reports of note, including "Assessment of Carbonaceous Fine Particle (PM_{2.5}) for New York and the Region" and "Modeling Mercury in the Northeast United States."

Dr. Graham holds a Ph.D. in Atmospheric Science from MIT and an AB in Chemistry from Harvard College.

PETER GRANNIS

New York State Department of Environmental Conservation

Mr. Peter Grannis was nominated by Governor Eliot Spitzer to serve as Commissioner of the Department of Environmental Conservation (DEC) and began his tenure in April 2007. His appointment marks a return to the DEC, where he began his career in public service in the early 1970's as a Compliance Counsel.

Mr. Grannis served as a member of the New York State Assembly representing the Upper East Side of Manhattan and Roosevelt Island for more than 30 years. While in the Assembly, Mr. Grannis championed a wide range of environmental issues as a long-time member of its Environmental Conservation Committee, and played a key role in enacting laws addressing acid rain, clean air and water, fluorocarbons and recycling. He fought for the passage of the State Environmental Quality Review Act (SEQRA), the original Bottle Bill and the clean-up and revitalization of brownfields. Last year, legislation he sponsored was signed into law requiring heavy duty trucks utilized by state contractors to use the best available technology and low-sulfur diesel, making such equipment virtually emission free. A nationally recognized leader in the fight to curb the health hazards posed by smoking, Mr. Grannis authored New York's historic Clean Indoor Air Act.

Mr. Grannis is a three-time winner of the Legislator of the Year award from the Environmental Planning Lobby and was accorded similar honors by the Audubon Society, the Environmental Action Coalition and Environmental Advocates. His work has been hailed by the American Cancer Society, the American Heart Association, and the New York State Association of County Health Officials. He received the American Lung Association's prestigious Hall of Fame Award in 1996 and the New York State Public Health Association's Herman M. Biggs Memorial Award in 2004. Mr. Grannis's efforts on behalf of consumers were recognized by the Consumer Federation of America, which presented him with its prestigious Philip Hart Public Service Award.

An avid outdoorsman and fly fisherman, Mr. Grannis lives with his family on the Upper East Side of Manhattan. He was born in Chicago, Illinois, grew up in Michigan, and is a graduate of the Loomis School, Rutgers University and the University of Virginia Law School. Prior to entering the Assembly, Mr. Grannis practiced law in New York City.

EDWARD E. GRAY

Antares Group Incorporated

Mr. Edward E. Gray, P.E. is an owner and the president of ANTARES, a consulting engineering firm specializing in advanced energy technologies for industry, power production and transportation. Mr. Gray has had an active role in the development and implementation of advanced energy systems and new energy resources including biomass and solar power systems for more than 25 years. He has been involved in every aspect of project and business development for advanced energy systems: market and economic assessment, business partnership development, systems design and analysis and project monitoring and evaluation.

Mr. Gray managed the Antares efforts for the Coalition of Northeast Governors to assist regional utilities to develop projects for cofiring biomass and coal in existing boilers. He has been actively engaged in the development of biomass systems including willow energy crops for power production in association with NRG Inc. and NYSERDA. He is the principal engineer for a project collaborating with the Pacific Northwest National Laboratory and commercial partners to develop and demonstrate the use of low temperature hydrothermal gasification for production of fuels of power generation and feedstocks for chemical production. Mr. Gray was actively involved in efforts to examine the potential for the National Bioenergy Initiative involving the cooperation of the EPA, Department of Energy and Department of Agriculture. As part of the effort he led the development of the Agripower model designed to examine a wide array of impacts for deployment of Biomass Power systems. In particular rural economic benefits and national environmental benefits were forecast for a variety of deployment scenarios. Mr. Gray also led a team of experts (EPRI, Princeton, Westinghouse, and Colorado School of Mines) to prepare a competitive assessment of biomass power generation technologies for the Office of Science and Technology Policy.

Mr. Gray served as the co-chair of the biomass power supply working group under the Clean Energy Development Advisory Council for the Western Governors. He is actively involved in a follow up effort with the Western Governors' Association addressing the potential for biofuel development in the Western Region. He has served as technical advisor to the Governor's Energy Task Force in the state of Maryland and testified before the Maryland House and Senate committees on behalf of energy legislation encouraging the use of renewable energy. Mr. Gray served as the chairman for the Biomass Eligibility Working Group for the NYS PSC proceeding on the Renewable Portfolio Standard for New York.

TIM HANSEN

The Southern Research Institute (SRI)

Mr. Tim Hansen is a Senior Project Leader with the Southern Research Institute's North Carolina based Environment & Energy Department. He currently serves as the Manager of Transportation Technology for the E&E Department, and Director of the ETV Greenhouse Gas Technology Center (GHG Center), a public-private partnership between the U.S. EPA's Environmental Technology Verification Program and private industry.

Mr. Hansen has more than 12 years of experience in the performance and management of multimedia environmental projects. He is currently responsible for the management of several studies involving the evaluation of diesel emission reduction technologies and the in-use measurement of emissions and fuel economy of heavy-duty diesel engines. Mr. Hansen is also responsible for the independent performance verification of greenhouse gas mitigation and monitoring technologies for the transportation and advanced energy sectors under the EPA's ETV program.

Mr. Hansen holds a B.S. in Chemical Engineering from the University of Virginia, an M.S. in Environmental Engineering from Dartmouth College, and is a Registered Professional Engineer. He spent the formative years of his life in Delmar, NY.

PETER M. IWANOWICZ

New York State Department of Environmental Conservation

Mr. Peter M. Iwanowicz is the Director of the New York State Climate Change Office at the Department of Environmental Conservation in Albany, New York. Before joining the state, Mr. Iwanowicz most recently served as Vice President for the American Lung Association of New York State, where he directed the association's advocacy efforts. He also created the association's air quality improvement program.

Mr. Iwanowicz previously worked for the San Francisco-based Resource Renewal Institute promoting sustainability policies in New York State. He also worked for Environmental Advocates of New York, based in Albany, New York, where he led the organization's clean air and clean energy policy work.

Mr. Iwanowicz holds a BA from Siena College and lives in the Albany area with his wife and two children.

PHILIP R.S. JOHNSON

Yale University

Mr. Philip Johnson is an environmental health consultant and a Ph.D. candidate at Yale University, studying environmental health and risk analysis. Johnson's expertise is in exposure assessment, risk analysis, and epidemiology. He most recently worked as a senior public health scientist and program manager at NESCAUM (Northeast States for Coordinated Air Use Management), where he focused on air pollution exposure, health effects, and risk. Mr. Johnson's current research involves assessing the potential health threat of carbonaceous PM_{2.5} and evaluating characteristics of transient (hourly) PM_{2.5} measurement data.

Mr. Johnson served on the NESCAUM Toxics and Public Health Committee from 2002-2007, where he coordinated NESCAUM's assessment of the PM_{2.5} NAAQS review process. He contributed to EPA's recent review of the NAAQS process. His research has involved assessing emerging air pollution exposure risks such as in-cabin commuter trains, residential outdoor wood boilers, and outdoor recreational activity in public lands. Mr. Johnson's research has also involved the analysis of ambient air quality standard setting metrics for PM_{2.5} and the development of demographic and exposure indicators of susceptibility that take into account micro-scale population characteristics and activity patterns.

Mr. Johnson received his Master in Public Health (M.P.H.) from the Yale University School of Medicine (2000), and Master in Environmental Science (M.E.S.C.) from the Yale University School of Forestry & Environmental Studies (2000).

PATRICK KINNEY

Mailman School of Public Health, Columbia University

Dr. Patrick Kinney is Associate Professor of Environmental Health Sciences at the Mailman School of Public Health at Columbia University. Dr. 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 air pollution. He developed a new interdisciplinary research and teaching program at Columbia to examine the potential impacts of climate and changes on air quality and human health. He also has carried out numerous studies examining the human health effects of air pollution, including studies of the effects of ozone and/or particulate matter on lung health and on daily mortality in large cities. Dr. Kinney earned his doctorate at the Harvard School of Public Health, where he examined the effects of air pollution on lung function in children as part of the Harvard Six Cities Air Pollution and Health Study.

GREG LAWRENCE

United States Geological Survey

Dr. Greg Lawrence, a research hydrologist for the U.S. Geological Survey since 1990, has spent his career conducting various research investigations related to acid rain effects on surface waters, soils, and forest health. He received a B.S. in Zoology from the University of Vermont, an M.S. in Environmental and Forest Biology from SUNY Environmental Science and Forestry, and a Ph.D. in Civil Engineering from Syracuse University.

PETER LEHNER

Natural Resources Defense Council (NRDC)

Mr. Peter Lehner is the Executive Director of NRDC, one of the United States' most influential and innovative environmental advocacy organizations. NRDC's mission is to safeguard the Earth: its people, its plants and animals, and the natural systems upon which all life depends. NRDC's priorities include curbing global warming, moving America beyond oil, stemming the tide of toxic chemicals, reviving our oceans, saving wild lands across the Americas, and speeding the greening of China.

As Executive Director, Mr. Lehner guides NRDC's policy positions, shapes advocacy strategies in the international, federal, and state arenas, oversees collaborative efforts with a variety of stakeholders, supervises NRDC's litigation, and ensures that NRDC's 1.2 million members and online activists stay up-to-date and mobilized. He leads an expert staff of more than 350 lawyers, scientists and other environmental advocates located in offices in New York, Washington, DC, Chicago, Santa Monica, San Francisco and Beijing, and manages an annual budget of more than \$80 million.

Before returning to NRDC, Mr. Lehner served eight years as chief of the Environmental Protection Bureau under New York State Attorney General Eliot Spitzer. He supervised all environmental litigation by the state, prosecuting a wide variety of polluters and developing innovative multi-state strategies targeting global warming, acid rain, and smog causing emissions from the country's largest electric utility companies.

Mr. Lehner has previously served at NRDC, when he worked as a senior attorney in charge of the water program from 1994 to 1999. Before that, he created and led the environmental prosecution unit at the New

York City Law Department. Mr. Lehner also clerked for Chief Judge James Browning of the U.S. Court of Appeals for the Ninth Circuit.

Mr. Lehner holds an AB *cum laude* in philosophy from Harvard College. He is a graduate of Columbia University Law School, where he continues to teach environmental law. He also has extensive experience in sustainable farming and green business in Central America.

CARL J. MAS

New York State Energy Research and Development Authority

Mr. Carl Mas is an Associate Project Manager with the New York State Energy Research and Development Authority's Alternative Fuel Vehicle Group. In this position, Mr. Mas assists in the development of alternative fuel and clean-diesel programs and policies, coordinates and contributes to the studies conducted by the Alternative Fuel Vehicle Group, and manages the clean-diesel deployment projects, which provide incentives for the installation of diesel emission reduction technologies.

Mr. Mas has 10 years of project management and research experience in the public and private sectors. Prior to joining NYSERDA, he worked at the Sandia National Laboratory's Combustion Research Facility and the National Renewable Energy Laboratory; and in the private sector as an energy systems analyst, and a consultant for not-for-profit international development organizations. Mr. Mas received a dual Masters in Science from the University of California, Berkeley, in Mechanical Engineering and in Energy and Resources. His graduate work focused on combustion sciences, control theory, and energy policy.

MONICA A. MAZUREK

Rutgers, The State University of New Jersey

Dr. Monica A. Mazurek is an Assistant Professor in the Department of Civil and Environmental Engineering at Rutgers University, and is a member of the Center for Advanced Infrastructure & Transportation (CAIT). She directs the Air Quality and Transportation Program within CAIT. Dr. Mazurek is one of the core faculty members who initiated the Rutgers Energy Institute (REI) serving as the first associate director and now as a member of the internal advisory board.

Dr. Mazurek has held joint academic and administrative positions at Rutgers University, and has generated over \$6.7 M in external funding for new educational initiatives in addition to her active research grants. She was concurrently the Director of Academic Initiatives, Office of the Dean, School of Engineering, Rutgers University and an Associate Research Professor in Institute of Marine and Coastal Sciences, Rutgers University.

She obtained her B.S. Chemistry and Ph.D. in Geochemistry from the University of California at Los Angeles and was a Post-Doctoral Research Fellow in the Environmental Engineering Science Department at the California Institute of Technology. Before joining Rutgers University she was a Research Chemist at Brookhaven National Laboratory in the Division of Environmental Chemistry and served as an Associate Program Director for the Atmospheric Chemistry Program, at the National Science Foundation.

Her research interests include air quality engineering; renewable and alternative fuels; chemical compositions, sources, distributions; and fates of carbonaceous aerosol particles; analytical methods for organic compounds in environmental and chemical engineering processes; and organic geochemistry of

Earth materials. She has co-authored 45 peer reviewed publications in international atmospheric chemistry and environmental science and engineering journals.

Dr. Mazurek received the *2001 Haagen-Smit Award* and just recently, the *2007 Haagen-Smit Award* for papers she co-authored on molecular composition, modeling, and source attribution of atmospheric fine particles. The award recognizes benchmark contributions to atmospheric chemistry and air quality research. She is a member of the United Nations Intergovernmental Panel on Climate Change which along with Albert Arnold (Al) Gore Jr., share in two equal parts the *Nobel Peace Prize for 2007* “for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.”

MYRON J. MITCHELL

State University of New York, College of Environmental Science and Forestry

Dr. Myron J. Mitchell has been at the College of Environmental Science and Forestry in Syracuse since 1975. He is currently a Distinguished Professor in the Department of Environmental and Forest Biology and Director of the Council on Hydrologic Systems Science.

His research interests include investigations on biogeochemistry, hydrology, forest ecology, Decomposition processes and floral-faunal interactions in terrestrial and aquatic systems. He has worked in Asia as well as Central Europe. He has participated on various NSF panels and currently serves on the Board of Directors of the Research Foundation of State of New York and Board of Directors of Upstate Freshwater Institute. He currently serves on the New York State Commission for Higher Education. He is a member of the U.S. EPA Clean Air Scientific Advisory Committee NO_x & SO_x Secondary NAAQS Review Panel. Recent research has focused on the role of air pollutants and climate change on watershed processes with support from the NSF, U.S. Forest Service, New York State Energy Research and Development Authority and the New York City Department of Environmental Protection.

He has been a NRC Postdoctoral Fellow at the University of British Columbia (1973 to 1974), a Visiting Scholar for The University of Calgary (1983), obtained a Fulbright Travel Fellowship to New Zealand (1983-1984), was a Visiting Professor, Kyoto University, Japan (1996) and also was awarded a Deutscher Akademischer Austausch Dienst award for working in Germany (2004). Honors and rewards include Fellow of the American Association for the Advancement of Science (1992), Sigma Xi Outstanding Faculty Research Award (1994), Co-chair for Gordon Conference on Hydrobiogeochemistry of Forested Catchments (1997), SUNY Chancellor's Research Recognition Award (2002), and Exemplary Researcher Award by SUNY-ESF (2006). Dr. Mitchell is affiliated with the following organizations: American Geophysical Union, Ecological Society of America; A.A.A.S., Sigma Xi, and Soil Science Society of America. He has more than 190 publications.

Dr. Mitchell received his Ph.D. in Soil Ecology from The University of Calgary in 1974 and obtained a B.A. in Biology in 1969 at Lake Forest College (Lake Forest, Illinois).

DAVID S. MIZRAHI

New Jersey Audubon Society

Dr. David S. Mizrahi came to NJ Audubon Society in 2000, where he is currently Vice-president for Research and Monitoring. For the last six years, he has worked with his staff to delineate and characterize migration stopover site occupancy by songbirds during migration through the mid-Atlantic region, using

National Weather Service Doppler radar data. During the last three years, they have been using portable marine radar to characterize spatial and temporal patterns of bird and bat movements in the mid-Atlantic Coastal Plain, the Appalachian Mountains and on the Tug Hill Plateau in NY.

Dr. Mizrahi earned a Ph.D. with honors in Zoology from Clemson University in 1999. The focus of his dissertation research was the behavior and ecophysiology of Semipalmated and Least Sandpipers during spring migration stopovers in Delaware Bay. While at Clemson he also worked with his major advisor, Sidney A. Gauthreaux, Jr., to study migration stopover ecology of landbirds using National Weather Service Doppler radar data.

CORNELIUS B. MURPHY JR.

SUNY College of Environmental Science & Forestry

Dr. Cornelius B. Murphy, Jr. is the current President of the State University of New York College of Environmental Science and Forestry. He holds a (Honorary) Doctor of Science from Clarkson University (1997) and from the School of Management, Syracuse University (1972-74). Dr. Murphy received his Ph.D. in Chemistry from Syracuse University in 1970 where he was a NASA Fellow. His B.A. in Chemistry, Magna cum laude, was received in 1966 from St. Michael's College, Syracuse University (NASA Fellow).

Prior to being President of SUNY-ESF, Dr. Murphy held various positions at O'Brien & Gere Engineers, Inc. starting out as a Laboratory Technician in June 1970, and working his way up to President in 1993 and Chairman of the Board in 1998.

Dr. Murphy is director of several boards including: O'Brien & Gere Ltd., OP-TECH Environmental Services and Bergmann Associates. He is an advisor to or board member of the following: Upstate Medical University Foundation; BSA Hiawatha Council; Metropolitan Development Association; Greater Syracuse Chamber of Commerce; New York State Environmental Technology Institute; Syracuse University, College of Engineering and Computer Science Advisory Board; University Hill Corporation; New York Indoor Environmental Quality Center; Success by Six; Syracuse City School District, Syracuse 20/20, Community General Hospital, CNY MedTech Foundation and the CNY Regional Board of Advisors for the American Cancer Society. Dr. Murphy serves as Vice Chair of University Hill Corporation, Co-Chair of Syracuse 20/20 and Vice President of CNY MedTech Foundation.

His technical expertise lies in the areas of environmental science and engineering management, hazardous waste management, environmental assessment, renewable energy systems, limnology, urban runoff planning, and industrial wastewater treatment.

Dr. Murphy belongs to various professional affiliations including the American Chemical Society, Environmental Chemistry Division; American Association for the Advancement of Science; Water Pollution Control Federation: Toxic Substance Committee, Pollution from Non-Point Sources Committee (former chairman), and Acid Precipitation Committee; New York Public Consultation Panel of the International Joint Commission on the Great Lakes' "Pollution from Land Use Activities" Reference Group, Mid-Atlantic Industrial Waste Conference, Member, Planning Committee; and the American Management Association.

SAM NAPOLITANO

United States Environmental Protection Agency

Mr. Sam Napolitano is the Director of the Clean Air Markets Division in EPA's Air Office. This group runs six air emission trading programs that reduce sulfur dioxide, nitrogen oxides, and mercury emissions from the electric power industry to protect public health, welfare, and the environment. The Division also serves as a focal point for the design, evaluation, and training of others on air emission reductions and other environmental trading programs under consideration by Congress, state and local governments, and foreign countries (e.g., China, Canada, and Chile). Mr. Napolitano has 30 years experience working on pollution issues related to air, water, and waste; over 23 years of that experience has been at EPA. For the last 13 years at EPA, he has worked in the Office of Air and Radiation. Mr. Napolitano also spent two years as a Division Director in the Office of the Secretary of Defense developing environmental compliance policies for military installations worldwide, and five years as a Vice President for the Risk Assessment and Economic Analysis Unit of ICF Incorporated.

Mr. Napolitano holds a Bachelor of Arts degree from the College of the Holy Cross and a Master of Business Administration degree from Cornell University.

JAMES R. NEWMAN

Pandion Systems, Incorporated

Dr. Jim Newman is a wildlife scientist Pandion Systems, Incorporated. He has 36 years of experience in managing and conducting research on the effects of wind and conventional energy generation on wildlife, and has working knowledge of habitat requirements and fragmentation from more than 50 studies conducted on development effects on wildlife and ecological communities. He co-authored the National Wind Coordinating Collaborative (NWCC) paper *Ecological Risk Assessment: A Framework for Wildlife Assessments At Wind Energy Facilities*. He is an active member of NWCC's Wildlife Workgroup and recently co-authored an avian risk assessment of resident and migrating eagles for a proposed wind project in New York.

Dr. Newman has numerous other publications on wildlife effects including a chapter on mammals in the Wildlife Society's *Acid Deposition: Effects on Wildlife and Habitats Effects* publication. He served on the United States Fish and Wildlife Service (USFWS) South Florida Multispecies Recovery Implementation Team and the Florida Scrub Jay Recovery Team. In addition, he is a certified Wildlife Biologist of the Wildlife Society. Dr. Newman holds a Ph.D. in Zoology, with a major concentration in ecology, from the University of California at Davis.

THOMAS NUSSBAUMER

University of Applied Science Lucerne

Dr. Thomas Nussbaumer is Professor and head of the Research Group on Bioenergy and Sustainability at the University of Applied Science Lucerne. He received a Diploma in Mechanical and Process Engineering at the Swiss Federal Institute of Technology (ETH) in Zürich. Dr. Nussbaumer also received his Doctor of Technical Services on pollutant formation in biomass combustion at ETH.

In 1989, Dr. Nussbaumer started Verenum, a private R&D company for energy from biomass. He is also a lecturer at ETH Zürich on energy and environment as well as habilitation for bioenergy. Dr. Nussbaumer

serves as the Swiss representative in the International Energy Agency (IEA) for the bioenergy task 32 on behalf of the Swiss Federal Office of Energy. He is Vice President of the Association of Wood Energy in Switzerland since 2007.

JEFF PETERSON

New York State Energy Research and Development Authority

Mr. Jeff Peterson is currently the Program Manager for Energy Resources at the New York State Energy Research and Authority. This is the primary research program for renewable and natural gas resource development. The goal of the program is to develop cooperative initiatives to introduce new energy and environmental technologies into the marketplace. Research projects range from partnering with New York State businesses to develop new technologies to supply the worldwide market for renewable energy, implementing a workforce training program for renewable technology, and sharing the risk of establishing new business enterprises or models to meet customer demand for renewable energy.

DAVID H. RIND

NASA Goddard Institute for Space Studies

Dr. David H. Rind is a senior climate researcher at the National Aeronautics and Space Administration (NASA) Goddard Institute for Space Studies in New York, NY. His research focuses on the Earth's climate as a holistic system, using observations, theory, and computer modeling, and interactions with atmospheric scientists, oceanographers, specialists in polar processes, cloud physicists, hydrologists, land surface biologists, atmospheric chemists, and computer scientists. Dr. Rind believes it is necessary to become familiar with these various disciplines and put knowledge into common form, via building and utilizing climate models.

Dr. Rind received his B.S. degree in 1969 from the City College of New York, M.A. in 1971 from Columbia University, and Ph.D. in 1976 from Columbia University. He has hundreds of publications from 1972 to 2007.

ALLEN ROBINSON

Carnegie Mellon University

Dr. Allen Robinson is a Professor in the Departments of Mechanical Engineering and Engineering and Public Policy at Carnegie Mellon University. His research examines the impact of emissions from combustion systems on urban and regional air quality. His current research focuses on organic particulate matter and the physicochemical evolution of fine particle emissions from combustion systems. Active projects include laboratory and modeling studies to quantify the effects of gas-particle partitioning and aging of low volatility organics on urban and regional aerosol concentrations and the oxidation of molecular markers used for source apportionment. Dr. Robinson was a principle investigator of the EPA-DOE supported Pittsburgh Supersite Project. This \$8M project involved more than 20 research groups and focused on regional fine particle pollution in the Eastern US. Dr. Robinson joined Carnegie Mellon in 1998 after working for two years as a Postdoctoral Fellow at the Combustion Research Facility at Sandia National Laboratories.

As a postdoctoral fellow his research focused on biomass energy and coal-biomass cofiring. He received his Ph.D. from the University of California at Berkeley in Mechanical Engineering in 1996 and his B.S. in Civil Engineering from Stanford University in 1990. He received the Ahrens Career Development Chair in Mechanical Engineering from Carnegie Mellon in 2005. He received the George Tallman Ladd Outstanding Young Faculty Award from Carnegie Mellon in 2000. Dr. Robinson has published more than 50 peer-reviewed scientific papers.

KURT ROOS

United States Environmental Protection Agency

Mr. Kurt Roos works with the AgSTAR Program at the US Environmental Protection Agency (EPA) Headquarters in Washington, DC. The AgSTAR Program is a voluntary federal program that encourages the use of effective technologies to capture methane gas generated from the decomposition of animal waste for use as a biogas energy source.

Mr. Roos has over twenty years experience in anaerobic digestion program development as related to the design, operation, evaluation, and financial performance of farm scale anaerobic digestion technologies in U.S., Asia, and the Caribbean. In addition, he has three years experience in development of utility demand side programs and energy impact analysis. Mr. Roos has numerous professional publications in the areas of anaerobic digestion, agricultural waste management, and renewable energy.

KAREN M. ROY

New York State Department of Environmental Conservation

Ms. Karen Roy has been a research scientist with the NYS Department of Environmental Conservation's Division of Air Resources, Bureau of Air Quality Analysis and Research, since 2001. She is the research manager of the ongoing Adirondack Long-Term Monitoring Program (ALTM) in Ray Brook, NY. Prior to this position she was a Project Analyst for Natural Resources at the NYS Adirondack Park Agency (1984–2001). Her background is in aquatic chemistry and limnology. She has a M.S. degree in Water Resources from the University of Vermont.

DAVID SCHMELTZ

United States Environmental Protection Agency

Mr. David Schmeltz is a senior policy analyst in the Assessment and Communications Branch within the Clean Air Markets Division of the U.S. Environmental Protection Agency (EPA). Mr. Schmeltz focuses on expanding technical capacity for monitoring, assessing, and reporting on the environmental impacts of air quality and atmospheric deposition.

Over the past seven years, Mr. Schmeltz has worked to advance long-term environmental monitoring programs, such as CASTNET, NADP, and TIME/LTM. Most recently, he is leading a collaborative effort with the NADP membership to establish a new, nationwide network for monitoring atmospheric mercury species. Mr. Schmeltz has published papers, posters, and maps, and given numerous presentations on environmental accountability and the role of long-term environmental monitoring in the evaluation of multi-pollutant control programs.

Prior to joining EPA in May 2000, Mr. Schmeltz was an Associate at Booz-Allen & Hamilton, focusing on the impacts of marine vessels on water quality and coastal ecosystems. He holds a Master of Science in Environmental Science from the State University of New York, College of Environmental Science and Forestry, a Master of Public Administration from the Maxwell School of Citizenship and Public Affairs, Syracuse University, and a Bachelor of Arts in Environmental Policy from the University of Michigan.

DAVID J. SHAW

New York State Department of Environmental Conservation

Mr. David J. Shaw is Director of the Division of Air Resources at the New York State Department of Environmental Conservation, where he has worked since 1979. Prior to serving in this position, he was Assistant Director, Division of Air Resources and Director, Bureau of Air Quality Planning, Division of Air Resources. Prior to his tenure at DEC, he worked as a Legislative Assistant to Congressman Ned Pattison in the United States House of Representatives. Mr. Shaw holds a Master's degree in Public Administration from Harvard University and Bachelor's degrees from the State University of New York.

BILL SHOBE

Weldon Cooper Center for Public Service, University of Virginia

Dr. Bill Shobe is the Director of Business & Economic Research at the Weldon Cooper Center for Public Service at the University of Virginia. He is also adjunct faculty in the Economics Department and the new Battan School of Leadership and Public Policy at UVA. Prior to that, Dr. Shobe was the Associate Director for Economic & Regulatory Analysis with the Virginia Department of Planning & Budget. At DPB, he had the responsibility for coordinating DPB's expenditure forecasts and the economic impact analysis of regulations. Dr. Shobe developed the Virginia Regulatory Town Hall web site, the recipient of numerous state and national awards. He spent the fall of 2000 in Prague, Czech Republic on a Fulbright Fellowship in environmental economics and policy. During his time at DPB, Dr. Shobe periodically taught classes at Virginia Tech and Virginia Commonwealth University. Before joining DPB, he taught economics at the University of North Carolina at Greensboro. In 2002, he received special recognition from the governor's office for commitment to effective government in Virginia.

Dr. Shobe has had articles published in the journals Environmental Law, Tax Notes, Environmental and Resource Economics, Virginia Economic Journal, Environmental Practice, and the Journal of Economic Behavior & Organization. He earned his Ph.D. in economics from the University of Minnesota and received a J.D. from Lewis & Clark Law School.

GOPAL SISTLA

New York State Department of Environmental Conservation

Dr. Gopal Sistla is the Director of the Bureau of Air Quality Analysis and Research with the New York State Department of Environmental Conservation. As a research scientist, he currently oversees photochemical grid modeling in conjunction with State Implementation Plans (SIPs), data analysis, air toxics and acidic deposition.

MICHAEL SLANDERS

United States Department of Energy

Mr. Michael Slanders is a General Engineer for Senior Program Management in the United States Department of Energy (DOE) Office of Clean Energy Systems within the Office of Fossil Energy. His responsibilities include the technical evaluation of emerging clean coal technologies for process optimization, as well as the development of systems modeling in support of DOE's Fuels and Power Systems program areas. A recent graduate of the Pennsylvania State University with a Bachelor of Science degree in Mechanical Engineering, Mr. Slanders first joined the Department of Energy in 2005 as a Technical Career Intern. Previous to his current position at DOE Headquarters in Germantown, Maryland, he served as a member of the Advanced Turbines Research Team at DOE's National Energy Technology Laboratory in Pittsburgh, Pennsylvania.

LANGHORNE (TAURY) SMITH

Reservoir Characterization Group, New York State Museum

Dr. Langhorne Smith is a carbonate reservoir characterization specialist with the New York State Museum, where he heads up the Reservoir Characterization Group. His current research interests are the carbon sequestration potential in New York State, and the characterization, sequence stratigraphy and hydrothermal alteration of carbonate reservoirs. Dr. Smith recently won best paper award from the American Association of Petroleum Geologists (AAPG) for his 2006 paper co-written with Graham Davies on structurally controlled hydrothermal dolomite reservoirs. He previously worked for Chevron as a development geologist for two years. Dr. Smith holds a B.S. degree from Temple University, a Ph.D. from Virginia Tech, and completed postdoctoral work at the University of Miami.

RON SMITH

Verdant Power Incorporated

Mr. Ron Smith is a founding partner, Chairman and Chief Executive Officer of Verdant Power Inc., a renewable energy company commercializing kinetic hydropower systems that deliver hydro electricity without dams or impoundments in the United States for global application. He previously led the start-up, growth and sale of a nationwide consumer advertising company; worked in management consulting as a Principal with Booz Allen Hamilton; served on the headquarters management advisory staff at Bendix Aerospace Group; and worked in organizational consulting to Commanding Officers of staffs and operating units in the U.S. Navy as a Navy Lieutenant. Mr. Smith served as a U.S. Navy carrier pilot in Vietnam, and retired as a naval reserve intelligence officer.

Mr. Smith has an MBA from the Harvard Business School, an MS in Systems Management from the University of Southern California, and a BA in mathematics and economics from Mount Saint Mary's University.

TIMOTHY J. SULLIVAN

E&S Environmental Chemistry, Inc.

Dr. Timothy J. Sullivan has been President and Principal Scientist of E&S Environmental Chemistry, Inc. for the past 19 years. His research focuses on the effects of air pollution on aquatic and terrestrial

resources; watershed analysis; effects of land use on surface waters; aquatic acid/base chemistry; mobilization, speciation, and toxicity of metals in acidic waters; episodic processes controlling surface water chemistry; and environmental assessment. Dr. Sullivan's most recent projects have included the Southern Appalachian Mountains Initiative (SAMI) Aquatic and Terrestrial Assessments, the Shenandoah National Park Assessment of Air Quality and Related Values, studies of land use and water quality in agricultural and forestry lands in Coastal Oregon, and studies to quantify critical loads of sulfur and nitrogen deposition for the protection of acid-sensitive lakes and streams.

Dr. Sullivan earned a B.A. in History from Stonehill College, an M.A. in Biological Sciences from Western State College of Colorado, and a Ph.D. in Biological Sciences from Oregon State University. He did postdoctoral research at the Center for Industrial Research and the University of Oslo, Norway.

ELIZABETH THORNDIKE

Adirondack Research Consortium

Dr. Elizabeth Thorndike is President of the Adirondack Research Consortium. She founded the Center for Environmental Information, Inc. (CEI) in Rochester, New York and served as Executive Director and then President of CEI from its establishment in 1974 until 1992, when she left to undertake fulltime graduate study at Cornell. She continues as a member of the Board of Directors.

In 1997, Dr. Thorndike was nominated by Governor Pataki and confirmed by the New York State Senate as a Board member of the New York State Energy Research and Development Authority, filling the statutorily designated environment seat. She was renominated and reconfirmed in 1999 (to 2005) and again in 2005 for another full six-year term. She serves as Chair of the Waste Facilities Management Committee.

Previous public-service appointments have included serving more than 15 years as a Commissioner of the New York State Adirondack Park Agency from 1980 to 1995, where she chaired the Agency's Park Policy and Planning Committee with oversight for local government planning services, state land (forest preserve) matters, official zoning map amendments, and development of policy for the public and private lands in the Adirondack Park. From 1985 to 1994, Dr. Thorndike was a member of Governor Mario Cuomo's bipartisan Environmental Advisory Board.

Dr. Thorndike is a visiting lecturer in the Department of City and Regional Planning at Cornell University. She is a member of the Honorary Board of the Girl Scouts of Genesee Valley. Dr. Thorndike attended Smith College, holds degrees from Stanford University and Harvard University, and a Ph.D. from Cornell University, with a concentration in Natural Resource Policy and Planning.

PAUL D. TONKO

New York State Energy Research and Development Authority

Mr. Paul D. Tonko was appointed President and CEO of the New York State Energy Research and Development Authority (NYSERDA) on July 1, 2007 by the NYSERDA Board of Directors. Prior to his appointment, Mr. Tonko served in the New York State Assembly, representing the 105th Assembly District - including all of Montgomery and part of Schenectady County - from April 1983 to June 2007.

At age 26, he was the youngest person in the history of Montgomery County to be elected to the county's Board of Supervisors. He served as chairman of that body in 1981. Prior to his election to the Assembly in

1983, Mr. Tonko was an engineer in the New York State Department of Transportation and also served on the staff of the Department of Public Service.

Mr. Tonko has gained a national reputation as an expert on energy and utility issues. From 1992 to June 2007, Mr. Tonko served as chairman of the New York Assembly Standing Committee on Energy. In April 2007, Mr. Tonko was called upon by the Congress of the United States, to provide expert testimony before the Subcommittee on Domestic Policy, in relation to the Energy Policy Act of 2005. In 2007 he was awarded the Solar Leadership Award by the New York Solar Energy Industries Association.

Mr. Tonko graduated from Clarkson University with a degree in mechanical and industrial engineering. He is a lifelong resident of the city of Amsterdam, New York.

MARK WATSON

New York State Energy Research and Development Authority

Mr. Mark Watson is a Senior Project Manager at NYSERDA, and has worked in the Environmental Monitoring, Evaluation and Protection Program since 1999. Mr. Watson's primary focus has been on environmental issues related to acid deposition, mercury, climate change, and wind/wildlife.

Mr. Watson previously worked at the Wildlife Pathology Unit and the Bureau of Fisheries at the New York State Department of Environmental Conservation, the New York State Energy Office, and the Ecological Services Division of Texas Instruments. He holds a Bachelor of Science degree with a focus on forest biology from the State University of New York College of Environmental Science and Forestry at Syracuse.

JAMES J. WINEBRAKE

Rochester Institute of Technology

Dr. James J. Winebrake is Chair of the Department of Science, Technology, & Society/Public Policy at the Rochester Institute of Technology (RIT) and founding partner of the consulting firm Energy and Environmental Research Associates, LLC in Pittsford, NY. At RIT, Dr. Winebrake is co-Director of the Laboratory for Environmental Computing and Decision Making, and Director of the University-National Park Energy Partnership Program.

Dr. Winebrake focuses his research on solving problems related to energy security, environmental quality, and transportation. He has published extensively in scholarly journals, co-authored a textbook on environmental modeling, and was editor and lead contributor for a book on alternative energy. He is also a co-Principal Investigator on a recently awarded \$2 million National Science Foundation grant to study the impact of greenhouse gas policies on the automotive sector. Dr. Winebrake received a B.S. in Physics from Lafayette College, a M.S. in Technology and Policy from M.I.T., and a Ph.D. in Energy Management and Policy from the University of Pennsylvania.

RONALD E. WYZGA

Electric Power Research Institute (EPRI)

Dr. Ronald Wyzga is Senior Technical Executive at the Air Quality Health and Risk Department in the Electric Power Research Institute (EPRI) Science and Technology Division in Palo Alto, California. Prior to joining EPRI in 1975, Dr. Wyzga worked at the Organisation for Economic Co-operation and Development (OECD) in Paris, where he co-authored a book on economic evaluation of environmental damage.

Dr. Wyzga received an A.B. in Mathematics from Harvard College in 1964, and was then awarded his M.S. in Statistics from Florida State University in 1966. In 1971, he completed a Sc.D. in Biostatistics at Harvard University.

Dr. Wyzga serves on and has chaired several committees for the U.S. Environmental Protection Agency Science Advisory Board Committees and National Academy of Sciences (NAS). In 1990 he was elected Fellow of the American Statistical Association. His research interests include environmental risk assessment and health effects of air pollution.

ED ZILLIOUX

Environmental Bioindicators Foundation, Inc.

Dr. Ed Zillioux began his career in research science first with the U.S. Naval Research Laboratory and the Federal Water Pollution Control Administration (later the EPA Narragansett Environmental Research Laboratory). In 1969, he received a faculty appointment at the University of Miami where he conducted research in plankton biology. In 1979, he accepted the position of Senior Scientist for Environmental Effects in EPA's Office of Toxic Substances in Washington, D.C., where he contributed to the early development of risk assessment procedures. In 1985, he joined Serrine Environmental Consultants in Greenville, SC. as Director of the Department of Toxicology and Risk Assessment. In 1990, he joined the environmental staff at Florida Power & Light Co., as Manager of Environmental Toxicology and Risk Assessment Issues. In 2005, he founded and serves, along with Dr. Jim Newman, as co-director of the Environmental Bioindicators Foundation, Inc.

He is a founding editor and co-editor-in-chief of the international peer-reviewed journal, *Environmental Bioindicators*, and served on the editorial board of the journal *Health and Ecological Risk Assessment*. Dr. Zillioux has served on several advisory committees including the Interagency Testing Committee, EPA's Chemical Testing and Assessment Research Committee, and the Florida Risk-Based Priority Council. He has worked with students and as guest lecturer at the University of Miami, Emory University, Clemson University, and the Kuwait Foundation for the Advancement of Science, and currently holds an appointment as Adjunct Associate Professor at the School of Public Health, University of Massachusetts. He is also the elected president of the International Society of Environmental Bioindicators (ISEBI). Dr. Zillioux is author of numerous government and consultant reports, contributions to books, and over 50 publications in peer-reviewed journals.