

**Invitation for Public Comment on the List of Candidates for the
EPA Science Advisory Board IRIS Trichloroethylene (TCE) Review Panel**

January 5, 2010

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a *Federal Register* Notice (Volume 74, Number 203, Pages 54563 – 54564) published on October 22, 2009 that it was forming an *ad hoc* Panel under the auspices of the SAB to review and provide independent expert advice on EPA's Toxicological Review of Trichloroethylene (TCE). To form the Panel, the SAB Staff Office sought public nominations of nationally recognized and qualified experts in one or more of the following areas: toxicokinetics, toxicology, carcinogenic modes of action, physiologically-based pharmacokinetic (PBPK) modeling, epidemiology, statistics, dose-response modeling, and risk assessment.

The SAB Staff Office Director will make the final decision about who will serve on the panel 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 panel 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 EPA charge to the SAB. 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 advisory committees and panels; and, for the panel as a whole, f) diversity of, and balance among, scientific expertise, and viewpoints.

We hereby invite comments on the attached List of Candidates for consideration by the SAB Staff Office in the formation of this panel. Comments should be submitted to the attention of Dr. Marc Rigas, Designated Federal Officer, no later than January 26, 2010. E-mailing comments (rigas.marc@epa.gov) is the preferred mode of receipt.

Candidates for the IRIS Assessment for Trichloroethylene Review Panel

Alexander, Dominik D.

Exponent

Dr. Dominik D. Alexander is a Senior Managing Scientist in Exponent's Health Sciences Center for Epidemiology, Biostatistics, and Computational Biology. He has extensive experience in health research methodology, particularly in the conceptualization, design, analysis, and interpretation of epidemiologic studies. Dr. Alexander has published on a diverse range of topics and types of studies, including original epidemiologic research, qualitative reviews, and quantitative meta-analyses. He has conducted numerous "state of the art" reviews on complex medical and scientific issues, and he has experience in statistical computing, including multivariate regression analysis and meta-analysis techniques for analyzing epidemiologic data across studies. Since joining Exponent, Dr. Alexander has been involved in numerous projects related to occupational and environmental exposures and cancer outcomes. For example, he has examined the association between trichloroethylene exposure and several types of cancer; benzene and other solvent exposures and non-Hodgkin lymphoma and leukemia; low-level arsenic exposure in drinking water and bladder cancer; hexavalent chromium exposure and stomach cancer; and asbestos exposure and mesothelioma. He has also evaluated potential health risks associated with dioxin exposure. In addition, Dr. Alexander has extensive experience in nutritional epidemiology, and has worked on several projects related to dietary factors and a variety of health outcomes. His work in this area includes conducting a comprehensive qualitative epidemiologic assessment of meat consumption and cancer, quantitatively evaluating the association between red and processed meat and a variety of cancer types, examining the role of partially hydrolyzed whey formula in reducing the risk of atopic dermatitis among infants, and assessing how fast food consumption is evaluated scientifically. He has presented his nutritional epidemiology research in a variety of professional venues, such as national conventions, scientific conferences, and governmental regulatory forums. Dr. Alexander is currently editing a textbook on Nutritional Epidemiology. Dr. Alexander is a graduate of the University of Alabama at Birmingham (UAB) where he was awarded a National Cancer Institute Fellowship for Cancer Prevention and Control. While at UAB, he worked closely with the Department of Pathology, where he designed and implemented epidemiologic studies pertaining to colorectal cancer survival. In particular, he evaluated racial disparities in survival. He conducted an analysis of tumor differentiation among colon cancer patients, and found that racial disparity in survival was largely attributable to aggressive tumor behavior among African American patients with poorly differentiated tumors. Prior to his graduate work at UAB, Dr. Alexander worked at the H. Lee Moffitt Cancer Center and Research Institute in Tampa, Florida. While there, he worked on a clinical trial Dominik D. Alexander, Ph.D. comparing two imaging modalities, digital vs. film mammography, for the Digital Medical Imaging Program in the Department of Radiology.

Andersen, Melvin

The Hamner Institutes for Health Sciences

Dr. Melvin Andersen is Director, Program in Chemical Safety Sciences, The Hamner Institutes for Health Research. Over the past 35 years, he held positions in toxicology research and research management in the federal government (US Navy, Department of Defense and EPA), in private industry (Vice-President, ICF Kaiser Consulting) and in academia (Colorado State University). His research career has focused on computational approaches for dose response modeling and human health risk assessments for environmental chemicals. His current programs are geared towards implementing key recommendations from the 2007 NAS report, "Toxicity Testing in the 21st Century: A Vision and A Strategy". Dr. Andersen is board certified in industrial hygiene (since 1978) and in toxicology (since 1982) and is a Fellow of the Academy of Toxicological Sciences. He served on the NAS Committee on Toxicity Testing and Assessment of Environmental Agents and as an ad hoc member for Computational Framework Science Advisory Board for the USEPA. Dr. Andersen is senior author or co-author of 400 research papers and book chapters. His professional awards include the Herbert Stokinger Award (American Conference of Industrial Hygienists, 1988), the Kenneth Morgareidge Award (International Life Sciences Institute, 1989), the George Scott Award (Toxicology Forum, 1993), and the Frank R. Blood (1982), Achievement (1984), and Arnold J. Lehman (2004) Awards from the Society of Toxicology. In June 2002, Dr. Andersen was recognized as a 'highly cited' scientist by the Institute for Scientific Information (www.ISIHighlyCited.com). He has a Bachelor of Science degree in Chemistry (Brown University, Providence, RI; 1967) and Ph.D. in Biochemistry and Molecular Biology (Cornell University, Ithaca, NY; 1971).

Bartell, Scott

University of California, Irvine

Scott Bartell is an assistant professor in the Program in Public Health and Department of Epidemiology at the University of California, Irvine. He was previously employed in a similar capacity by the Department of Environmental and Occupational Health at the Rollins School of Public Health at Emory University, where he still holds an adjunct faculty appointment. Dr. Bartell earned an M.S. in environmental health from the University of Washington, and an M.S. in statistics and Ph.D. in epidemiology from the University of California at Davis. Dr. Bartell's research interests are in probabilistic models and statistical methods for exposure assessment, risk assessment, and environmental epidemiology. He has 14 years of environmental health research experience with a variety of topics including pesticide exposures, chronic beryllium disease susceptibility, and applications of toxicokinetic and toxicodynamic models to risk assessment. Contributing to large collaborative studies through innovative statistical analyses is a particular passion for Dr. Bartell. His current research efforts include development of statistical approaches for estimating time-varying exposures using biomarkers, power analyses and design considerations for multiphase epidemiologic study designs, and large scale epidemiologic studies of human exposures to silica, polychlorinated biphenyls, methylmercury, and perfluorooctanoic acid. Current and recent research funding sources include the National Institute of Environmental Health Sciences, the Centers for Disease Control and Prevention, and Garden City Group, Inc.

Blair, Aaron

National Institutes of Health

Dr. Aaron Blair was an epidemiologist with the National Cancer Institute for over 30 years. He was the Chief of the Occupational and Environmental Epidemiology Branch of the Division of Cancer Epidemiology and Genetics. He retired in 2007 and is currently a Scientist Emeritus at the National Cancer Institute and Interim Director of the Occupational Cancer Research Centre in Toronto, Canada. Dr. Blair holds a B.A. in Biology from Kansas Wesleyan University, and an M.S. in Botany, M.P.H. in Epidemiology, and Ph.D. in Genetics from North Carolina State University. His research has focused on cancer risks from agricultural exposures, industrial chemicals, physical inactivity, occupational exposures among women, and methodologic issues in occupational epidemiology. Dr. Blair has evaluated the risk of non-Hodgkin's lymphoma, leukemia, and multiple myeloma among farmers in the first case-control studies to obtain detailed information on pesticide use and application practices. This work culminated in the development of the Agricultural Health Study, a long-term prospective study of 90,000 farmers and their spouses in Iowa and North Carolina. His studies of cancer mortality among workers exposed to the important industrial chemicals formaldehyde and acrylonitrile were among the first to employ sophisticated algorithms to develop quantitative estimates of exposure in multi-company studies. In his more than 350 publications, Dr. Blair has evaluated cancer risks among women in studies of dry cleaners and aircraft maintenance workers. His methodologic studies have focused on confounding, meta-analysis, and misclassification in exposure assessment. Dr. Blair has served on many national and international scientific advisory groups for the International Agency for Research on Cancer, the National Toxicology Program, the Environmental Protection Agency, and Health and Welfare Canada and the National Institutes of Health. He has served on the organizing committees for many international scientific conferences and on Editorial Boards of the American Journal of Epidemiology, Scandinavian Journal of Work, Environment and Health, the Journal of Agricultural Safety and Health, and the American Journal of Industrial Medicine. Dr. Blair is a member of the American Epidemiologic Society and a Fellow of the American College of Epidemiology.

Bogen, Kenneth

Exponent

Dr. Kenneth T. Bogen is a Managing Scientist in Exponent's Health Sciences Center for Exposure Assessment and Dose Reconstruction. Dr. Bogen has nationally recognized expertise in risk assessment for environmental carcinogens and in related exposure, PBPK, dose-response and uncertainty analysis. Before joining Exponent's Health Sciences Group in 2007, he led experimental, epidemiological and mathematical-modeling research on health risks posed by environmental exposures to chemicals and ionizing radiation, as a University of California environmental scientist for 20 years at Lawrence Livermore National Laboratory. Dr. Bogen served as a Member of the National Academy of Sciences/National Research Council (NRC) committees that issued Science and Judgment in Risk Assessment (1994) and Review of the Army's Technical Guides on Assessing and Managing Chemical Hazards to Deployed Personnel (2004); served as expert panelist at the NRC Standing Committee on Risk Analysis Issues and Reviews, Workshop on Uncertainty in Cancer Risk Based on Bioassay Data (June 5, 2007); chaired the Metabolism and Mode of Action Panel, Naphthalene State of the Science Symposium (NS3), Monterey, CA (October 9–12, 2006); and chaired the U.S. Consumer Product Safety Commission's Chronic Hazards Advisory Panel on Diisononyl Phthalate (DINP) (2000–2001). Dr. Bogen also authored and continues to develop RiskQ computer software (a University of California-licensed Mathematica® package) for biostatistics, stochastic modeling, and uncertainty analysis, authored Uncertainty in Environmental Health Risk Assessment (Garland, New York, 1990), and has authored or coauthored more than 100 reports and publications in peer-reviewed scientific journals. Dr. Bogen served as President (1995) and Councilor (2004–2006) of the Northern California Chapter of the Society for Risk Analysis. Dr. Bogen is a Diplomate of the American Board of Toxicology (DABT). He has a Dr.P.H. and M.P.H. in Environmental Health Science from University of California, Berkeley, and M.A. in Science Technology and Public Policy from George Washington University, and an A.B. in Biology from Princeton University.

Borghoff, Susan J.

Integrated Laboratory Systems, Inc. (ILS)

Dr. Susan Borghoff is the Scientific Director of Investigative Toxicology at ILS, Inc. ILS is a Contract Research Organization in the Research Triangle Park, NC working with both federal and commercial clients. Prior to this position (since April 2006), Dr. Borghoff was a Senior Staff Scientist at CIIT Centers for Health Research in the Research Triangle Park, North Carolina. Her research interests while at CIIT focused on: understanding the mode-of-action by which specific chemicals cause kidney toxicity and cancer in rats with a view to understanding the relevance of this response for human risk assessment; understanding the metabolism and pharmacokinetics of various chemicals with emphasis on the development of physiologically based pharmacokinetic models that can be used for risk assessment, and developmental pharmacokinetics of endocrine active compounds such as genistein and dibutyl phthalate. Along with Dr. Borghoff's research program at CIIT she was also the Director of Education Programs for 2 years which involved oversight of the pre- to post-graduate training programs and K-12 educational outreach activities. Dr. Borghoff received the Frank R. Blood Award in 1994 for the best paper of the year published in one of the Society of Toxicology research journals and a Society of Toxicology Risk Assessment Specialty Section Award in 2000. Dr. Borghoff is a member of a number of professional societies but is most active with the Society of Toxicology and is currently on Council. She was an Associate Editor for Toxicological Sciences and on the editorial board for Chemical Biological Interactions and Toxicology Letters. Dr. Borghoff has served as reviewer on a number of panels/ working group member for National as well as International organizations that include the USEPA, National Cancer Institute, International Programme on Chemical Safety, European Centre for Ecotoxicology and Toxicology of Chemicals, and the International Agency for Cancer Research (IARC). She has also been a reviewer for the NIEHS Superfund Basic Research Program Grant, Research Grants for the USEPA on Children's Health Issues, and most recently a reviewer for Reviewer on NIEHS Special Emphasis Panel for Absorption, Distribution, Metabolism and Excretion (ADME) Chemical Disposition in Mammals and a panel member on the VCCEP review of ethylbenzene. Currently Dr. Borghoff is a member of an Expert Panel to oversee a series of Industry sponsored studies to evaluate the toxicity and carcinogenicity of methyl tert-butyl ether in rats exposed via the drinking water. Dr. Borghoff received her Ph.D. and MSPH in Environmental Sciences and Engineering from the University of North Carolina, and a B.S. in Chemistry from East Stroudsburg University in Pennsylvania. Dr. Borghoff became a Diplomat of the American Board of Toxicology in 1994.

Bruckner, James

University of Georgia

James V. Bruckner received his B.S. in pharmacy and M.S. in toxicology from the University of Texas, as well as a Ph.D. in toxicology from the University of Michigan. He has held faculty positions at the University of Kansas, the University of Texas Medical School at Houston, and the University of Georgia (UGA). He was director of UGA's Interdisciplinary Graduate Program in Toxicology from some 15 years. He is currently Professor of Pharmacology and Toxicology at the UGA College of Pharmacy. Dr. Bruckner has served on the editorial boards of Toxicology and Applied Pharmacology, Journal of Toxicology and Environmental Health, Toxicology, Chemosphere and the International Journal of Toxicology. Dr. Bruckner was the lead author of a chapter entitled "Toxic Effects of Solvents and Vapors" in the last two editions of Casarett and Doull's Toxicology: The Basic Science of Poisons. His primary research focus is on the toxicology and toxicokinetics of volatile organic chemicals (VOCs), drug interactions at environmental exposure levels, and toxicokinetic bases for susceptibility of children to insecticides and other chemicals. The relevance of experimental designs to "real life" chemical exposures is of particular interest. Research funding for the past 35 years has consistently come from federal agencies, notably the EPA. Dr. Bruckner has published more than 200 journal articles, book chapters and abstracts. Many of these papers focus on the toxicology, toxicokinetics and PBPK modeling of trichloroethylene and closely related VOCs. He has served on a variety of expert panels and committees for the U.S. EPA, National Institute of Environmental Health Sciences, NASA, Air Force, the Centers for Disease Control and Prevention, U.S. Food and Drug Administration, and the National Academy of Sciences (NAS). Much of peer review work has involved EPA documents. The NAS appointments have included, among others, the Committees on Safe Drinking Water, Pesticides in Diets of Infants and Children; Acute Exposure Guideline Levels; Health and Safety Consequences of Child Labor; Use of Third Party Pesticide Toxicity Research with Human Participants; and Contaminated Drinking Water at Camp Lejeune. He is currently a member of the ACGIH TLV chemical substances panel, the NAS Committee on Toxicology, and the EPA Insecticide, Fungicide and Rodenticide Science Advisory Board.

Clewell, Harvey

The Hamner Institutes for Health Sciences

Dr. Harvey Clewell is the Director of the Center for Human Health Assessment at the Hamner Institutes for Health Sciences. Dr. Clewell is a professional research manager with over thirty-five years of experience in environmental quality research, toxicology research, chemical risk assessment, and hazardous materials management. He is a leading expert on the use of tissue dosimetry and mode-of-action information in chemical safety and risk assessment. He has gained an international reputation for his work in the applications of physiologically based pharmacokinetic (PBPK) modeling. He has played a major role in the first uses of PBPK modeling in cancer and non-cancer risk assessments by U.S. EPA, the Agency for Toxic Substances and Disease Registry (ATSDR), the Occupational Safety and Health Administration (OSHA), and U.S. Food and Drug Administration (FDA), for such chemicals as methylene chloride, trichloroethylene, vinyl chloride, and retinoic acid. Dr. Clewell has authored numerous scientific publications, has provided testimony both in civil tort cases and congressional hearings, and frequently provides invited lectures and computer workshops in the areas of pharmacokinetics and risk assessment. He has also served on a number of external peer review panels for U.S. EPA, ATSDR, and Health Canada. Dr. Clewell served for 20 years as an officer in the U.S. Air Force Biomedical Science Corps; his duties included Deputy Director of the Air Force Toxic Hazards Research Unit, Director of Hazardous Materials Safety for the Air Force Aeronautical Systems Center, and consultant to the Air Force Surgeon General on Chemical Risk Assessment. He received a Masters Degree in Chemistry from Washington University, St. Louis, Missouri, and a Ph.D. in Toxicology from the University of Utrecht, the Netherlands. His current research interests include the application of physiologically based pharmacokinetic (PBPK) modeling to the interpretation of human biomonitoring data, the incorporation of genomic dose-response information in quantitative risk assessment, and the application of systems biology methods to understand drug toxicity. Dr. Clewell has previously served on the U.S. EPA's Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Scientific Advisory Panel for CCA Treated Wood Structures and as a peer reviewer for a number of U.S. EPA guidelines, including cancer risk assessment, risk characterization, benchmark dose modeling, and dermal absorption. In his position at the Hamner Institutes for Health Sciences he has performed research for a number of clients, including the American Chemistry Council Long Range Research Initiative (Risk Assessment for Dibutylphthalate; Development of Approaches for Applying PBPK Modeling to the Interpretation of Human Biomonitoring Data), U.S. EPA (Development of PBPK Models for the Interpretation of Biomonitoring Data on N-Methyl Carbamates; Application of PBPK Models for the Interpretation of Biomonitoring Data on Perfluorinated Compounds), the Electric Power Research Institute (EPRI) (Genomic Dose-Response of the Urinary Bladder to Inorganic Arsenic Exposure), the Formaldehyde Council, Inc. (Sensitivity Analysis of a Clonal Growth Model of Formaldehyde Carcinogenicity), the American Forest and Paper Association (PBPK Modeling of Acetaldehyde and Arolein), Bayer CropScience (Development of a PBPK Model for Carbaryl), and 3M (Development of a PBPK Model for PFOA). In his previous position as a principal at ENVIRON International, he performed research for a variety of clients, including the U.S. EPA, Health Canada, International Life Sciences Institute (ILSI), EPRI, American Chemistry Council (ACC), Kodak (methylene chloride), and DuPont (PFOA).

Cory-Slechta, Deborah

University of Rochester

Dr. Deborah Cory-Slechta received her Ph.D. degree from the University of Minnesota in 1977 and worked as a junior staff fellow of the National Center for Toxicological Research beginning in 1979. She was appointed to the faculty of the University of Rochester Medical School in 1982 was appointed Chair of the Department of Environmental Medicine and Director of the NIEHS Environmental Health Sciences Center at the University of Rochester in 1998. From July 2000- July 2002, she was the Dean for Research and Director of the AAB Institute for Biomedical Sciences, a newly established post at the University and as such, became the first female dean in the history of the Medical School. From 2003-2007 she served as Director of the Environmental and Occupational Health Sciences Institute (UMDNJ/Rutgers) and Chair of the Department of Environmental and Occupational Medicine at the Robert Wood Johnson Medical School (UMDNJ). In 2007, she returned to the Department of Environmental Medicine at the University of Rochester School of Medicine where she serves as Professor. Her research has focused largely on environmental neurotoxicants as risk factors for behavioral disorders and neurodegenerative disease. Currently she has also begun to examine mixtures of neurotoxic chemicals and risk modifiers for effects of neurotoxicants as well. These research efforts have resulted in over 100 papers and book chapters to date. Dr. Cory-Slechta has served on numerous national research review and advisory panels, including committees of the National Institutes of Health, the National Institute of Environmental Health Sciences, the Food and Drug Administration, the National Center for Toxicological Research, the Environmental Protection Agency, the National Academy of Sciences, the Institute of Medicine, and the Agency for Toxic Substances and Disease Registry, Centers for Disease Control. In addition, Dr. Cory-Slechta has served on the editorial boards of several journals including Neurotoxicology, Toxicology, Toxicological Sciences, Fundamental and Applied Toxicology, Neurotoxicology and Teratology, and American Journal of Mental Retardation. She has held the elected positions of President of the Neurotoxicology Specialty Section of the Society of Toxicology, President of the Behavioral Toxicology Society, and been named a Fellow of the American Psychological Association.

De Roos, Anneclaire

University of Washington

Dr. De Roos is an Associate Professor of Epidemiology at the University of Washington (UW) and an Associate Member of the Fred Hutchinson Cancer Research Center (FHCRC) in Seattle. Her research interests and experience are primarily in the study of occupational and environmental exposures to chemicals and radiation as risk factors for cancer and other chronic diseases. She completed a master of public health (MPH) degree in Epidemiology/Biostatistics at the University of California at Berkeley, followed by doctoral training in Epidemiology at the University of North Carolina at Chapel Hill. Dr. De Roos' dissertation research focused on parents' occupational exposures as risk factors for neuroblastoma in their children, as well as application of novel statistical methods for analyzing multiple exposures in epidemiologic studies. In 2000, Dr. De Roos began a postdoctoral fellowship in the Division of Cancer Epidemiology and Genetics of the National Cancer Institute, where she furthered her training over the next two years in studies of genetic determinants of disease and intermediate biologic effects of environmental exposures. Currently, in her role as Associate Professor at the UW and FHCRC, several of Dr. De Roos' studies are focused on environmental exposures (persistent organic pollutants, traffic emissions, and industrial pollution) and occupational exposures (pesticides, solvent exposure in the workplace) as potential causes of lymphomas, leukemias, and autoimmune diseases. At the UW, Dr. De Roos has taught courses in Cancer Epidemiology, Environmental and Occupational Epidemiology, and Advanced Epidemiologic Methods.

Dietert, Rodney

Cornell University

Rodney R. Dietert, Ph.D., is Professor of Immunotoxicology in the Department of Microbiology and Immunology at Cornell University, Ithaca, NY. Dietert is the former Director of the Institute for Comparative and Environmental Toxicology at Cornell University (1992-97), and the Cornell Program on Breast Cancer and Environmental Risk Factors (2000-04). Additionally, he was appointed as a Senior Fellow in the Cornell Center for the Environment (1992-97). He has previously served as an author and panel member on the EPA's most recent Air Quality Criteria Document for Lead and the National Toxicology Program's Panel on Immunotoxicology Criteria. Currently, he is a member of the WHO's panel on Harmonization of Immunotoxicology Criteria for Risk Assessment and the Vice President Elect for the Immunotoxicology Specialty Section of the Society of Toxicology. Dietert has authored more than 280 publications concerning health risks, is the editor of Immunotoxicity Testing (Humana/Springer) and the author of a recent book on environmental health of children. Dietert's biographical citations include listings in Who's Who in the World, Who's Who in America, and Who's Who in Medicine and Healthcare.

Emond, Claude

University of Montreal

Dr. Claude Emond is a Clinical Adjunct Professor in the Department of Environmental and Occupational Health at the University of Montreal. He received a B.Sc. in biochemistry from Université du Québec à Montréal in 1987. He received his Master's degree at the University of Montreal in Environmental Health in 1997 and his Ph.D. in Public Health (Toxicology and Human Risk Assessment option) in 2001. His research and consulting interests address problems in toxicology covering different fields from persistent organics pollutants (POPS), occupational toxicology, and nanotoxicology. He has participated as a peer reviewer for Health Canada, on Toxicological Risk Assessment Associated with Herbicide Spraying Operations, as a consultant on several projects for U.S. Universities and for private Research Institutes. Dr. Emond actively works to understand the mode of action of dioxins and flame retardants and their impact on human health. As a clinical adjunct professor, Dr. Emond lectures in toxicology at the University of Montreal and supervises students.

Everitt, Jeffrey

GlaxoSmithKline Pharmaceuticals

Dr. Jeffrey Everitt is the Worldwide Director of Comparative Biology & Medicine in the Department of Laboratory Animal Sciences at GlaxoSmithKline Pharmaceutical R&D. He also serves on the adjunct faculty in the Department of Pathology and Laboratory Medicine at the UNC School of Medicine in Chapel Hill, N.C. and in the College of Veterinary Medicine at North Carolina State University in Raleigh, NC. Dr. Everitt received his D.V.M. from Cornell University (1977) and completed a residency in pathology at the University of Pennsylvania (1980). Prior to assuming his position at GlaxoSmithKline in 2002, Dr. Everitt spent over 17 years on the senior scientific staff of the CIIT Centers for Health Research (formerly the Chemical Industry Institute of Toxicology) where he led a multidisciplinary program that studied the health effects of inhaled particulate. Throughout his professional career, Dr. Everitt has been active in numerous professional societies, including service on the Executive Council of the Society of Toxicologic Pathology, and on the Council of the Inhalation Specialty Section and the Toxicologic and Exploratory Pathology Specialty Section of the Society of Toxicology. Dr. Everitt is a Diplomate of the American College of Veterinary Pathologists and a Diplomate of the American College Laboratory Animal Medicine. He has been a member of National Toxicology Program pathology working groups since 1985 and has served as a consultant in toxicologic pathology to numerous academic, industrial, and governmental organizations including NIH, USEPA, NIEHS, IARC, NTP, and ILSI. Dr. Everitt's research interests include experimental and toxicologic pathology of the lung and kidney, particle-induced lung disease, and the development of animal models of human disease.

Fenner-Crisp, Penelope

Independent Consultant

Dr. Fenner-Crisp is currently a private consultant. She is the former Executive Director of the Risk Science Institute of the International Life Sciences Institute (ILSI), a global, non-profit, scientific organization dedicated to seeking scientific solutions to important public health issues related to food and nutrition, food safety, water quality, chemical safety and environmental health and assessment of human health and environmental risk. She received a B.S. in Zoology from the University of Wisconsin-Milwaukee, an M.A. and Ph.D. in Pharmacology from the University of Texas Medical Branch-Galveston and spent two years at Georgetown University Schools of Medicine and Dentistry as a post-doctoral fellow in Pharmacology-Morphology from the then-Pharmaceutical Manufacturer's Association Foundation. Dr. Fenner-Crisp's current areas of expertise include human health and environmental risk assessment, toxicology, science policy and its integration into regulatory decision-making and familiarity with environmental regulatory programs and practices, all of which are a continuation of her activities and responsibilities during her 22 years at EPA. Her current service on advisory committees and boards consists of membership on the Drinking Water Committee of the Science Advisory Board, OPPT's National Pollution Prevention and Toxics Advisory Committee and as an ad hoc member of the FIFRA Scientific Advisory Panel (February 2007) as well as a member of the board of GreenBlue, a Charlottesville, VA-based not-for-profit organization whose mission is to inspire a transformation in the design of human industry to achieve sustainability. She has served on the board of the American Board of Toxicology. She is a Charter member of the Society for Risk Analysis (SRA), having received its first Risk Practitioner's Award in 1996, the Capital Area Chapter of SRA, and a long-time member of the Society of Toxicology and its National Capital Area Chapter.

Fuentes, Montserrat

North Carolina State University

Dr. Montserrat Fuentes is a full professor of Statistics (with tenure) at North Carolina (NC) State. Dr. Fuentes received her B.S. in Mathematics and Music (piano) from the University of Valladolid (Spain), and her Ph.D. in Statistics from the University of Chicago (1999). She spent 6 months as a postdoc in the National Center of Atmospheric Research (NCAR) before joining NC State in 1999. She is a member-elect of the International Statistical Institute, and also a member of the Regional Advisory Board (RAB) for the Eastern North American Region (ENAR) of the International Biometric Society. Dr. Fuentes is a member of the Science Advisory Board (SAB) Integrated Human Exposure Committee of the U.S. Environmental Protection Agency, and the U.S. representative in the Board of Directors of the International Environmetrics Society. She is a member of the Biostatistical Methods and Research Design (BMRD) study section of the National Institutes for Health. She has also worked for the U.S. Department of Justice as an expert witness (Spring 2007), and she is currently a member of a committee of the National Research Council of the National Academies working on the impact of ozone on mortality. Throughout her professional career, Dr. Fuentes has been active in numerous professional societies, including being chair of the section on Statistics and the Environment (2003) for ENAR, chair of the General Methodology Section (2001, and 2004) of the American Statistical Association (ASA), program chair for the 2002 Southern Regional Council on Statistics (SRCOS) and ASA, serving in the scientific committee for The International Environmetrics Society (TIES) (2004) and in the program committee for the Institute of Mathematical Science-The International Society for Bayesian Analysis (IMS-ISBA) joint conference (2005). She was also chair of the scientific committee for the International Statistical Institute (ISI) Conference on Environmental Statistics and Health (July, 2003). She was the program chair for ENAR 2006. She has been elected for the IMS council (2007-2010). She received the Abdel El-Shaarawi Young Research's Award in recognition of outstanding contributions to environmetric research (2003). Dr. Fuentes has maintained her own research group, with an average of seven Ph.D. graduate students and two postdocs. Dr. Fuentes has developed new statistical methods that she applies to air pollution, weather prediction, hurricane forecasting and environmental health risk assessment problems in collaboration with the air quality modelers and scientists at EPA and NCAR. This work has led to numerous publications in top statistical journals and books, as well as top journals in atmospheric sciences. Dr. Fuentes was named an ASA fellow (2008) for outstanding contributions to research in spatial statistics, for excellence in the development and application of statistical methodology in atmospheric sciences, air pollution and oceanography; and for service to the profession.

Gilbert, Kathleen

University of Arkansas for Medical Sciences/Arkansas Children's Hospital Research Institute

Dr. Gilbert is a tenured faculty member at a medical school and have worked for over 10 years studying trichloroethylene-induced immunotoxicology. She has consulted with the Pew Charitable Trust Environmental Working Group for "Kid-Safe Chemicals Act of 2008" bill before US Congress. Her research has used a mouse model to examine how low-level chronic exposure to trichloroethylene alters several aspects of CD4+ T cell function and promotes autoimmune disease. She has used classic assays for CD4+ T cell phenotype and function. Her group has also used whole genome arrays, RT-PCR and metabolomics to examine how trichloroethylene alters T cell and liver function. Western blotting has been used to assess how trichloroethylene promotes antibody production to native and altered liver proteins during the development of autoimmune hepatitis. The role of Schiff base formation on CD4+ T cells by a metabolite of trichloroethylene has been examined for mechanistic relevance. She is now attempting to use mathematical modeling to obtain a more comprehensive picture of how trichloroethylene alters several aspects of CD4+ T cell function and promotes autoimmunity. Dr. Gilbert has a B.S. in Biology from Occidental College and a M.S. and Ph.D. in Biology from Tulane University.

Goldberg, Mark

McGill University

Dr. Mark Goldberg is Professor in the Department of Medicine, McGill University, is a member of the Division of Clinical Epidemiology and the Division of Experimental Medicine, Department of Medicine, McGill University. He is also an associate member of the Joint Departments of Epidemiology and Biostatistics and Occupational Health, Department of Oncology, and the McGill School of the Environment, McGill University, and is a Medical Scientist, Royal Victoria Hospital, McGill University Health Centre. Dr. Goldberg is a member of the International Society for Environmental Epidemiology. He received in 1991 his Ph.D. in epidemiology and biostatistics from McGill University. Dr. Goldberg's expertise is in occupational and environmental epidemiology, and his research interests include the short- and long-term effects of air pollution on health and occupational and environmental causes of cancer, particularly breast cancer in women. Dr. Goldberg serves currently as a member of the Health Canada Science Advisory Board and the Health Canada Pest Management Advisory Council, and he has served as a member on three U.S. Institute of Medicine's expert committees: "Veterans and Agent Orange: Sixth Biennial Update" (2006-7), "Committee on the future of the Air Force Health Study Vietnam veterans cohort study" (2004-5), and "Committee on Gulf War and Health: A review of the literature on pesticides and solvents" (2004-5); and one US National Research Council expert panel: "Human Health Risks of Trichloroethylene" (2004-5). Dr. Goldberg is on the editorial board of Reviews on Environmental Health and is a consulting editor for Archives of Environmental and Occupational Health. Dr. Goldberg receives salary support as an Investigator from the Canadian Institutes of Health Research. In the last two years, Dr. Goldberg has received support for a study on gene-environment interactions in postmenopausal breast cancer and for a longitudinal study of the health effects of air pollution, a study of traffic-related air pollution and socioeconomic gradients in the incidence of cancer, and a cohort study of cancer incidence and mortality among adults from long-term exposure to outdoor air pollution studies on the chronic and acute effects of air pollution on health. He has also conducted a number of studies on air pollution and is a collaborator on a study on radiotherapy in cancer, a cohort study of stroke and heart disease, and a study in research in palliative care.

Hassenzahl, David

University of Nevada, Las Vegas

Dr. David M. Hassenzahl Chairs the Department of Environmental Studies at the University of Nevada, Las Vegas, where he holds the rank of Associate Professor. He has a Bachelors Degree from the University of California at Berkeley, where he majored in Environmental Science and Paleontology. He earned his M.A. and Ph.D. from Princeton University's Woodrow Wilson School of Public and International Affairs, where his dissertation explored the impact of uncertainty on decisions using cost-effectiveness analysis. His research focuses on incorporating scientific information and expertise into environmental and health risk decisions, with particular emphasis on the management, interpretation and communication of uncertainty. Among his academic publications is the widely used risk analysis textbook *Should We Risk It?* Dr. Hassenzahl's relevant advisory and professional service include chairing the Education Committee for the Society for Risk Analysis; acting as Ombudsman for the New Jersey Comparative Risk Project; serving on the publications committee for the second World Congress on Risk Analysis; serving as risk assessment area editor for the *Encyclopedia of Earth*; advising Clark County Nevada and the State of Nevada on risk, vulnerability and homeland security issues; and representing UNLV on the Council of Environmental Deans and Directors. He has extensive experience working on risk and uncertainty issues from an interdisciplinary perspective: his collaborators have backgrounds in physics, astrophysics, rhetoric, medicine, chemistry, public policy, psychology, engineering, planning, botany, communications, public health, toxicology, economics, and geography. Prior to his academic career, he worked in the private sector as an environmental manager at a pulp and paper mill, and in the public sector as an inspector for the (San Francisco) Bay Area Air Quality Management District.

Hoel, David G.

Medical University of South Carolina

Dr. David G. Hoel is Distinguished University Professor of Biometry and Epidemiology in the College of Medicine at the Medical University of South Carolina in Charleston and Clinical Professor of Radiology at the USC Medical School in Columbia. He received an A.B. in mathematics and statistics from University of California at Berkeley in 1961, a Ph.D. in mathematical statistics from University of North Carolina in Chapel Hill in 1966 and was a post-doctoral fellow in preventive medicine at Stanford University. Prior to joining the Medical University of South Carolina Dr. Hoel was Division Director for Risk Assessment at the NIEHS in N.C. Dr. Hoel is a Fellow of the AAAS, a member of the Institute of Medicine of the National Academies and a National Associate of the National Academies. His awards include the Spiegleman Gold Medal in Public Health and the Ramazzini Award in Environmental and Occupational Health. He has served on numerous governmental committees including the EHC and RAC of EPA's Science Advisory Board and the BEIR V committee of the National Academy of Sciences. Dr. Hoel's research has focused on risk assessment methods with particular interest in low-dose radiation exposures and cancer. This work has included stays in Hiroshima as a Director at Radiation Effects Research Foundation and currently is a RERF Scientific Counselor. This year he became a member of National Academies' Board on Nuclear and Radiation Studies.

Johanson, Gunnar

Karolinska Institute

Gunnar Johanson is professor of occupational toxicology and risk assessment at the Karolinska Institutet (KI), Stockholm, Sweden, since 2002. In addition, he is deputy director of the KI Institute of Environmental Medicine (IEM) and head of the IEM Unit of Work Environment Toxicology. His research focuses on the study of toxicokinetics of chemicals after controlled exposure of volunteers and on the development of physiologically based pharmacokinetic models. He has published on pharmacokinetics and metabolism of volatile organics and has quantified uncertainty in physiologically based models. Dr. Johanson received his Ph.D. in toxicology at KI in 1988. He is a long-standing member of the Scientific Committee on Occupational Exposure Limits at the European Commission, chairman of the Nordic Expert Group for Criteria Documentation of Health Risks from Chemicals, and vice chairman of the Swedish Criteria Group for Occupational Exposure Limits. In 2001, Dr. Johanson was a recipient of the Herbert E. Stokinger Award for outstanding achievement in industrial toxicology from the American Conference of Governmental Industrial Hygienists.

Keil, Deborah

University of Nevada, Las Vegas

Dr. Keil is an Associate Professor in the Clinical and Laboratory Sciences Program at the University of Nevada Las Vegas (2005 - current) and previously in the same program at Medical University of South Carolina in Charleston, SC (1997 - 2002). She has also been a Research Toxicologist at the National Institutes for Occupational Safety and Health (NIOSH) in Morgantown, WV (2002-2004). Her clinical work experience is comprised 8 years of laboratory medicine that includes serving as a licensed Medical Laboratory Director in the state of Nevada (2007-current). Her research has focused on the immunotoxicity of the following environmental contaminants or mixtures: perchlorate, JP-8 jet fuel, trichloroethylene (TCE), DEET, perfluorinated compounds (PFOS), and brominated compounds (PBDEs). More recent projects include developmental immunotoxicological assessment of PFOS or JP-8 jet fuel. Doctoral work focused on modeling of immune function and host resistance relationships in response to immunosuppressants with varying mechanisms of action. Support for these research studies was obtained from a variety of sources, including Department of Defense, Department of Veterans Administration, NIOSH, Cure Autism Now, and the Environmental Protection Agency (EPA; doctoral studies). Dr. Keil received the Ph.D. degree in immunotoxicology at Mississippi State University in Starkville, MS (1996) under the direction of Dr. Stephen Pruet. She received the baccalaureate degree in clinical laboratory science (CLS) at Western Carolina University in Cullowhee, NC. Dr. Keil received board certification in toxicology (DABT) in 2006.

Kelsh, Michael

Exponent

Dr. Michael Kelsh is a Principal Scientist in Exponent's Health Sciences Center for Epidemiology, Biostatistics, and Computational Biology. Dr. Kelsh specializes in the application of epidemiology and biostatistics to occupational, environmental health, and pharmaceutical issues. Dr. Kelsh has extensive experience in the design, implementation, analysis, and interpretation of epidemiologic studies. Dr. Kelsh has conducted epidemiologic studies of occupational injuries, musculoskeletal diseases, cardiovascular disease, respiratory and neurological diseases, and cancer incidence and mortality. His research has also focused on exposure assessment issues, and as part of epidemiologic investigations, has evaluated the potential health effects of air pollution, arsenic, asbestos, beryllium, hexavalent chromium, electric and magnetic fields, ergonomic factors, mercury, perchlorate, radiofrequency energy, and trichloroethylene. Dr. Kelsh has conducted occupational health studies among a variety of worker groups including: Aerospace, electric utility, electronics, mining, and petroleum research workers. He has also worked on meta-analyses of trichloroethylene and cancer, arsenic and bladder cancer; auto mechanic work and mesothelioma; and magnetic fields and childhood leukemia. Dr. Kelsh taught seminars in occupational/environmental epidemiology and exposure assessment as an adjunct professor at the University of California, Los Angeles (UCLA) School of Public Health (1996-2008). Dr. Kelsh has served on Scientific Advisory Panels covering a variety of environmental health issues for the California Department of Health Services, the New York Department of Environmental Health, and the Oregon Department of Human Services. Dr. Kelsh is fluent in Spanish and has international public health experience through consulting, research, and volunteer projects in Latin America.

Klaunig, James E.

Indiana University

Dr. James E. Klaunig is Professor of Toxicology and Director of Toxicology in the Department of Pharmacology and Toxicology at Indiana University, School of Medicine. He received his B.S. degree from Ursinus College in Collegeville, Pennsylvania, an M.A. from Montclair State University, Montclair, New Jersey, and his Ph.D. from the University of Maryland in Baltimore, Maryland. He is the recipient of numerous awards, including Fellow of the Academy of Toxicological Sciences; the Otis R. Bowen M.D. Distinguished Leadership Award, Indiana University School of Medicine; the Kenneth P. DuBois Award from the Midwest Society of Toxicology, and the Sagamore of the Wabash award from the governor of Indiana. He is editor-in-chief of Toxicologic Pathology Journal, serves as associate editor of Toxicological Sciences, and is on the editorial board of Toxicological Pathology. He is a member of the National Toxicology Program Board of Scientific Counselors for the National Institutes of Health, National Institute of Environmental Health Sciences. He also has served as president of the Carcinogenesis Specialty Section, president of the Ohio Valley Society of Toxicology, member and chair of the Education Committee, and member of the finance and program committees of the Society of Toxicology. He is currently the treasurer of the Society of Toxicology. He also serves the State of Indiana on the Indiana Pesticide Review Board, the Governor's Council on Impaired and Dangerous Driving, and the Indiana Controlled Substances Advisory Board. He has trained more than fifty graduate students and postdoctoral fellows. His research interests are dedicated to understanding the mechanisms of chemically induced carcinogenesis, specifically the mode of action of nongenotoxic carcinogens; understanding the role of oxidative stress in carcinogenesis and cell injury, and understanding the multistage nature of the cancer process.

Lash, Lawrence

Wayne State University

Dr. Lash's research program over the past nearly three decades has focused on various aspects of determining how chemicals produce injury to the kidneys and how we can design approaches to preventing or correcting such injury. The kidneys are critical for the maintenance of electrolyte and acid-base balance in the body and for reabsorption of nutrients and excretion of waste products. Because of the manner by which these functions are accomplished, the kidneys are very susceptible to injury from many types of chemicals. Consequently, a good understanding of how the kidneys handle and respond to drugs and other chemicals (in physiological, biochemical, and molecular terms) is necessary. Kidney injury can take the form of acute toxicity with failure of organ or cellular function, or chronic toxicity, which may be characterized by decreased organ or cellular function or transformation of kidney cells into tumor cells. Acute toxicity typically occurs with exposures to relatively high doses of chemicals over short periods of time whereas chronic toxicity typically involves exposures to relatively lower doses of chemicals over longer periods of time. The first situation is analogous to overdose exposures to either a drug or environmental chemical or to an accidental exposure to a high amount of an environmental and/or industrial chemical in the workplace. In contrast, the second situation is analogous to a continual or long-term exposure to a relatively low dose of an environmental or industrial chemical. The chemicals that we have used to produce kidney toxicity fall into one of three categories: 1) Model chemicals that are used to study specific mechanisms of action; 2) pharmacologic agents, such as analgesics or antibiotics; and 3) environmental chemicals, such as trichloroethylene and perchloroethylene. Although some of our studies have been conducted in intact, experimental animals, most of our studies have involved a variety of in vitro systems, including freshly isolated and primary cultures of kidney cells from rats and humans, subcellular fractions, or purified proteins. These type of in vitro model systems have afforded us the opportunity to dissect biochemical and molecular mechanisms of action and to manipulate and specify incubation conditions. Moreover, it is important to note that we have validated these in vitro model systems in terms of their functional integrity and relevance to the normal, in vivo state.

Ma, Xiaomei

Yale University

Dr. Xiaomei Ma is an associate professor in the Division of Chronic Disease Epidemiology at Yale School of Public Health. She received her Ph.D. in epidemiology from the University of California at Berkeley. Her research interests include the etiology and outcomes of cancer, especially malignancies of the hematopoietic system. Her recent work has explored a variety of risk factors, including chemical exposures, lifestyle factors, diet, and genetic differences. Her research has been supported by the National Cancer Institute, the National Institute of Environmental Health Sciences, the Centers for Disease Control and Prevention, and several non-profit organizations. Dr. Ma has written several recent book chapters on epidemiologic methods for cancer research and on case-control studies. She has served as a grant reviewer for government organizations and served from 2007 - 2009 as a member of the National Research Council committee of the National Academies, Contaminated Water Supplies at Camp Lejeune - Assessing Potential Health Risks.

Manautou, Jose

University of Connecticut

Dr. José E. Manautou is Associate Professor of Toxicology and the Marlene L. Cohen and Jerome H. Fleisch Scholar in the Department of Pharmaceutical Sciences at the School of Pharmacy of the University of Connecticut. His research emphasizes mechanisms of toxicant action/interaction. His laboratory studies the role of multidrug resistance proteins in the hepatobiliary disposition of toxicants and the changes in expression of transport proteins in response to chemical liver injury. His group also investigates the biochemical and genetic determinants associated with the hepatoprotective actions of peroxisome proliferators and other chemicals that prevent drug liver injury. He has published numerous seminal articles on these research areas in both toxicology and liver-related journals. Dr. Manautou has been an active member of the Society of Toxicology (SOT) since he joined as a student member. In 2003, he was elected Councilor of the SOT and has also served in key committees and task forces for the society. Dr. Manautou was the recipient of the 2006 SOT Achievement Award and the 2008 AstraZeneca Traveling Lectureship Award. Dr. Manautou has served as member of the National Research Council Committee Assessing the Human Health Risks of Trichloroethylene and is currently Associate Editor for the journal Toxicology and Applied Pharmacology. He is also on the editorial board of five other journals. He recently completed a 4-year term as member of the National Institutes of Health Xenobiotic and Nutrient Disposition and Action (XNDA) Study Section and has also served as an external reviewer of grants for the European Commission. Dr. Manautou received his B.S. in Pharmacy from the University of Puerto Rico, Ph.D. in Pharmacology and Toxicology from Purdue University and postdoctoral training in biochemical toxicology at the University of Connecticut. He also conducted sabbatical research at the Amsterdam Liver Center of the University of Amsterdam, The Netherlands.

McKone, Thomas

University of California

Thomas E. McKone is a Senior Staff Scientist and Deputy Department Head at the Lawrence Berkeley National Laboratory and an Adjunct Professor and researcher with the School of Public Health at the University of California, Berkeley. His research interests include the development, use, and evaluation of models and data for human-health and ecological risk assessments; chemical transport and transformation in the environment; and the health and environmental impacts of energy, industrial, and agricultural systems. In addition to his research and teaching activities with the University of California, Dr. McKone is active in other research, regulatory, and professional organizations. He has been a member of twelve National Academy of Sciences Committees and served six years on the EPA Science Advisory Board. He has been on consultant committees for the Organization for Economic Cooperation and Development (OECD), the World Health Organization, the International Atomic Energy Agency, the Food and Agriculture Organization, and the UN Environment Program. He is currently a member the Executive Board of the International Life-Cycle Initiative, a joint effort of the United Nations Environment Program (UNEP) and the Society for Environmental Toxicology and Chemistry (SETAC). He was recently appointed by California Governor Arnold Schwarzenegger to the Scientific Guidance Panel for the California Environmental Contaminant Biomonitoring Program. He is a fellow of the Society for Risk Analysis and a former president of the International Society of Exposure Science (ISES). In 2003 The ISES awarded him the Constance L. Mehlman Award for "contributions in exposure analysis research" that have provided "new approaches for the reduction or prevention of exposures" and have "helped shape national and state policies" and in 2008 ISES presented him the Jerome J. Wesolowski award for outstanding contributions to the field of exposure assessment. McKone earned his Ph.D. in engineering from the University of California, Los Angeles.

McMillan, David

University of Nebraska Medical Center

Dr. David C. McMillan is Associate Professor and Vice-Chair for Professional Education in the Department of Pharmacology and Experimental Neuroscience at the University of Nebraska Medical Center. His research interests are in mechanisms underlying pro-oxidant drug-induced hemolytic anemia and the role of reactive metabolites in the toxicity of environmental chemicals in the liver. Current research is directed toward developing animal and cell culture models to discover non-hemolytic 8-aminoquinoline antimalarial drugs. Before coming to UNMC, Dr. McMillan conducted research on trichloroethylene (TCE) metabolism and toxicity as a faculty member of a DOE-supported Environmental Biosciences Program at the Medical University of South Carolina. This research led to the identification of TCE-protein adducts in rodent models and insight into how known genetic variation in human enzymes responsible for TCE metabolism alters the rate and amount of carcinogenic metabolites produced after exposure. Dr. McMillan recently served on a National Academy of Sciences EPA-IRIS review committee on perchloroethylene. He received his Ph.D. degree in toxicology at University of Arkansas for Medical Sciences and performed his dissertation work at the National Center for Toxicological Research. Dr. McMillan has been a diplomate of the American Board of Toxicology since 1994.

McMillan, Joellyn

University of Nebraska Medical Center

Dr. Joellyn McMillan is an assistant professor in the Department of Pharmacology and Experimental Therapeutics and the Department of Environmental, Agricultural and Occupational Health at the University of Nebraska Medical Center. Dr. McMillan received her Ph.D. degree from Texas A&M University and carried out post-doctoral training at the National Center for Toxicological Research and at the Medical University of South Carolina. While at the Medical University of South Carolina she received the Developing Scholar Award in 1997. She has in the past conducted Department of Energy sponsored research and published several articles on the hepatic effects of trichloroethylene and its metabolites using primary cell cultures of hepatocytes from rodents and humans. She has also conducted NIH sponsored research on drug-induced hepatotoxicity using galactosamine as a model agent. Dr. McMillan currently conducts research on the development of methods of delivery of nanoformulated antiretroviral drugs. In addition she is involved in research to develop an animal model for assessing primaquine-induced hemolytic anemia. She currently teaches introductory and advanced toxicology to graduate students in the College of Public Health programs at UNMC.

Miller, Marion

University of California-Davis

Marion Miller, PhD is a Professor in the Department of Environmental Toxicology, UC Davis and has been on the faculty at UC Davis since 1986. Her undergraduate and graduate degrees were both in Pharmacology and were received from Aberdeen University, Scotland and the Medical University of South Carolina, Charleston, SC respectively. Subsequently she spent two years carrying out postdoctoral research in the Toxicology Unit, University of London, UK. Her research interests are in the areas of reproductive toxicology, metabolism and pharmacokinetics. Research projects in her laboratory are investigating why toxicants selectively damage the testis. Particular interests are metabolic mechanisms of testicular toxicity and the role of testis-specific functions in testicular damage. Sperm biomarkers for male reproductive toxicity are being researched using computerized biophysical measures of motility and morphology and biochemical indicators of sperm dysfunction as well as metabolomic approaches. Compounds of particular interest are the nitroaromatics, as well as agricultural chemicals such as benomyl (a fungicide), and molinate (a herbicide). Dr Miller was a member of a Science Advisory Board for OEHH (Office of Environmental Health Hazard Assessment) in Cal EPA serving as one of the state's qualified experts on the Developmental and Reproductive Toxicant (DART) Identification Committee for the purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) (1994-2004). Currently, she is Director of the USDA funded IR-4 program, a National Agricultural Program to clear pest control agents for minor use crops and Associate Director of the systemwide University of California Toxic Substances Research and Teaching Program. She is a member of the Society of Toxicology and has served on the SOT K-12 Education subcommittee. She previously has served as an ad hoc reviewer on NIH study sections. Specifically for trichloroethylene, she has also served on a peer review panel of this chemical for New York State. Because of her duties as Director of the IR-4 program, she also receives support monies from chemical companies and grower groups to support specific studies for pesticides undergoing IR-4 supported research and registration.

Moore, Lee

National Cancer Institute

Dr. Lee Moore received her M.P.H. degree in Industrial Hygiene and Ph.D. in Environmental Health Sciences from the University of California at Berkeley, School of Public Health in 1992 and 1994, respectively. Subsequently, she received several postdoctoral fellowship awards to continue her research of early genotoxic effects of environmental arsenic exposure in human populations at the School of Public Health at UC Berkeley and the University of California San Francisco Cancer Center. In her research, molecular epidemiological methods that employed biomarkers of exposure, susceptibility, and tumor heterogeneity were used to investigate health effects associated with arsenic exposure from drinking water among populations in the United States (Nevada, California), South America (Chile, Argentina), and India. She also held positions at the City and County of San Francisco, Department of Public Health as a water epidemiology specialist and as an environmental health consultant for the American Lung Association and the California Environmental Protection Agency Air Toxics and Epidemiology Section from 1993-1996. In 2001, she joined the Occupational and Environmental Epidemiology Branch, in the Division of Cancer Epidemiology and Genetics, at the National Cancer Institute, National Institutes of Health in Bethesda, MD. Currently, her research areas of focus include investigations of renal and urothelial cancer risk associated with occupational, environmental, genetic and epigenetic risk factors for disease. She continues to lead large international investigations of renal and bladder tumor heterogeneity associated with etiologic and genetic risk factors for disease. At the NCI, she continues to investigate health effects associated with environmental arsenic exposure in populations in New England and Chile with a particular focus on low-dose exposures, and modification of risk associated with adult, childhood, and in utero exposures. Her research has resulted in over 80 peer-reviewed manuscripts, book chapters, and regulatory documents. She continues to serve on the editorial board of the journal Mutation Research, Fundamental and Molecular Mechanisms of Mutagenesis and the Journal of Toxicology and Environmental Health and has served on committees at the Environmental Protection Agency, International Agency for Research on Cancer, and at the National Cancer Institute. In October 2009, she was the recipient of the National Institutes of Health Award of Merit in recognition of her important scientific contributions to furthering our understanding of molecular pathologic factors that play a role in the etiology of urologic cancers.

Pennell, Michael

The Ohio State University

Michael L. Pennell is an Assistant Professor in the Division of Biostatistics in the College of Public Health at The Ohio State University. Dr. Pennell received his Ph.D. in Biostatistics in 2006 from the University of North Carolina at Chapel Hill where he was funded by a training grant in Environmental Biostatistics from the National Institute of Environmental Health Sciences. The primary focus of Dr. Pennell's graduate research was on the statistical analysis of environmental health data. In his Masters thesis, he performed a multivariate analysis of water quality data from the town of Chapel Hill in order to identify dates and locations with outlier concentrations of fecal coliform bacteria and total suspended solids. In his dissertation research, Dr. Pennell developed a Bayesian semiparametric method for analyzing data from studies of palpable tumors and a Bayesian nonparametric method for determining the Lowest Observed Adverse Effects Level (LOAEL) in a dose-response study; both papers were published in the journal Biometrics. At Ohio State, Dr. Pennell has remained engaged in environmental health in both his research and teaching. Since arriving at OSU, he has been a co-Investigator on a grant entitled "Threshold regression methodology for cancer risk assessment." Threshold regression is an alternative to the commonly used Cox proportional hazards model for survival data which models a subject's health using a latent stochastic process that fails once it hits a threshold value. Not only is it a biologically plausible model for modeling time to cancer-related death, but it also allows exposure effects to vary with time and can accommodate different exposure durations across subjects. Currently, Dr. Pennell is working on threshold regression models motivated by data from two year carcinogenicity studies performed by the National Toxicology Program and by data on diesel exhaust exposure of railroad workers. Dr. Pennell is also extending his dissertation research to develop a nonparametric Bayesian method for estimating the benchmark dose from quantal response data. The past three years, Dr. Pennell has provided guest lectures on dose response modeling in the environmental risk assessment course offered by the College of Public Health. He has also developed a course entitled "Statistical Methods in Toxicological Risk Assessment," which he hopes to teach in the near future.

Portier, Kenneth M.

American Cancer Society, National Home Office

Dr. Kenneth M. Portier is Associate Professor of Statistics and Agricultural Experiment Station Statistician in the Institute of Food and Agricultural Sciences at the University of Florida. Since 1979, he has worked primarily as a statistical consultant to researchers in agriculture, natural resources and the environment and as a teacher of statistical methods to graduate students in agriculture, ecology, environment and natural resources associated disciplines. Widely sought after for graduate committees, Dr. Portier has coauthored publications in many of the premier journals in agriculture, natural resources and environmental sciences and in 2003 was named a North American Colleges and Teachers of Agriculture (NACTA) teaching fellow. He is a regular participant of US EPA and National Toxicology Program science advisory panels reviewing human and ecological risks from agriculture-related chemicals and practices. In 2004 he was appointed to membership on the EPA science advisory panel. His research interests are in applied statistics, biostatistics, statistical computing and the teaching of statistics.

Post, Gloria

New Jersey Department of Environmental Protection

Dr. Gloria Post has been a Research Scientist in the New Jersey Department of Environmental Protection's Division of Science, Research and Technology since 1986. She is responsible for development of the human health basis for New Jersey's standards, criteria, and advisories for drinking water, surface water, ground water, soil, and fish consumption, and for coordination of approaches used in human health criteria development throughout NJDEP. She also provides toxicology and risk assessment expertise to NJDEP on other issues. Dr. Post has developed risk assessments for many important environmental contaminants including PFOA, MTBE, perchlorate, and volatile organics. She is a member of the New Jersey Drinking Water Quality Institute, a legislatively mandated advisory body to NJDEP. She is also member of the planning committee of FSTRAC, an organization of state and federal scientists responsible for human health assessment of drinking water contaminants. She became a Diplomate of the American Board of Toxicology in 1990, and is a 25 year full member of the Society of Toxicology, serving on the Program Committee of its Mid-Atlantic chapter. She has lectured in Pharmacology at Rutgers College of Pharmacy and on risk assessment at UMDNJ School of Public Health. Dr. Post holds a Ph.D. in Pharmacology from Thomas Jefferson University, where her thesis work related to benzene metabolism and toxicity. She earned an A.B. with honors in Biochemical Sciences from Princeton University. Prior to joining NJDEP, she did post-doctoral research in biochemical toxicology at Duke University and Thomas Jefferson University.

Rankin, Gary

Marshall University

Dr. Gary O. Rankin received his Ph.D. degree from the University of Mississippi in 1976. After completing postdoctoral training in pharmacology at the Medical College of Ohio, he joined the faculty of the School of Medicine at Marshall University in 1978 and rose through the ranks to become Professor and Chair of the Department of Pharmacology in 1986. In 2005, he became Chair of the Department of Pharmacology, Physiology and Toxicology at the Joan C. Edwards School of Medicine at Marshall University. He also served as Associate Dean for Biomedical Research and Graduate Education at MU for three years to establish the office and programs. He has extensive experience as a regular and ad hoc member of numerous National Institutes of Health (NIH) study sections. His primary area of research is investigating mechanisms of chemical-induced nephrotoxicity, funded predominately from NIH throughout his career, where he is an internationally recognized expert. Dr. Rankin has been an author on over 115 peer-reviewed publications, 23 review articles, 15 book chapters and 210 presentations at state, national and international meetings primarily in the areas of toxicology and pharmacology. Dr. Rankin currently serves as the Principal Investigator of the West Virginia IDEa Network of Biomedical Research Excellence (WV-INBRE) award from NIH to help develop biomedical research competitiveness within the state and to provide biomedical research opportunities to undergraduate students and faculty. He has served on several editorial boards and as an Associate Editor for Toxicology and Applied Pharmacology and XPharm. He has also been elected to numerous leadership roles for professional societies including President of the Mechanisms Specialty Section of the Society of Toxicology, President of the Division of Toxicology of the American Society for Pharmacology and Experimental Therapeutics, and President of the Association of Medical School Pharmacology Chairs.

Rusyn, Ivan

University of North Carolina at Chapel Hill

Ivan Rusyn received his M.D. (with honors) from Ukrainian State Medical University in Kiev in 1994, and Ph.D. in Toxicology (Ronald G. Thurman, advisor) from UNC-Chapel Hill in 2000. He trained at the University of Dusseldorf (1995-1996, with Helmut Sies), UNC-Chapel Hill (2000-2001, with James A. Swenberg), and MIT (2001-2002, with Leona D. Samson). In 2002 he re-joined the Department of Environmental Sciences and Engineering at UNC as a tenure-track Assistant Professor and in 2007 was promoted to Associate Professor with tenure. Since returning to North Carolina as a faculty member, he is also active in the Curriculum in Toxicology as a teacher, mentor and, since 2007, as Associate Director of one of the top U.S. Toxicology training programs. His research interests are in the fields of non-genotoxic carcinogenesis, alcohol-induced liver injury, computational toxicology and toxico-genetics. Dr. Rusyn's 2008 SOT Achievement Award is reflective of many accomplishments in research. Dr. Rusyn's laboratory has an active research portfolio funded by the National Institutes of Health and the US EPA with a focus on the mechanisms of action of environmental toxicants and the genetic determinants of the susceptibility to toxicant-induced injury. He has nearly 15 years of experience in studies on health effects of environmental agents that resulted in more than 80 peer-reviewed publications. Through a combination of in vivo animal studies and experiments that utilize cellular and molecular models, his laboratory aims to better understand why certain chemicals cause cancer or organ damage in rodents and whether humans in general, or any susceptible sub-population in particular, are at risk from similar exposures. His laboratory is focused on large-scale screening of environmental agents and targeted mechanistic investigation of alcohol, trichloroethylene, peroxisome proliferators, acetaminophen and other model toxicants of high public health concern. Dr. Rusyn's group develops innovative experimental methods and computational tools which enable analysis of data across multiple dimensions including SNPs, -omic endpoints, multiple chemicals and traditional toxicity phenotypes. His laboratory was the first to report on the genetic regulation of gene expression in the liver, work that establishes the basis for understanding the impact of the genetic variability on the toxicity pathways. Their work is also defining a "toxicity susceptibility state" in mouse liver in response to chemical agents by combining knowledge of toxicology, metabolomics, gene expression profiling and mouse genetics. Dr. Rusyn has served on a number of working groups and committees convened by the National Research Council of the National Academies of Science (Committee to Review EPA's Toxicological Assessment of Tetrachloroethylene, Standing Committee on Emerging Science for Environmental Health Decisions) and the WHO (IARC Monograph on "Alcoholic beverage consumption, acetaldehyde and urethane"). Dr. Rusyn was an external reviewer of the EPA IRIS draft risk assessment for Trichloroacetic Acid. He also served on numerous study sections for NIH, EPA and the Canada Foundation for Innovation. He will begin permanent membership in NIH Xenobiotic and Nutrient Disposition and Action (XNDA) study section in 2010 (pending CSR approval). He is also an active member of the Society of Toxicology where he served as a member of the Scientific Program Committee (2006-2008), Councilor of the Carcinogenesis Specialty Section (2007-2009), and member of the Board of Publications (since 2008). He also contributes through participation on the editorial boards of Toxicological Sciences and Toxicology and Applied Pharmacology and as a regularly solicited reviewer for more than a dozen scientific journals.

Selmin, Ornella

University of Arizona

Dr. Selmin is an Associate Research Scientist in the Department of Nutritional Sciences at University of Arizona. From 1993 - 1996, she was a Visiting Associate at the National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health. During the past 15 years, her main research objectives have been to identify the molecular mechanisms through which trichloroethylene (TCE), and its metabolite, trichloroacetic acid (TCAA), induce congenital heart disease with the long-term objective of designing preventative strategies. As a principal investigator, I have developed two NIH R01 projects on the effects of TCE on cardiac development funded under the umbrella of the University of Arizona Superfund Program. The working hypothesis of the current project is that exposure to TCE induces specific changes in cellular pathways that regulate heart differentiation and in turn, these changes cause cardiac defects. Taken together, our data indicate that perturbations of calcium flux may disrupt both cardiac physiology and intracellular signaling and suggest likely mechanisms for TCE-mediated cardio-toxicity. Her research has also explored the preventative effects of folic acid against TCE-induced DNA methylation. An objective is to explore the possibility that mice exposed to TCE during pregnancy will generate offspring with a reduced incidence of cardiac malformations if their diet was supplemented with folic acid. The hypothesis is that TCE exposure during embryonic development may reduce the availability of methyl group donors, and in turn alter the expression of genes involved in cardiac differentiation. Recent findings indicate that the interaction between high concentrations of folic acid and TCE may cause deleterious effects in the expose dam and offspring. Dr. Selmin has a B.S. in Biology and a Ph.D. in Molecular and Cell Biology from University of Padova, Italy.

Shiao, Yih-Horng

National Institutes of Health

Dr. Shiao is a Staff Scientist in the intramural program of National Cancer Institute (NCI), National Institutes of Health. He received Ph.D. from the Department of Pathology, Louisiana State University Medical Center, New Orleans. After a period of stay in Italy to help setting up a molecular pathology laboratory in the Cittadella Hospital, affiliated with University of Padova, he joined the Laboratory of Comparative Carcinogenesis, NCI for his postdoctoral training in 1994. Dr. Shiao has been interested in the interactions of genomes with environmental and dietary factors. His research has covered the use of genomic information to predict exposures in human populations, to determine the genome targets of selected agents in animals, and to characterize the functions of genes and gene products in in vitro systems. Examples of his contributions in the field are correlating of environmental and dietary factors to p53 mutation spectra, identification of the VHL as a target of alkylating agents, and epigenetic and genetic changes of the rRNA after Cr(III) exposure. The model tumor types, that have been examined, include gastric, breast, esophageal, kidney, and lung cancers. Dr. Shiao is an elected and active member of the American Association for Cancer Research and of the American Chemical Society. He served as a panelist to evaluate the health issue of trichloroethylene exposure in a 2004 conference sponsored by the U.S. Environmental Protection Agency and contributed a commentary article later included in a 2006 Congressional report from National Academy of Sciences. He is currently sitting in the editorial board of Open Biomarkers journal. He has been routinely invited to peer-review manuscripts for over 20 scientific journals.

Sipes, I. Glen

University of Arizona

Dr. Sipes earned a B.S. in Pharmacy from the University of Cincinnati (1965) and the Ph.D. in Pharmacology from the University of Pittsburgh (1969). After three years as a staff fellow at NIH, with Drs. B. Brodie and J. Gillette, he joined the faculty at the University of Arizona as an assistant professor in 1973. There he developed a research program with emphasis on the biotransformation of drugs and environmental chemicals and on mechanisms of chemical-induced liver and ovarian injury. He is the author of over 200 research publications and several review articles and book chapters. As an academic scientist, Dr. Sipes has trained 32 MS and 26 PhD students and mentored 25 postdoctoral fellows. Dr. Sipes currently serves as Professor and Head of the Department of Pharmacology in the College of Medicine at the University of Arizona. He is also Professor of Pharmacology and Toxicology and Anesthesiology. For 19 years he served as Head of the Department of Pharmacology and Toxicology in the College of Pharmacy and was the founding Director of the Center for Toxicology. Dr. Sipes is active in the Society of Toxicology having served as a Councilor, Secretary, Vice President and President. Dr. Sipes served as Editor of Toxicology and Applied Pharmacology, an official journal of the Society for seven years and was an associate editor of Life Sciences and on the editorial boards of Quality Assurance and Annual Review of Pharmacology and Toxicology, and Molecular Interventions. Other professional activities include serving as a Councilor for the International Society for the Study of Xenobiotics; as a Councilor and as Chair of the Pharmaceutical Sciences section for the American Association for the Advancement of Science, of which he is also a Fellow; as a member of the NAS/NRC Committee of Toxicology and Board of Environmental Studies and Toxicology and as Chairperson of the NIH Toxicology Study Section and a member of the National Advisory Environmental Health Sciences Council. He was a Burroughs Wellcome Toxicology Scholar from 1985-1990 and was elected a Fellow of the Academy of Toxicological Sciences. He served as Editor-in-Chief of the 13 volume series entitled, Comprehensive Toxicology. From 1998-2004, Dr. Sipes served as President of the International Union of Toxicology and then as Past President. He is a technical advisor (currently chair) to the Joint Expert Committee on Food Additives for the United Nations/WHO and a member of Research Institute for Fragrance Material's Expert Panel. In addition he has served as a consultant and/or on advisory committees for several pharmaceutical and chemical companies.

Thrall, Brian

Pacific Northwest National Laboratories

Dr. Brian Thrall is currently Associate Director of the Biological Sciences Division and Technical Group Manager of the Cell Biology & Biochemistry at the Pacific Northwest National Laboratory. Dr. Thrall received a Ph.D. degree in Pharmacology and Toxicology at Washington State University in 1990, and conducted postdoctoral research in molecular biology in the Biology and Chemistry Department at Pacific Northwest Laboratory. He currently holds adjunct positions in the Graduate Research Program at Washington State University. Dr. Thrall is a member of the Society of Toxicology, American Society of Cell Biology, American Association for the Advancement of Science, and served as President of the Pacific Northwest Association of Toxicologists (2000-01). He regularly serves on a variety of national special emphasis review panels for the National Institutes of Health, Department of Energy, U.S. Air Force Office of Scientific Research and the Department of State. Dr. Thrall's research focuses on understanding the mechanisms in which environmental agents modulate normal cell signaling pathways to influence human health. His research employs genomic, proteomic, and cellular imaging strategies to investigate the molecular mechanisms by which environmental agents alter growth factor, inflammatory and stress signaling pathways, using a variety of epithelial and immune cells as model systems. Early work elucidated fundamental mechanisms by which metabolites of chlorinated solvents and drinking water disinfection byproducts induce liver cancer in rodents. His published research identifying critical roles of growth factor signaling pathways in stimulating hepatocellular replication and inhibiting hepatocellular apoptosis in response to these agents received recognition by the Society of Toxicology in 2001 (Manuscript of the Year Award). His laboratory has also developed state-of-the-art proteomics and bioinformatics approaches for elucidating biological response pathways associated with inflammation. Currently, his laboratory is focused on applying these approaches to identify toxicity pathways induced by engineered nanomaterials, with funding provided by the National Institute of Environmental Health Sciences, Department of Energy, and Battelle Memorial Institute. In 2008, he was an invited speaker faculty for the 1st US-China Joint Symposium on Nanobiology representing NIEHS-sponsored research in nanotoxicology. He has authored or co-authored over peer-reviewed 70 publications and reports, and serves as a regular reviewer for several journals, including as an Editorial Board member for Open Toxicology.

Vena, John

University of Georgia

John E. Vena, Ph.D. is the Head of the Department of Epidemiology and Biostatistics and University of Georgia Foundation Professor in Public Health at the College of Public Health, University of Georgia. For the past five years he served as Professor and Chair of the Department of Epidemiology and Biostatistics at the Arnold School of Public Health at the University of South Carolina (USC). Dr. Vena was Professor of Social and Preventive Medicine at the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and a research fellow at Roswell Park Cancer Institute (1981-2003) and Director of the Environment & Society Institute (1999-2003). Dr. Vena received his B.S. in Biology from St. Bonaventure University and his M.S. and Ph.D. degrees in Epidemiology from the State University of New York at Buffalo. Dr. Vena is a Fellow of the American College of Epidemiology and the American Epidemiological Society, a member of the International Society for Environmental Epidemiology, Society for Epidemiologic Research and the American Public Health Association (APHA) and currently serves on the Governing Council for Epidemiology for APHA. He has published extensively in the field of environmental and occupational epidemiology and his studies have included descriptive and analytic studies of air and water pollution, bladder cancer and drinking water contaminants, occupational exposures, health of municipal workers including firefighters and police officers, diet, electromagnetic fields and persistent environmental toxicants. Dr. Vena served on the National Academy of Science Committee for the evaluation of the impact of oceans on human health in 1999 and the Committee on Gulf War and Health: Pesticides and Health, Solvent/ Cancer Panel in 2002-2003. He was a recent invited speaker to the Presidents Cancer Panel. Since 1981, Dr. Vena has taught courses in epidemiologic methods and applications in occupational health and in environmental health and has mentored graduate students, post-doctoral fellows and junior faculty.

Wartenberg, Daniel

Robert Wood Johnson Medical School

Daniel Wartenberg, Ph.D., is Professor and Director of the Division of Environmental Epidemiology in the Department of Environmental and Occupational Medicine at the Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey (UMDNJ), served as Director of the Population Science Program at the Cancer Institute of New Jersey, and was a Libra Scholar at the University of Southern Maine, Portland. He is immediate past President of the International Society of Environmental Epidemiology and has served on a variety of local, national and international advisory committees for organizations including the World Health Organization, England's Health Protection Agency, the Center for Disease Control (CDC), the National Academy of Sciences, the US Environmental Protection Agency and the New Jersey Governor's Commission on Radiation Protection. Dr. Wartenberg's primary research interests are the development and application of novel approaches to the study of environmental risk, pollution, and public health, with particular emphasis on geographic variation, disease clustering and the application of Geographic Information Systems (GIS). His research has explored a variety of topics including the health of flight attendants, nuclear workers, and Persian Gulf War veterans. He also has studied health effects from exposure to incinerator emissions, pesticides, power lines, solvents and toxic chemicals, as well as methodologic developments in epidemiology and quantitative risk assessment. Dr. Wartenberg often works with communities on understanding and addressing local health concerns and perceived disease excesses, also known as clusters. Dr. Wartenberg is the Principal Investigator on a CDC funded, multi-institutional, Academic Partnership for Excellence in Environmental Public Health Tracking, a New Jersey Governor's Council on Autism study on possible environmental risk factors, and a Fire Department of New York study on the psychological impact of the 9/11 disaster on firefighters and is co-leader of the Integrated Health Sciences Facility Core for the Rutgers University and UMDNJ Robert Wood Johnson Medical School's Environmental and Occupational Health Sciences Institute's NIEHS funded Environmental Health Sciences Core Center.

Weaver, Virginia

Johns Hopkins University

Dr. Weaver is an Associate Professor and Director of the Occupational and Environmental Medicine Residency at the Johns Hopkins University Bloomberg School of Public Health. She has a B.A. in Biology from the University of Rochester, an M.D. from New York University and an M.P.H. from the Johns Hopkins Bloomberg School of Public Health. She is dual-boarded in Internal Medicine and Preventive Medicine (Occupational Medicine). She has been on the faculty at Johns Hopkins since completing her occupational medicine residency and post-doctoral research fellowship in 1993. She has a joint appointment in the School of Medicine and is an Associate Faculty Member in the Welch Center for Prevention, Epidemiology and Clinical Research. Her research utilizes molecular epidemiology techniques to evaluate populations with exposure to occupational and environmental nephrotoxicants, including lead and cadmium. Research goals include improved risk assessment, medical surveillance, and exposure management (including treatment). Validation of exposure and early biological kidney effect markers is a focus as well as is assessment of effect modification by age, genetic susceptibility factors, hypertension and other risks on relations between those toxicants and kidney function.

Wolff, Mary

Mount Sinai School of Medicine

Mary S. Wolff, Ph.D., is Professor in the Department of Community and Preventive Medicine as well as the Department of Oncological Sciences and the Director of the Division of Environmental Health Science at the Mount Sinai School of Medicine in New York City. Dr. Wolff's current research interests are in the environmental and genetic determinants, in particular hormonal factors, of fetal and child growth and development. She has been Director of the Center for Children's Environmental Health and Disease Prevention Research from 1998-2009, an NIH/EPA-funded program. She has led a project on the environmental and genetic determinants of puberty (2003-2010), and also directed a study of a birth cohort of women exposed to chemicals and traumatic events at the World Trade Center on 9/11/2001. Her past research involved environmental exposures and cancer, in particular breast cancer in minority populations.

Zeise, Lauren

California Environmental Protection Agency

Dr. Lauren Zeise is chief of the Reproductive and Cancer Hazard Assessment Branch of the California Environmental Protection Agency. She oversees or is otherwise involved in a variety of California's risk assessment activities, including cancer and reproductive toxicant assessments; development of frameworks and methodologies for assessing cumulative impact, nanotechnology, green chemistry/safer alternatives, and susceptible populations; the California Environmental Contaminant Biomonitoring Program; and health risk characterizations for environmental media, food, fuels and consumer products. Dr. Zeise's research focuses on human interindividual variability, dose response, uncertainty and risk. She was the 2008 recipient of the Society of Risk Analysis's Outstanding Practitioners Award and is a National Associate of the National Academy of Science's National Research Council (NRC). She has served on various advisory boards and committees of the Environmental Protection Agency, Office of Technology Assessment, World Health Organization, and National Institute of Environmental Health Sciences. She has also served on a numerous NRC and Institute of Medicine committees and boards, including the committees that produced Toxicity Testing in the 21st Century: A Vision and Strategy, Science and Decisions: Advancing Risk Assessment, and Understanding Risk: Informing Decisions in a Democratic Society. Dr. Zeise received her Ph.D. from Harvard University.