

**Invitation for Public Comment on the List of Nominated Candidates for the
EPA Science Advisory Board Scientific and Technological Achievement Awards
Committee (2012-2014)**

April 5, 2012

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a *Federal Register* Notice (Volume 77, Number 27, Pages 6797 – 6798) published on February 9, 2012 that it was seeking public nominations of technical experts to serve on an expert committee under the auspices of the SAB to make recommendations on EPA's Scientific and Technological Achievement Awards (STAA). The SAB Staff Office sought public nominations of nationally and internationally recognized scientists and engineers with a multidisciplinary background in the areas of: ecological research; energy and the environment; environmental control systems and technology; environmental monitoring and measurement methods; environmental policy and decisionmaking studies; environmental risk management and restoration; environmental sustainability and innovation; environmental transport and fate; human health effects research and human health risk assessment; homeland security; industry and the environment; integrated environmental risk assessment; and other environmental research. The Committee will review EPA's STAA nominations for Fiscal Year 2012, 2013, and 2014, and make recommendations to the Administrator for recognition and awards.

Below is the list of nominated candidates that is based solely on relevant expertise and willingness to serve on the Committee. We hereby invite comments on the attached List of Candidates that the SAB Staff Office should consider in the formation of this Committee. Please be advised that comments received are subject to release under the Freedom of Information Act. Comments should be submitted to the attention of Mr. Edward Hanlon, Designated Federal Officer, no later than April 26, 2012. E-mailing comments (hanlon.edward@epa.gov) is the preferred mode of receipt.

The SAB Staff Office Director will make the final decision about who will serve on the Committee based on all relevant information. This includes a review of the confidential disclosure form (EPA Form 3110-48) and information gathered by staff and public comments. For the EPA SAB Staff Office, a balanced Committee is characterized by inclusion of candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the general charge. Specific criteria to be used in evaluating a candidate include: a) scientific and/or technical expertise, knowledge, and experience; b) availability and willingness to serve; c) absence of financial conflicts of interest; d) absence of appearance of a lack of impartiality; e) skills working in committees, subcommittees, and advisory panels; and, for the Committee as a whole, f) diversity of scientific expertise and viewpoints.

Benjamin, Mark M.

University of Washington

Dr. Mark M. Benjamin is a Professor in the Environmental Engineering and Science Program of the Department of Civil and Environmental Engineering at the University of Washington, where he has been on the faculty since 1977. He holds a B.S. in Chemical Engineering from Carnegie-Mellon University (1972), an M.S. in Chemical Engineering from Stanford University (1973), and a Ph.D. in Environmental Engineering from Stanford University (1978). Dr. Benjamin is an expert in physical/ chemical treatment processes in general, with long-term research interests in the behavior of natural organic matter (NOM) and its removal from potable water sources, and in the development of adsorption-based processes for removal of metals, NOM, and other contaminants from solutions. For the past thirteen years, a major focus of Dr. Benjamin's work has been membrane treatment of drinking water, and in particular, approaches for interfering with membrane fouling by NOM. In addition to the topics noted above, he has published research on conventional coagulation and filtration processes, diffusion dialysis, and mineral dissolution kinetics. Dr. Benjamin's work has been recognized by a Fulbright fellowship and several awards for best publications in various journals, and three of his students have won awards for best doctoral thesis in environmental engineering. In addition to his research activities, he has served on the Board of Directors of the Association of Environmental Engineering and Science Professors (AEESP), has written a widely adopted graduate-level textbook on Water Chemistry (McGraw-Hill, 2002), and is preparing another text on Physical-Chemical Treatment of Water with Professor Desmond Lawler of the University of Texas. Dr. Benjamin has twice held five-year appointments to endowed Chairs, and was recently selected as the AEESP Distinguished Lecturer for 2009-10. Dr. Benjamin's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency and National Science Foundation) and American Water Works Association Research Foundation (AwwaRF), with additional grant support from state and local governments, industry, and foundations.

Biddinger, Gregory R.

Natural Land Management

After a rich 25 year career with ExxonMobil, which included management and senior technical positions in areas of environment and sustainability, Dr. Gregory R. Biddinger founded and is currently the Managing Director of Natural Land Management, a consulting firm focused on integrating technical, legal, regulatory, and market based approaches to achieve sustainable outcomes in the operation and management of land throughout its natural lifecycle. He holds a B.S. in Science Education from Mount St. Mary's College (1972), a Ph.D. in Ecology/Physiology from Indiana State University (1981), and conduct Post-Doctoral work in Ecological Toxicology at Cornell University (1981-1983). Dr. Biddinger has practiced professionally as an environmental scientist for over 30 years. His professional experience covers a broad range of tools and techniques to assess and manage the environmental aspects, risks and impacts of industrial manufacturing processes and commercial products. Dr. Biddinger's experience ranges from the design and establishment of ecotoxicological testing facilities for Cornell University and the Illinois Environmental Protection Agency in the early part of his career; to the design and implementation of strategic environmental business planning processes and the creation of sustainable approaches for product development and land management for ExxonMobil in more recent years. During his career, Dr. Biddinger has been active in the development and review of ecological risk assessment methods, and in drafting international standards related to ecotoxicology, Risk-Based Corrective Action and environmental management systems (i.e. International Organization for Standardization' ISO 14000). He is currently exploring the utility of ecosystem service assessment and valuation tools to aide private and public sector decisions. Dr. Biddinger's research has been conducted without the support of grants from either federal government agencies or private companies. Dr. Biddinger has been an active participant in professional societies, industry technical working groups and has served on numerous governments expert panels and peer reviews. He was the founding chair of the Society of Environmental Toxicology and Chemistry (SETAC) Ecological Risk Assessment Advisory Group (chaired 1992-2002) and co-lead the founding of the SETAC journal Integrated Environmental Assessment and Management. Additionally, Dr. Biddinger served as a member of the chartered U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) from 2003 to 2009 and the EPA SAB Ecological Processes and Effects Committee (EPEC) from 1999 to 2003. His work on the EPA SAB Committee on Valuation of Protection of Ecosystems and Ecological Services (2004-2009) has spurred his current passion for integrating ecosystem service concepts and assessment tools into private sector decision-making and regional land-use planning. Pertinent to the topic of Ecosystem Services he is an active member of the Business for Social Responsibilities Ecosystem Service Markets and Tools Workgroup which is collaborating with government, academic and conservation organizations to advance the capacity and quality of ecosystem service assessment and valuation approaches for use in business planning processes.

Campbell, Jerry

The Hamner Institutes for Health Science

Dr. Jerry Campbell is a Scientist and Associate Director of the Center for Human Health Assessment in the Institute for Chemical Safety Sciences at The Hamner Institutes for Health Science. He holds a B.S. (1993) and M.S. (1997) in Environmental Health Science, and a Ph.D. in Toxicology (2004) from the University of Georgia. Dr. Campbell's research interests include the development of physiologically based models and their application to chemical risk assessment. His areas of focus include the incorporation of tissue dosimetry with probabilistic methodologies and mode-of-action information into quantitative chemical risk assessment and the interpretation of human biomonitoring data in exposure assessment to environmental chemicals. In particular, with a team that includes Drs. Harvey Clewell and Melvin Andersen, Dr. Campbell's research is focused on the development of a "State of the Science" risk assessment for phthalate exposure. Concern has arisen over recent research implicating dibutyl phthalate (DBP), as well as other phthalate diesters) in the disruption of testosterone production in the male fetus resulting in male reproductive malformations. The primary basis of Dr. Campbell's research will be the development of a human physiologically-based pharmacokinetic (PBPK) models to describe the prenatal and neonatal exposure to endocrine active phthalates including DBP. The PBPK models will incorporate human metabolic parameters measured in vitro. Once completed, the PBPK models for phthalates will be employed to investigate human exposure to phthalate diesters through interpretation of biomonitoring data. Dr. Campbell is also extensively involved in The Hamner's Tox21 program to reduce the use of animal species in toxicology testing. His primary focus is on the development of three dimensional in vitro models for hepatic toxicity and in vitro to in vivo extrapolation of metabolic rates. Dr. Campbell's recent publications include "In vitro metabolism of di(2-ethylhexyl) phthalate (DEHP) by various tissues and cytochrome P450s of human and rat", "Formaldehyde: integrating dosimetry, cytotoxicity, and genomics to understand dose-dependent transitions for an endogenous compound", "Challenges in the application of quantitative approaches in risk assessment: a case study with di-(2-ethylhexyl)phthalate", "Evaluation and prediction of pharmacokinetics of Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) in the monkey and human using a PBPK model", "Quantitative interpretation of human biomonitoring data", and "A PBPK modeling assessment of the competitive metabolic interactions of JP-8 vapor with two constituents, m-xylene and ethylbenzene." Dr. Campbell's research has been supported by grants from private companies and governmental agencies including the American Chemistry Council Long Range Initiative, U.S. Environmental Protection Agency and the National Institutes for Environmental Health Sciences.

Chapman, Peter

Golder Associates Ltd.

Dr. Peter M. Chapman is a Principal and Senior Environmental Scientist at Golder Associates Ltd (Burnaby, BC, Canada). He holds a B.Sc. in Marine Biology (1974), M.Sc. in Biological Oceanography (1976), and Ph.D. in Benthic Ecology (1979) at the University of Victoria, BC, Canada. Dr. Chapman's professional areas of specialization are ecotoxicology/toxicity testing, ecological risk assessment, and aquatic ecology. He has directed development and source evaluation studies of contaminants and other stressors in water and sediment involving sewage treatment plants, mining, manufacturing, pulp and paper, wood processing, hazardous waste disposal, landfill operations, oil and gas, smelting and food processing. Dr. Chapman has served as an advisor to the federal governments of both the United States and Canada for environmental toxicology and biomonitoring assessment policy and protocols and directed projects (for government and industry) involving biological monitoring; assessment of contaminant levels in tissues, sediments and water; ecological surveys; literature reviews for ranking environmental contaminants; and, bioassessment (e.g., toxicity testing). He has developed and verified a variety of bioassessment protocols for measuring/ predicting toxicity and bioaccumulation, including the use of benthic indicators for contaminant analysis and various toxicity tests. Dr. Chapman's research was key to the development of the Sediment Quality Triad weight-of-evidence approach to determining pollution-induced degradation in aquatic ecosystems. He is the author of over 200 refereed journal and book publications, 3 edited books, and over 200 technical reports on subjects including: taxonomy, aquatic ecology, development of monitoring programs, risk assessment, and biological effects of chemicals. Dr. Chapman is Senior Editor for the journal Human and Ecological Risk Assessment, Editor of the Learned Discourses in the journal Integrated Environmental Assessment and Management (IEAM), and serves on the Editorial Board of the journal Marine Pollution Bulletin. Dr. Chapman's research has been conducted without the support of grants from either government agencies or private companies. He is a member of the U.S. Environmental Protection Agency (EPA) Science Advisory Board Ecological Processes and Effects Committee. In 1996 Dr. Chapman received an award from EPA Region 10 for resolving environmental issues in Port Valdez, Alaska. In 2001 the Society of Environmental Toxicology and Chemistry (SETAC) awarded Dr. Chapman its highest award, the Founders Award, for an outstanding career and contributions to the environmental sciences.

Chow, Judith

Desert Research Institute

Dr. Judith Chow is Nazir and Mary Ansari Chair in Science and Entrepreneurialism and a Research Professor in the Division of Atmospheric Sciences at the Desert Research Institute (DRI) in Reno, Nevada. She holds a B.S. in Biology from Fu-Jen Catholic University in Taiwan (1974), and an M.S. in Air Pollution Control (1983) and Sc.D. in Environmental Science and Physiology (1985) from Harvard University. Established in 1959, DRI is a dedicated research component of the Nevada System of Higher Education. Dr. Chow has led DRI's Environmental Analysis Facility since its inception in 1985. For more than 30 years, she has conducted air quality studies and performed data analysis to improve understanding of effects of air quality on human health, visibility, historical treasures, ecosystems, and climate. Dr. Chow is currently the principal investigator for organic and black carbon measurements for the U.S. Environmental Protection Agency's (EPA) Chemical Speciation Network (CSN) and the Interagency Monitoring of Protected Visual Environments (IMPROVE) network, tracking changes in air quality with control measures at the port of Los Angeles, and conducting real-world emissions characterization in Canada's Athabasca Oil Sands region. She has been principal investigator or a major collaborator in more than 50 large air quality studies (and many smaller ones) across the United States and in several other countries. Dr. Chow prepared and revised sections of the EPA's PM Criteria Document pertaining to chemical analysis and source emissions. She contributed to EPA guidance documents on network design, continuous particulate monitoring, and particulate matter chemical speciation. Dr. Chow's research has been supported by grants primarily from the federal government (U.S. Environmental Protection Agency, National Park Service, Department of Defense), state and regional air quality management authorities, with additional support from industry and foundations. As chair and a member of the Air & Waste Management Association's (A&WMA) Critical Review Committee, Dr. Chow has coordinated the Critical Review and discussion focused on topics concerning advances in environmental science and technology. She was chair of the Publications Committee for the Journal of the Air & Waste Management Association and serves on Editorial Boards and/or as Associate Editor for several international journals including: the Journal of Air Quality, Atmosphere, & Health, Aerosol and Air Quality Research, and Atmospheric Pollution Research, and as Thematic Editor for Particulate. Dr. Chow was a member of the National Research Council's (NRC) Committee on Research Priorities for Airborne Particulate Matter (1998–2003), and served on the NRC Board on Environmental Studies and Toxicology (2002–2005). She is also a member of other advisory panels for the EPA, National Environmental Respiratory Center [New Mexico], and South Coast [California] Air Quality Management District. Dr. Chow is also a member of the Air Monitoring and Methods Subcommittee (AMMS, formerly the Ambient Air Monitoring and Methods Subcommittee) of the EPA's Clean Air Scientific Advisory Committee (CASAC) since 2004. She is the principal author or co-author of ~320 peer-reviewed articles and ~90 peer-reviewed book chapters and has been recognized by ISI Highly Cited.com in ecology and environment with more than 8,200 citations of her work. Dr. Chow was recently selected for the 2011 Shaanxi Province Friendship Award in China and the California Air Resources Board 2011 Haagen-Smit Clean Air Award for her contributions to air quality science and technology.

Clark, James R.

Independent Consultant

Dr. James R. Clark is currently a semi-retired, independent consulting scientist in ecological and environmental toxicology studies. He retired from Exxon Mobil in August of 2010 as a Senior Engineering Advisor. He joined Exxon in 1992, after a twelve-year career as a research biologist with the U.S. Environmental Protection Agency (EPA). Dr. Clark holds a B.S. in Fisheries at the University of Michigan (1972), and an M.S. (1977) and Ph.D. (1980) in Zoology and Aquatic Ecology from Virginia Polytechnic Institute and State University (Virginia Tech). At the EPA, Dr. Clark served as an Office of Research and Development scientist in aquatic toxicology and ecological risk assessment, working and managing a variety of laboratory and field studies for pesticides, industrial chemicals and contaminated site clean-ups. He was responsible for EPA's environmental assessments of the bioremediation technology developed and applied during the Alaskan Oil Spill clean-up program. Dr. Clark led ExxonMobil's Oil Spill Research Program for Refining and Supply, and played a corporate and industry leadership role in the development and evaluation of environmentally relevant techniques and strategies for oil and chemical spill response. He has extensive experience in laboratory and field assessments of petroleum industry products and activities, complex effluents, contaminated soils and sediments as well as pesticides and industrial chemicals. Dr. Clark has developed and applied ecological hazard and risk assessment approaches to address a wide variety of environmental issues. Dr. Clark's research has been supported by grants from private companies, with core grant research support being from Exxon Corporation. He is active in several professional/technical organizations involved with ecological risk assessment and serves on a number of professional, academic, and governmental advisory panels. Dr. Clark has authored over 85 peer-reviewed publications, and nearly 100 technical presentations at national and international meetings and symposia.

Clarke, James H.

Vanderbilt University

Dr. James H. Clarke is Professor of Civil and Environmental Engineering and Professor of Earth and Environmental Sciences at Vanderbilt University. He holds a B.A. in Chemistry from Rockford College (1967) and a Ph.D. in Theoretical Physical Chemistry from The Johns Hopkins University (1973). Prior to joining the full-time Vanderbilt faculty in 2000, Dr. Clarke was the Chairman, President and Chief Executive Officer of an internationally recognized consulting firm that specialized in the investigation and remediation of contaminated sites, risk assessment and industrial wastewater treatment. This company, Eckenfelder Inc., completed several Small Business Innovation Research projects for the U.S. Environmental Protection Agency concerning new and emerging technologies for contaminated site remediation. His experience in the areas of contaminated site evaluation, risk assessment, remediation and post-closure management and monitoring includes consultation activities for several Superfund sites, hazardous waste sites, and contaminated sites within the former U.S. Department of Energy nuclear weapons complex program. Dr. Clarke was a member of the former Nuclear Regulatory Commission (NRC) Advisory Committee on Nuclear Waste and Materials for which he was the lead member for decommissioning and risk informed regulation. Currently, he is a consultant to the NRC Advisory Committee on Reactor Safeguards. Dr. Clarke's research has been supported by grants from both government agencies and private companies.

Daston, George

Proctor & Gamble Company

Dr. George Daston is Victor Mills Society Research Fellow at the Procter & Gamble Company, and an adjunct Professor of Pediatrics at University of Cincinnati. He holds a B.S. in Biology from University of Miami (1978) and a Ph.D. in Developmental Biology and Teratology (1981) from the University of Miami, Coral Gables, Florida. Dr. Daston has published over 100 articles and book chapters and edited five books in toxicology and risk assessment. His current research efforts are in the areas of toxicogenomics and mechanistic toxicology, particularly in addressing how findings in these fields can improve risk assessment for chemicals and the development of non-animal alternatives. Dr. Daston's research has been funded by Procter & Gamble and by a grant from the Cefic (European chemical industry association) Long-range Research Initiative. He has served as President of the Teratology Society, Councilor of the Society of Toxicology, on the EPA Board of Scientific Counselors, National Toxicology Program Board of Scientific Counselors, National Research Council's Board of Environmental Studies and Toxicology, and National Children's Study Advisory Committee. Dr. Daston is Editor-in-Chief of Birth Defects Research: Developmental and Reproductive Toxicology. He manages the AltTox website, which is devoted to the exchange of scientific information leading to the development of in vitro replacements for toxicity assessments. Dr. Daston has been awarded the Josef Warkany Lectureship by the Teratology Society, the George H. Scott Award by the Toxicology Forum, and was elected a Fellow of AAAS.

Ducoste, Joel

North Carolina State University

Dr. Joel Ducoste is a Professor in the Civil, Construction, and Environmental Engineering Department at North Carolina State University. He holds a B.S. (1988) and M.Eng. (1989) in Mechanical Engineering from Rensselaer Polytechnic Institute, and a Ph.D. in Environmental Engineering (1996) from the University of Illinois at Urbana-Champaign. Dr. Ducoste is a national and international recognized expert in modeling water and wastewater treatment processes using Computational Fluid Dynamics (CFD). His current research interests include physico-chemical processes in water treatment, computational fluid dynamics modeling, solid/liquid separation processes, chemical and UV disinfection, advance oxidation, water/wastewater process optimization, and wastewater sewer collection system sustainability. Dr. Ducoste has served on advisory committees such as the American Water Works Association (AWWA) Particulate committee, AWWA project advisor for research projects funded by AWWA, National Science Foundation (NSF) graduate fellowship awards committee, and International Population Balance Model scientific and organizing committees. Dr. Ducoste's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from federal and state and local government (National Science Foundation, U.S. Environmental Protection Agency, U.S. Department of Energy), Water Research Foundation, Water Environment Research Foundation, and North Carolina State University Water Resources Research Institute, with additional grant support from state and local governments, industry, and foundations. He has also served on the North Carolina House of Representatives Special Committee on Offshore Energy Exploration Study. Dr. Ducoste currently serves as an Associate Editor for American Association of Civil Engineers (ASCE) Journal of Environmental Engineering and is a board member of the North Carolina Fulbright Association and the U.S. Environmental Protection Agency Science Advisory Board Drinking Water Committee. He also serves on the Water Environment Federation (WEF) FOG Sewer Collection sub-committee. Dr. Ducoste is a member of AWWA, WEF, International Ultraviolet Association (IUVA), and Association of Environmental Engineering and Science Professors.

Giesy, John P.

University of Saskatchewan

Dr. John P. Giesy is currently Professor and Canada Research Chair in Environmental Toxicology in the Department of Veterinary Biomedical Sciences and Toxicology Centre at the University of Saskatchewan. He is also Distinguished Professor Emeritus of Zoology at Michigan State University in East Lansing, Michigan, where he was a Professor for 26 years. He is also Chair Professor at Large of Biology & Chemistry, at City University of Hong Kong and Concurrent Professor of Environmental Science at Nanjing University, China. Dr. Giesy holds a B.S., Summa cum laude with honors, in Biology from Alma College in Alma, Michigan (1970), and an M.S. (1971) and Ph.D. (1974) in Limnology from Michigan State University. Dr. Giesy is a world leading eco-toxicologist with interests in many aspects of eco-toxicology, including both the fates and effects of potentially toxic compounds and elements, particularly in the area of ecological risk assessment. He has conducted research into the movement, bioaccumulation, and effects of toxic substances at different levels of biological organization, ranging from biochemical to ecosystem. Dr. Giesy has done extensive research in the areas of metal speciation, multi-species toxicity testing, biochemical indicators of stress in aquatic organisms, fate and effects of Polycyclic aromatic hydrocarbons (PAHs), halogenated hydrocarbons, including chlorinated dibenzo-dioxins and -furans, PCBs and pesticides. Dr. Giesy discovered the phenomenon of photo enhanced toxicity of organic compounds, such as PAHs and was the first to report the occurrence of perfluorinated chemicals in the environment. His studies include both laboratory and field as well as mesocosm studies and apply tools from molecular biology to ecosystem-level. Dr. Giesy was the first to report the occurrence of perfluorinated compounds in the environment. Dr. Giesy's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from international, federal, state and local government (including the State Key Laboratory for Marine Pollution, City University, Hong Kong; National Plan for Science and Technology of Saudi Arabia; National Science and Engineering Research Council of Canada; Canada Institute for Health Research; National Science and Engineering Research Council of Canada; Chinese Ministry of Education; U.S. Environmental Protection Agency), with additional grant support from state and local governments, industry, and foundations. He has published 663 peer-reviewed articles and presented 1,125 lectures, world-wide. Dr. Giesy's research is significantly used and cited by other researchers; he is in the top 0.1% of active authors (Institute of Scientific Information Current Contents), and was the 2nd most cited author in the field of Ecology/Environmental Science over the period 1997-2007 with 12,437 citations.

Gordon, Terry

New York University

Dr. Terry Gordon holds the rank of Professor of Environmental Medicine at the New York University (NYU) School of Medicine. He holds a B.S. in Physiology (1974) and an M.S. in Toxicology (1976) from the University of Michigan, and a Ph.D. in Toxicology from Massachusetts Institute of Technology (1981), and was appointed to the faculty of the Department of Environmental Medicine in 1989. He has served as an ad hoc member of grant review panels and/or site visit teams for the National Institute of Environmental Health Services (NIEHS), National Institute of Allergy and Infectious Diseases (NIAID), National Coalition for Cancer Research (NCCR), U.S. Department of Defense (DOD), Bureau of Mines, Health Canada, and the U.S. Environmental Protection Agency (EPA). Dr. Gordon currently serves as Chair of the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value committee, a volunteer organization that publishes occupational exposure levels that are used as workplace safety guidelines throughout the world. Dr. Gordon's broad research interest is in inhalation toxicology. The major focus of his research lab is the identification and understanding of the role of genetic host factors in the pathogenesis of the adverse pulmonary effects produced by inhaled environmental and occupational agents. Because inter-individual responses to inhaled particles and gases vary so greatly in both human subjects and test animals, Dr. Gordon has hypothesized that genetic susceptibility factors play a major role in environmental and occupational lung disease. In collaboration with a number of investigators in the department, his laboratory uses classic murine genetics models, computational genomics, and DNA microarrays to identify genes involved in the acute response as well as in the development of tolerance to repeated exposure to inhaled toxicants. Dr. Gordon also plays a major role in the particulate matter (PM) research program at NYU, and was among the first researchers to use concentrator technology to study the adverse cardiopulmonary effects of ambient PM. He also led a large collaborative effort amongst EPA's five original PM research centers to evaluate the in vitro and in vivo toxicity of size-segregated PM collected in the U.S. and Europe. Dr. Gordon's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency, Centers for Disease Control, National Institute of Environmental Health Sciences), with additional grant support from state and local governments, and industry. Dr. Gordon is an active member of the Society of Toxicology (SOT), and has served on the Program Committee (2002-2005), the Placement Service (1998-2001), Membership Committee (2009-2012), and as President of its Inhalation Specialty Section during 2002-2003. He has served as a consultant/author to the EPA on issues of pulmonary toxicology related to the development of various documents, and he served on EPA's Clean Air Scientific Advisory Committee (CASAC) Oxides of Nitrogen (NOx) and Sulfur Oxides (SOx) Primary National Ambient Air Quality Standards (NAAQS) Review Panels.

Harris, Cynthia M.

Florida A&M University

Dr. Cynthia M. Harris is Director of and Professor in the Institute of Public Health of Florida A&M University. Dr. Harris holds a B.A. in Biology (1978) and an M.A. in Genetics (1981) from the University of Kansas, and a Ph.D. in Biomedical Sciences from Meharry Medical College (1985) with concentration in the areas of nutritional biochemistry and toxicology. Dr. Harris was awarded a postdoctoral fellowship in the Interdisciplinary Programs in Health of the Harvard School of Public Health, where she conducted research regarding the effects of heavy metals on pulmonary function and environmental risk assessment. She is a Diplomat of the American Board of Toxicology (DABT). From 1990-1996, Dr. Harris served as a staff toxicologist and branch chief with the Agency for Toxic Substances and Disease Registry, a sister agency of the Centers for Disease Control and Prevention, in Atlanta, Georgia. Dr. Harris was the first African American branch chief of the Agency for Toxic Substances and Disease Registry. As branch chief of the Community Health Branch, she was responsible for the administration and management of staff who conducted environmental health assessments, at the request of individual citizens and community groups across the nation. In 1996, Dr. Harris accepted the position of Director of the Institute of Public Health at Florida A&M University. Since her tenure, she has been actively engaged in the general planning and development of the MPH program. The 1997 Florida State Legislature approved and appropriated funding to support the MPH program and the MPH program received full, maximum accreditation for its initial review (2000-2005). Dr. Harris has served on numerous committees and panels, which includes membership on the Board of Directors for the Florida Public Health Association, Chair of the Florida Public Health Partnership Council on Stroke, member of the Pregnancy Mortality Review Board, member of the Florida Sickle Cell Task Force, member of the American Public Health Association, member of the editorial board of the Harvard Journal of Public Health, reviewer for the Journal of Environmental Health, and board member for the Panhandle Chapter of the Florida March of Dimes. She has also provided a review for the Food and Nutrition Board of the National Academy of Sciences. She is a Full Member of the Society of Toxicology and was appointed by the Secretary of the U.S. Department of Health and Human Services to the Agency for Toxic Substances and Disease Registry Board of Scientific Counselors. In addition, she has served on numerous grant reviews for several federal agencies such as the Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), National Institute of Environmental Health Services (NIEHS), and Health Resources and Services Administration (HRSA). Dr. Harris' research has been supported by grants primarily from the federal government (CDC and HRSA), with additional grant support from state and local governments and foundations.

Hopke, Philip K.

Clarkson University

Dr. Philip K. Hopke is the Bayard D. Clarkson Distinguished Professor at Clarkson University, the Director of the Center for Air Resources Engineering and Science (CARES), and the Director of the Institute for a Sustainable Environment (ISE). He holds a B.S. in Chemistry from Trinity College, Hartford, CT (1965), and an M.A. (1967) and Ph.D. (1969) in Chemistry from Princeton University. Dr. Hopke is the past Chair of U.S. Environmental Protection Agency (EPA)'s Clean Air Scientific Advisory Committee (CASAC), and has served on the EPA Science Advisory Board (SAB) Professor Hopke is a Past President of the American Association for Aerosol Research (AAAR), and was a member of the more than a dozen National Research Council committees. He was recently appointed to the NRC's Board of Environmental Studies and Toxicology. He is a fellow of the International Aerosol Research Assembly, the American Association for the Advancement of Science and the American Association for Aerosol Research. He is an elected member of the International Statistics Institute and the recipient of the Eastern Analytical Symposium Award in Chemometrics. Dr. Hopke is also a recipient of the David Sinclair Award of the AAAR. He served as a Jefferson Science Fellow at the U.S. Department of State during the 2008-09 academic year. After a post-doctoral appointment at the Massachusetts Institute of Technology and four years as an assistant professor at the State University College at Fredonia, NY, Dr. Hopke joined the University of Illinois at Urbana-Champaign, rising to the rank of professor of environmental chemistry, and subsequently came to Clarkson in 1989 as the first Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He moved his principal appointment to the Department of Chemical and Biomolecular Engineering in 2000. Since 2002, Dr. Hopke has been the Clarkson Professor and Director of CARES. Dr. Hopke's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency, U.S. Department of Energy, and the National Science Foundation) with additional grant support from state and local governments, industry, and foundations. On July 1, 2010, he took on the directorship of the ISE that houses Clarkson's undergraduate and graduate environmental science degree programs as well as managing Clarkson's sustainability initiatives.

Horvath, Arpad

University of California, Berkeley

Dr. Arpad Horvath is a Professor of Civil and Environmental Engineering at the University of California, Berkeley. He heads the Energy, Civil Infrastructure and Climate, as well as the Engineering and Project Management graduate programs. He is the Director of UC Berkeley's Consortium on Green Design and Manufacturing, and the Director of UC Berkeley's Engineering and Business for Sustainability Certificate Program. He holds a Dipl. Eng. (M.S.) degree in Civil Engineering from the Technical University of Budapest, Hungary (1993), and M.S. (1995) and Ph.D. (1997) degrees in Civil Engineering from Carnegie Mellon University. His research focuses on life-cycle environmental and economic assessment of products, processes, and services, particularly of engineered systems, civil infrastructure systems, and the built environment. He is Associate Editor of the Journal of Infrastructure Systems, and is on the Editorial Board of Environmental Science & Technology, Environmental Research Letters, and the Journal of Industrial Ecology. Dr. Horvath was Conference Chair of the 6th International Conference on Industrial Ecology in 2011, Conference Co-chair of the IEEE International Symposium on Electronics and the Environment in 2000, 2001 and 2007, and Program Co-chair in 1999, 2006, 2008, and 2009. Dr. Horvath is a recipient of the American Society of Civil Engineer's Walter L. Huber Civil Engineering Research Prize, the Laudise Prize "for outstanding achievements in industrial ecology by a young scientist or engineer" of the International Society for Industrial Ecology, the Excellence in Review Award from Environmental Science & Technology, the National Science Foundation CAREER award, four-time recipient of the AT&T Foundation Industrial Ecology Faculty Fellowship, and co-recipient of the NSF-Lucent Technologies Industrial Ecology Fellowship. Two of his co-authored papers were among the Top Papers in Environmental Science & Technology in 2008 and 2011. Dr. Horvath's research has been supported by grants from both private companies and government agencies, with core grant research support primarily from industry, foundations, the federal government (National Science Foundation), and several California state agencies.

Jacksier, Tracey

Air Liquide

Dr. Tracey Jacksier is an International Senior Expert and the Research and Development Analysis and Specialty Gas Program Director at the Newark, Delaware Research and Technology Center of Air Liquide, a world leader in gases for industry, health and the environment. She holds a B.S. in Biochemistry from Purdue University (1983) and a Ph.D. in Physical Chemistry from the University of Massachusetts (1992). Dr. Jacksier is responsible for defining the world-wide development of key technologies in specialty gases used for environmental compliance and improved process quality, as well as the recommendation of new analytical technologies within the Air Liquide Group. She has been with Air Liquide for 20 years; prior to her current position, she has previously served as Analysis Group Manager, Project Manager for Elemental Analysis, and Postdoctoral Researcher. Prior to joining Air Liquide, Dr. Jacksier served for eight years in the Cooperative Education Program / Intern and as a Chemist at International Business Machines in NY. She has authored or co-authored more than 100 articles and technical presentations and holds patents in the areas of gas purification and standard manufacturing. Dr. Jacksier currently serves on the advisory boards of Princeton University Engineering Research Center on Mid-InfraRed Technologies for Health and the Environment, and Northwestern University International Institute for Nanotechnology. Dr. Jacksier's research has been supported by funding from Air Liquide, and has received no external grants from either government agencies, private companies, or foundations.

Landis, Wayne

Western Washington University

Dr. Wayne Landis is Professor and Director, Institute of Environmental Toxicology Huxley College of the Environment, Western Washington University. He holds a B.A. in Biology from Wake Forest University, (1974), an M.A. in Biology from Indiana University (1978), and a Ph.D. in Zoology from Indiana University (1979). Dr. Landis' areas of expertise and research activities include: environmental toxicology, the effects of toxicants on populations, and ecological risk assessment at large spatial and temporal scales. His research contributions also include: co-development of the Community Conditioning Hypothesis, the use of multivariate analysis in microcosm data analysis, creation of the Action at a Distance Hypothesis for landscape toxicology, the application of complex systems theory to risk assessment, and development of the Relative Risk Model for multiple stressor and regional-scale risk assessment and specialized methods for calculating risk due to invasive species and emergent diseases. Dr. Landis has authored over 130 peer-reviewed publications and government technical reports, made over 220 scientific presentations, edited four books, and wrote the textbook, Introduction to Environmental Toxicology, now in its fourth edition. He has consulted for industry; nongovernmental organizations as well as federal (U.S. and Canada), state, provincial, and local governments. Dr. Landis' research has been supported by grants from government agencies, private companies, and Non-Government Organizations (NGOs), with core grant research support primarily being from the federal governments (U.S. Air Force, Environmental Protection Agency, U.S. Forest Service), DuPont, and Teckcominco Ltd., with additional grant support from state, provincial and local governments, industry, NGOs and foundations. Dr. Landis has served on the American Society of Testing and Materials (ASTM) Committee on Publications overseeing a variety of environmentally related symposia proceedings. He serves on the editorial boards of the journals Human and Ecological Risk Assessment and Integrated Environmental Assessment and Management, and is the ecological risk area editor for Risk Analysis. Dr. Landis is a member of the Society of Environmental Toxicology and Chemistry (SETAC) and served on the SETAC Board of Directors from 2000-2003. In 2007 he was named a Fellow of the Society for Risk Analysis.

Larson, Timothy

University of Washington

Dr. Timothy Larson is a Professor in the Department of Civil and Environmental Engineering at the University of Washington. He is also an adjunct Professor in the Department of Occupational and Environmental Health Sciences at the University of Washington. Dr. Larson holds a B.S. in Chemical Engineering from Lehigh University (1968), and an M.S.Ch.E. (1972) and Ph.D. (1976) from the University of Washington. He is currently the holder of the Alan and Inger Osberg Endowed Chair in Civil and Environmental Engineering at the University of Washington. Dr. Larson is a member of the Air and Waste Management Association, the International Society of Exposure Analysis and the American Association for Aerosol Research. His expertise is in characterization of urban air pollution, exposure assessment of airborne particles and gases, and source/receptor relationships of ambient air pollutants. Dr. Larson major focus in recent years has been on assessment of human exposure to outdoor generated air pollutants. Dr. Larson has previous served as a member of U.S. Environmental Protection Agency (EPA)'s Advisory Council on Clean Air Compliance Analysis (COUNCIL) and EPA's advisory committee on Indoor Air Quality/Total Human Exposure. In addition, he served on the EPA Science Advisory Board as a member of the Health and Ecological Effects Subcommittee and the Air Quality Modeling Subcommittee. Dr. Larson's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal, state and local government (U.S. Environmental Protection Agency, National Science Foundation, National Institutes of Health, National Institute of Environmental Health Sciences, Washington State Department of Ecology, and Puget Sound Clean Air Agency) with additional grant support from state and local governments, industry, and foundations.

Lee, Cindy M.

Clemson University

Dr. Cindy M. Lee is a Professor of Environmental Engineering and Earth Sciences and of Environmental Toxicology at Clemson University. She holds a B.A. in English from Indiana University (1977), a B.A. in Geology and Chemistry from University of Colorado (1984), and a Ph.D. in Geochemistry from the Colorado School of Mines (1990). Dr. Lee joined the faculty at Clemson in 1990. Her major teaching and research interests are the chemistry of environmentally significant organic compounds and environmental sustainability. Dr. Lee's specific research interests involve the use of chiral chemistry as a tool for investigating the fate and transport of pesticides, pharmaceuticals, and persistent organic pollutants (POPs) in the environment; the bioremediation of chlorinated contaminants; and the role of black carbon and natural organic matter in the fate of contaminants. Her research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from federal government (National Science Foundation, U.S. Environmental Protection Agency, U.S. Department of Energy, U.S. Army Corps of Engineers), with additional grant support from state and local governments, industry, and foundations. From July 2006 to July 2007, Dr. Lee served at the National Science Foundation as the founding Program Director of the Environmental Sustainability Program in the Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET), Directorate of Engineering. Dr. Lee has a national perspective on engineering and science research and research needs in environmental sustainability. She served as a member of the Energy and Environment Coordinating Group for development of the National Aeronautical Research and Development Plan under the auspices of the Office of Science and Technology Policy (OSTP). Dr. Lee participated on the Feedstocks Task Force of the U. S. Department of Energy's Biofuels Action Plan.

Lifset, Reid

Yale University

Mr. Reid J. Lifset is the Associate Director of the Industrial Environmental Management Program and Resident Fellow in Industrial Ecology at the Yale University School of Forestry and Environmental Studies. Professor Lifset holds a B.A. in Philosophy and History from Swarthmore College (1979), an M.S. in Political Science from Massachusetts Institute of Technology (1987), and an M.P.P.M. in Public and Private Management from Yale School of Management (1989). His research focuses on the application of industrial ecology to novel problems and research areas, and the evolution of extended producer responsibility. Mr. Lifset is the editor-in-chief and founder of the Journal of Industrial Ecology, an international peer-reviewed bimonthly on industry and the environment, headquartered at and owned by Yale University and published by Wiley-Blackwell. He serves on the Environmental Engineering Committee of the Science Advisory Board of the U.S. Environmental Protection Agency, and is a member of the governing council of the International Society for Industrial Ecology (ISIE), and the editorial advisory board for the Springer book series on Eco-efficiency in Industry & Science. He is an advisor to the Q Collection, New York, New York, an environmental design and furnishings firm. Mr. Lifset serves on the managing board of the American Journal of Science and is a topic editor for industrial ecology for the Encyclopedia of the Environment. Mr. Lifset's research and grants have been funded by government agencies, industry, and foundations.

Luster, Michael I.

West Virginia University

Dr. Michael I. Luster is currently Professor in the Dept. Of Community Medicine, School of Medicine and Adjunct Professor in the Dept. of Microbiology and Immunology at West Virginia University. He also serves as a senior advisor for the National Institute for Occupational Safety and Health (NIOSH) in Morgantown, West Virginia where he helps direct the genetics research program in molecular epidemiology. Dr. Luster also works as a private consultant in toxicology. He holds a B.A. in Biology from the University of Massachusetts (1969), and an M.A. (1972) and Ph.D. (1974) in Microbiology from Loyola University of Chicago. Dr. Luster retired as Chief of the Toxicology and Molecular Biology Branch at NIOSH in 2006 and prior to joining NIOSH in 1996, served as Head of the Environmental Immunology and Neurobiology Section at the National Institute of Environmental Health Sciences, National Institutes of Health (NIH) in Research Triangle Park, North Carolina. He has co-authored over 360 publications, holds several U.S. Patents and has co-edited 8 books in the area of Immunotoxicology. Dr. Luster is a recipient of the NIH Award of Merit, the Alice Hamilton Award for excellence in occupational safety and health research, and the Frank Blood Award from the Society of Toxicology. Dr. Luster has served on the Editorial Board of numerous journals including the Journal of Immunology, Environmental Health Perspectives, and Toxicology & Appl. Pharmacology, and has served as an ad-hoc member of the Scientific Advisory Boards for the U.S. Environmental Protection Agency, U.S. Food and Drug Administration (FDA) and Consumer Product Safety Commission (CPSC) as well as on advisory committees for the World Health Organization (WHO), International Life Sciences Institute (ILSI)/Health and Environmental Sciences Institute (HESI), National Academy of Sciences and World Resource Institute. Dr. Luster's research has been conducted without the support of grants from either government agencies or private companies.

Maki, Alan W.

Independent Consultant

Dr. Alan W. Maki is the retired Environmental Advisor for ExxonMobil Production Company. Dr. Maki holds a B.S. in Fisheries Biology (1969) from the University of Massachusetts, an M.S. in Environmental Toxicology (1971) from the University of North Texas, and a Ph.D. in Wildlife and Fisheries Management (1974) from Michigan State University. He previously worked at ExxonMobil Biomedical Sciences in East Millstone, New Jersey and with the ExxonMobil Safety, Health and Environment Department in Houston, Texas. Dr. Maki also served as Senior Environmental Scientist for Exxon in Alaska. Active in a wide range of professional organizations, he is a former member of the U.S. Environmental Protection Agency (EPA) Science Advisory Board and has served on numerous advisory panels for EPA Office of Research and Development. He is former President of the Society of Environmental Toxicology and Chemistry, and has served on National Academy of Science panels concerned with the assessment and management of ecological risks and environmental issues in Western Europe. Dr. Maki was responsible for providing advice and consultation concerning the environmental consequences of oil and gas exploration and production activities. While serving as Senior Environmental Scientist for Exxon in Alaska from 1985 to 1991, he managed numerous environmental programs in the Prudhoe Bay oil field and along Alaska's North Slope. Following the Exxon Valdez oil spill, he was responsible for managing Exxon's wildlife rescue rehabilitation program and for organizing the company's scientific assessment of ecological damage and recovery. Recently he has served as Science Advisor for BP during the deepwater Horizon oil spill. Dr. Maki has authored and co-authored over 250 publications and reports and 6 books on numerous aspects of environmental quality, ecological risk assessment, toxicology and aquatic biology. Dr. Maki's research has been conducted without the support of grants from either government agencies or private companies.

Mihelcic, James R.

University of South Florida

James R. Mihelcic is a Professor of Civil and Environmental Engineering and State of Florida 21st Century World Class Scholar at the University of South Florida. He holds a B.S. in Environmental Engineering from Pennsylvania State University (1981), and an M.S. (1985) and Ph.D. (1988) in Civil Engineering from Carnegie Mellon University. Dr. Mihelcic directs the Peace Corps Master's International Program in Civil & Environmental Engineering (<http://cee.eng.usf.edu/peacecorps>). His research interests are centered around sustainability, specifically understanding how global stressors such as climate, land use, and urbanization influence water resources, water quality, and provision of sanitation. Dr. Mihelcic is a past president of the Association of Environmental Engineering and Science Professors (AEESP) and is currently a Board Certified Environmental Engineering Member and Board Trustee with the American Academy of Environmental Engineers (AAEE). He is lead author for 3 textbooks: Fundamentals of Environmental Engineering (John Wiley & Sons, 1999); Field Guide in Environmental Engineering for Development Workers: Water, Sanitation, Indoor Air (ASCE Press, 2009); and, Environmental Engineering: Fundamentals, Sustainability, Design (John Wiley & Sons, 2010). Dr. Mihelcic's research has been funded through grants from government agencies (e.g., National Science Foundation, U.S. Environmental Protection Agency, U.S. Department of Education, Michigan Great Lakes Protection Fund), nongovernmental organizations (WateReuse Foundation, Water Environment Research Foundation, CARE-Madagascar), and municipalities (Cedar Rapids, Iowa; Mercer Wisconsin Sanitary District; and Western Lake Superior Sanitary District, Duluth, MN)).

Miller, Frederick J.

Independent Consultant

Dr. Frederick J. Miller is currently an independent consultant in dosimetry and inhalation toxicology. He holds a B.S. in Mathematics and Statistics (1967) and an M.S. in Statistics (1968) from the University of Wyoming, and a Ph.D. in Statistics from North Carolina State University (1977). From February, 1991 until April, 2005 he was employed in various capacities at the Hamner Institutes for Health Sciences (formerly CIIT) serving lastly as Vice President for Research. Dr. Miller began his research career in 1968 as a commissioned officer in the U.S. Public Health Service (PHS) and was assigned to the U.S. Environmental Protection Agency (EPA) when it was created in 1970. During his career with EPA, Dr. Miller was noted for bringing together interdisciplinary teams of scientists to solve important public health problems. Upon retirement from the PHS in 1989, he joined the faculty of Duke University Medical Center, continuing his long-standing interest in extrapolation modeling. His primary research interests have included pulmonary toxicology, respiratory tract dosimetry of gases and particles, lung physiology and anatomy, extrapolation modeling, and risk assessment. He is internationally recognized for his research on the dosimetry of reactive gases and has authored or co-authored 165 publications and book chapters and edited 3 books. Dr. Miller received a number of Scientific and Technical Achievement awards from EPA and also the PHS' Outstanding Service Medal. Dr. Miller has served as both a regular and an ad hoc member of EPA's Clean Air Science Advisory Committee and has served on numerous peer review and advisory panels for governmental and private organizations. He is a Fellow of the Academy of Toxicological Sciences and received the Career Achievement Award from the Inhalation Specialty Section of the Society of Toxicology at the 2005 annual meeting. Dr. Miller is also an Adjunct Medical Research Professor in the Department of Medicine, Duke University Medical Center. Dr. Miller's research has been conducted without the support of grants from either government agencies or private companies.

Murphy, Eileen

Rutgers University

Dr. Eileen Murphy is the Director of Research and Grants at the Rutgers University Ernest Mario School of Pharmacy. She holds a B.S. in English with a minor in Biology from the University of Notre Dame (1983), an M.S. in Environmental/Outdoor Education from Northern Illinois University (1984), and a Ph.D. in Environmental Science from Rutgers University (1989). Dr. Murphy coordinates multi-disciplinary research projects among faculty in pharmacology, toxicology, communication, environmental science, engineering and other disciplines. Her research interests include occurrence, fate and transport of pharmaceuticals and other anthropogenically-derived organic chemicals in the environment. Prior to holding this position, Dr. Murphy served as the Director of the New Jersey Department of Environmental Protection (NJDEP) Division of Science, Research and Technology. Before becoming Director in 2004, she served as Assistant Director for four years and as a research scientist for 15 years within the group, developing an expertise in the drinking water field. Dr. Murphy has focused much of her career on drinking water science, including contaminant occurrence and fate & transport. She has been involved in the issue of unregulated contaminants in drinking water and the treatment to remove them from finished water. Dr. Murphy's particular research emphasis is on exposures to toxic substances, fate and transport of toxic substances and assessments of the potential risks to human health and the environment posed by these exposures. Dr. Murphy's research has been conducted without the support of grants from either government agencies or private companies. She is co-author on numerous peer-reviewed scientific papers that have appeared in scholarly journals, including Environmental Science and Technology. Before coming to NJDEP, Dr. Murphy served as Assistant Director for the Douglass Project for Rutgers Women in Math and Science and as a Project Manager for the Center for Math, Science and Computer Education at Rutgers University.

Portier, Kenneth M.

American Cancer Society

Dr. Kenneth M. Portier is Managing Director of the Statistics & Evaluation Center at the American Cancer Society (ACS) home office in Atlanta, GA, and is Affiliate Professor of Biostatistics in the School of Public Health, Emory University. A native of south Louisiana, Dr. Portier holds a B.S. in Mathematics from Nicholls State University in Thibodaux, Louisiana (1973), and an M.S. in Statistics (1975) and Ph.D. in Biostatistics (1979) from the University of North Carolina, Chapel Hill. With ACS since early 2006, he provides general statistical support on design and analysis of cross-sectional and longitudinal sample surveys, program evaluation and cancer modeling. Prior to ACS Dr. Portier spent 27 years as a statistical consultant to researchers in agriculture, natural resources and the environment and as a teacher of applied statistics at the graduate level at the University of Florida. He has coauthored over 150 publications in many of the premier journals in agriculture, natural resources and environmental sciences. Dr. Portier has received national recognition for his teaching and twice participated in U.S. Department of Agriculture (USDA)-funded teaching grants, one on new methods for teaching natural resources sampling and the other to develop a study abroad course in natural resources assessment with the Czech Republic. His collaborations with other researchers at UF resulted in 36 funded research grants from numerous agencies and private companies, with core research support being from the federal government (National Science Foundation (NSF), USDA, U.S. National Oceanic and Atmospheric Administration (NOAA), U.S. Environmental Protection Agency (EPA), and the U.S. Department of the Interior). Dr. Portier continues to collaborate with UF's Center for Environmental and Human Toxicology on statistical questions that arise in environmental sampling and risk assessments. He is currently chair of EPA's Federal Insecticide, Fungicide, and Rodenticide Act Science Advisory Panel (FIFRA-SAP) and has participated in over 60 FIFRA-SAP meetings over the last 12 years. Dr. Portier has served on expert and advisory panels for the National Institutes of Health (NIH) National Institute of Environmental Health Sciences (NIEHS), the National Toxicology Program (NTP), and the World Health Organization Food and Agriculture Organization (WHO/FAO). His research interests are wide, including the application of new statistical methodologies to cancer research and environmental health.

Rabeni, Charles

University of Missouri

Dr. Charles Rabeni is a Research Professor in the Department of Fisheries and Wildlife at the University of Missouri. He holds a B.A. in Biology from Colby College (1966), an M.S. in Biology from Idaho State University (1971), and a Ph.D. in Zoology from the University of Maine (1977). Dr. Rabeni is former Leader of the Missouri Cooperative Fish and Wildlife Research Unit. His research addresses questions useful to the conservation or restoration of the biological integrity of streams to enhance their recreational and ecological benefits. Dr. Rabeni's focus is on invertebrates and fishes as endpoints and integrators of ecological conditions. His interest is in delineating those key environmental factors influencing the biota - such as siltation, dissolved oxygen, and extreme temperatures - and to design cost effective mitigation strategies. One current effort is a series of projects aimed at producing biologically-sound sediment criteria for Missouri streams. Dr. Rabeni has published over 90 peer-reviewed journal articles, book chapters, and book editorships. He has served in numerous capacities with the North American Benthological Society, including as President in 1992. For the American Fisheries Society, Dr. Rabeni served in numerous capacities including President of the Missouri Chapter and for two years as Associate Editor for the Transactions of the American Fisheries Society. He has served on numerous panels and boards, including: assisting the National Park Service by serving on expert panels and task forces to develop long-term monitoring protocols for their Prairie Cluster Park network, and their Heartland Park network; serving on an expert panel for the USGS's Grand Canyon Monitoring and Research Center to evaluate the existing biological research and monitoring program for the Colorado River; assisting the national office of the Nature Conservancy in their project for the conservation of aquatic species and ecosystems in the Central Tallgrass Prairie Region; as a member of an interagency team advising the Mark Twain National Forest (USFS) on research necessary to evaluate cumulative effects of timber harvest on aquatic fauna; serving on a joint agency (Missouri Department of Natural Resources, Missouri Department of Conservation, U.S. Natural Resources Conservation Service - NRCS) work group evaluating the ecological consequences of proposed NRCS PL-566 projects; serving as the scientific advisor on the Missouri Aquaculture Task Force to review relations between private aquaculture industry and the Missouri Department of Conservation; and serving on the Liaison Committee of the U.S. Geological Survey Water Resources Division National Water Quality Assessment Program-Ozark Region. Dr. Rabeni's research has been supported by grants from government agencies, with core grant research support primarily being from federal government (U.S. Environmental Protection Agency, Missouri Department of Natural Resources, Missouri Department of Conservation), with additional grant support from state and local governments.

Robinson, Allen

Carnegie Mellon University

Dr. Allen Robinson is a Professor in the Departments of Mechanical Engineering and Engineering and Public Policy at Carnegie Mellon University. He holds a B.S. in Civil Engineering from Stanford University (1990), and an M.S. (1993) and Ph.D. (1996) in Mechanical Engineering from the University of California at Berkeley. Dr. Robinson's research examines the impact of emissions from energy systems on urban and regional air quality, organic aerosols, and biomass energy. He joined Carnegie Mellon in 1998 after working for two years as a Postdoctoral Fellow at the Combustion Research Facility at Sandia National Laboratories. Dr. Robinson received the Carnegie Institute of Technology Outstanding Research Award in 2010, the Ahrens Career Development Chair in Mechanical Engineering in 2005 and the George Tallman Ladd Outstanding Young Faculty Award in 2000. He has authored or co-authored 77 peer-reviewed archival journal papers, and has led the Pittsburgh Air Quality Study which is a multi-disciplinary investigation of fine particulate pollution involving research groups from 14, Universities, 2 National Laboratories, and 2 companies. Dr. Robinson's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency, U.S. Department of Energy, the National Science Foundation, and the U.S. Department of Defense) with additional grant support from state and local governments, industry, and foundations. Dr. Robinson teaches courses on thermodynamics, climate change mitigation, combustion, and air quality engineering.

Schauer, James Jay

University of Wisconsin

Dr. James Jay Schauer is a Professor of Civil and Environmental Engineering at the University of Wisconsin-Madison and serves as the Associate Chair of the Department of Civil and Environmental Engineering for the Environmental Science and Engineering Division, the Director of the Water Science and Engineering Laboratory, and a Program Director at the Wisconsin State Laboratory of Hygiene at the University of Wisconsin-Madison. He holds a B.S. in Chemical and Petroleum Refining Engineering from the Colorado School of Mines (1984), an M.S. in Environmental Engineering from the University of California at Berkeley (1991), a Ph.D. from the California Institute of Technology (1998) and recently completed his MBA from the University of Wisconsin-Whitewater (2010). Dr. Schauer's research focuses on the development and application of air pollution sampling methods and advanced chemical analysis methods to understand the sources and impacts of air pollution. He is applying these tools in urban air pollution studies, human health studies, and climate studies. He has extensive expertise in the measurement and data analysis of measurements of organic aerosols, trace elements in particulate matter and atmospheric mercury. Dr. Schauer has led and participated in numerous monitoring studies and source testing projects throughout the United States and in Asia, Europe, and the Middle East. Dr. Schauer's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency, National Science Foundation, U.S. Department of Energy, National Oceanic and Atmospheric Administration), private industry consortia (Electric Power Research Institute, Water Environmental Research Foundation), and state and regional air quality management authorities, with additional grant support from state and local governments, industry, and foundations. He is a Guest Professor at Peking University (Beijing, China) and is a member of the United Nations Environmental Programs (UNEP) ABC-Asia Science Team. Dr. Schauer has been appointed as a Lead Author for the International Panel on Climate Change (IPCC) 5th Assessment Report, Working Group III: Mitigation. He has authored and co-authored over 200 peer-reviewed scientific publications that have been cited over 7000 times according to the Institute of Scientific Information Science Citation Index, and is a registered Professional Engineering in the State of Colorado and the State of Illinois.

Turner, Jay

Washington University

Dr. Jay Turner is an Associate Professor of Energy, Environmental and Chemical Engineering at Washington University in St. Louis. Dr. Turner holds B.S. and M.S. degrees from UCLA (1987) and a D.Sc. from Washington University (1993), all in Chemical Engineering. Following his M.S. studies, he spent two years at the University of Duisburg, Germany, where he was a DAAD Fellow. Following his D.Sc. studies, Dr. Turner spent eight months on assignment with the Federal Highway Administration, U.S. Department of Transportation, as an Air Quality Specialist. He subsequently joined the Washington University faculty in 1994 as an Assistant Professor of Engineering & Policy. Dr. Turner's research primarily focuses on air quality characterization and control with emphasis on field measurements and data analysis to support a variety of applications in the atmospheric science, regulation and policy, and health studies arenas. He was the Principal Investigator of the St. Louis – Midwest Fine Particulate Matter Supersite. He manages a field site in East St. Louis that has hosted several Federal Equivalent Method testing campaigns and was recently one of two U.S. Environmental Protection Agency (EPA) coarse particulate matter pilot speciation study sites. Current research projects include estimating lead emissions from piston engine aircraft, source apportionment of ambient particulate matter in Hong Kong, high time resolution air toxics metals measurements, and long-term fence-line monitoring for gaseous air toxics and particulate matter species at an industrial facility. Current and recent consulting activities include monitoring guidance and data analyses for agencies in four states in support of State Implementation Plan development. A second research area is green engineering with current funding to develop a technical, economic and life cycle inventory model for algal biodiesel production. Dr. Turner's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from the federal government (U.S. Environmental Protection Agency), regional planning organizations (LADCO), state and local governments (State of Missouri), and the private sector (Electric Power Research Institute, Sierra Research, Sonoma Technology). Dr. Turner has served on several state and local air quality-related advisory committees, the Science and Technical Support Workgroup of the Federal Advisory Committee Act (FACA) Subcommittee for Ozone, Particulate Matter, and Regional Haze Implementation Programs. He currently serves on the Ambient Monitoring and Methods Subcommittee (AMMS) of EPA's Clean Air Scientific Advisory Committee (CASAC), the Independent Technical Advisory Committee of the Texas Air Quality Research Program, and the Health Effects Institute project panel for the National Particle Components Toxicity Initiative. Dr. Turner was general chair for the 2007 Annual Conference of the American Association for Aerosol Research (AAAR) and currently serves on the AAAR Board of Directors.

Young, Thomas M.

University of California, Davis

Dr. Thomas M. Young is a Professor of Civil and Environmental Engineering at the University of California, Davis. He holds a B.S. in Chemical Engineering from Michigan State University (1985), an M.P.P. in Public Policy from the University of California (1987), Berkeley, and a Ph.D. in Environmental Engineering from the University of Michigan (1996). Before joining the faculty at UC Davis, Dr. Young worked for three years in U.S. Environmental Protection Agency (EPA)'s Office of Underground Storage Tanks, where he worked closely with several EPA laboratories. Dr. Young's current research centers on the experimental and modeling work required to proactively manage toxic chemicals to reduce their life cycle environmental impacts. The majority of his research has been in the measurement and modeling of contaminant fate and transport in the environment, particularly with respect to environmental sorption processes, and on sorption related water treatment processes. Dr. Young has published extensively on these topics, and has a strong interest in the application of engineering to environmental policy-making. He has received various awards, including the Distinguished Service Award from the Association of Environmental Engineering and Science Professors and a National Science Foundation (NSF) Career Award. Dr. Young is a member of the International Water Association, the American Society of Civil Engineers, American Chemical Society, Association of Environmental Engineering and Science Professors, and the Society of Environmental Toxicology and Chemistry. Dr. Young's research has been supported by grants from both government agencies and private companies, with core grant research support primarily being from federal and state and local government (National Institutes of Health, California Department of Pesticide Regulation, Sacramento Regional County Sanitation District, California Department of Transportation, California Department of Pesticide Regulation, California State Water Resources Control Board), with additional grant support from state and local governments, industry, and foundations.

Zeng, Yousheng

Providence Engineering and Environmental Group LLC

Dr. Yousheng Zeng is a Managing Partner for Providence Engineering and Environmental Group, LLC. His areas of expertise include method development and implementation of air pollution monitoring (ambient and source, criteria pollutants and air toxics), air quality modeling (both dispersion modeling and receptor modeling), optical imaging of gas plumes, air quality laws and regulations, and air pollution control technologies. Dr. Zeng holds a B.S. in Analytical Chemistry from Sichuan University, China (1982), an M.S. in Environmental Chemistry from Nankai University, China (1985), a Ph.D. in Environmental Engineering from the University of Illinois at Urbana-Champaign (1990), and an MBA from the University of Texas at Dallas (1998). He has been working in the field of air quality management since 1990. Dr. Zeng has co-authored 19 peer-reviewed air quality related research papers, chapters in five books, and 38 papers presented at national and international technical conferences. He is a Professional Engineer (PE) registered in five states. Dr. Zeng is the inventor or a co-inventor of two patents and two pending patents. As an adjunct professor at Southern Methodist University (SMU) in Dallas, TX for six academic years (1996-2002), he taught two graduate level courses, "Air Pollution Management, Regulations, and Public Policy" and "Air Quality Modeling". Dr. Zeng has worked with multiple state and local air monitoring agencies and hundreds of regulated entities. Dr. Zeng has completed hundreds of air quality modeling analyses, served as a trial burn observer, and designed and constructed a dozen of fixed and mobile air monitoring systems. He pioneered Auto-GC operated on a trigger mode to study sources of volatile organic compounds (VOC) species in ozone episodes. Dr. Zeng designed a web-based, real-time air monitoring data visualization system. Recently he completed a study of 14 years (1994-2007) of air monitoring data collected by the Photochemical Assessment Monitoring Stations (PAMS) network in the San Joaquin Valley, CA. He was the Principal Investigator for multiple research projects, including a GIS based model for NO_x emissions from biogenic sources and innovative ozone mitigation strategies. Dr. Zeng's research has been conducted without the support of grants from either government agencies or private companies. Dr. Zeng was a member of several workgroups organized by the Louisiana DEQ and industries to deal with various air quality issues, specifically the Highly Reactive Volatile Organic Compounds (HRVOC) Workgroup, the Title V Permit Workgroup, and the AERMOD Modeling Guideline Workgroup. He served as an external peer reviewer for U.S. Environmental Protection Agency (EPA) Region 6 Regional Air Impact Modeling Initiative (RAIMI) Pilot Study. Dr. Zeng has served on the EPA Clean Air Scientific Advisory Committee (CASAC) Ambient Air Monitoring and Methods Subcommittee and EPA Science Advisory Board Scientific and Technological Achievement Awards (STAA) Committee.