

**Invitation for Public Comment on the List of Candidates for the
EPA Science Advisory Board (SAB)
Chemical Assessment Advisory Committee
(CAAC) augmented for the review of the
EPA's draft IRIS Ammonia Assessment**

December 12, 2013

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a Federal Register Notice (Vol 78 Number 167 Pages 53144-46) published on August 28, 2013 that it was augmenting the expertise on the SAB Chemical Assessment Advisory Committee (CAAC) to conduct a peer review of EPA's draft IRIS Ammonia Assessment. To augment the expertise on the CAAC, the SAB Staff Office sought nominations of nationally and internationally recognized experts with experience and expertise in one or more of the following areas, with a particular focus on ammonia: toxicology of ammonia (and ammonium compounds); epidemiology with experience in respiratory effects (i.e., irritants and measures of lung function); toxicokinetics and the role of endogenous ammonia in maintaining nitrogen homeostasis; and inhalation toxicology. Attached is a List of Candidates that includes the biosketches of both current members of the CAAC and other nominees. In total, the SAB Staff Office has identified 37 candidates based on their relevant expertise and willingness to serve.

The SAB Staff Office Director will make the final decision about who will serve on the Panel based on all relevant information. This will include a review of the confidential financial disclosure form (EPA Form 3110-48), relevant information gathered by staff, and public comments. For the 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 general charge. Specific criteria to be used in evaluating a candidate include: a) scientific and/or technical expertise, knowledge, and experience; b) availability and willingness to serve; c) absence of financial conflicts of interest; d) absence of appearance of a lack of impartiality; e) skills working in advisory committees and panels; and f) for the panel as a whole, diversity of 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 Dr. Suhair Shallal, Designated Federal Officer, no later than January 6, 2014. E-mailing comments (shallal.suhair@epa.gov) is the preferred mode of receipt. Please be advised that comments are subject to release under the Freedom of Information Act.

List of Candidates for the Chemical Assessment Advisory Committee (CAAC) Augmented for the review of EPA's draft IRIS Ammonia Assessment

Acosta, Daniel

University of Cincinnati

Dr. Daniel Acosta, Jr. is the endowed Carl Chair of Pharmacy at the Winkle College of Pharmacy of the University of Cincinnati. He holds a B.S. in Pharmacy from the University of Texas, and a Ph.D. in Pharmacology/Toxicology from the University of Kansas. Dr. Acosta was the 4th dean of the University of Cincinnati's James L. Winkle College of Pharmacy from 1996 to 2011. He was a member of The University of Texas College of Pharmacy faculty for 22 years where he helped develop a nationally ranked program in toxicology as the first Director of the Toxicology Training Program. Dr. Acosta's research has focused on the development of in vitro cellular models to explore and evaluate the mechanisms by which xenobiotics damage or injure specific cell types of various organs or tissues. More recently, he has worked on the development of primary culture systems of rabbit corneal epithelial cells, conjunctival cells, and iris epithelial cells and primary cultures of rat epidermal keratinocytes as in vitro models to evaluate selected chemicals for ocular and dermal toxicity. Dr. Acosta's laboratory has had extensive experience in in vitro toxicology and in the development of cell culture systems and methods for assessing cytotoxicity. He is very active in pharmacy organizations, such as the American Association of Colleges of Pharmacy and the Accreditation Council for Pharmacy Education. Dr. Acosta serves on several editorial boards of toxicology and in vitro journals, and has been appointed to a number of government and private committees, including: Chairman of the U.S. Food and Drug Administration (FDA) Scientific Advisory Board for the National Center for Toxicology Research; Past Chairman and current member of the Texas A&M External Advisory Board of the National Institute of Environmental Health Sciences (NIEHS) Center for Environmental and Rural Health; a past member of the Board of Scientific Advisors for the Office of Research and Development of the Environmental Protection Agency; a past member of the National Advisory Committee to the Director of the Center for Environmental Health of the Centers for Disease Control and Prevention; a past member of the NIEHS Scientific Advisory Committee on Alternative Toxicological Methods which is advisory to NIEHS and the National Toxicology Program; and a past member of the Expert Committee on Toxicology and Biocompatibility of the United States Pharmacopoeia, 2000-2005. Dr. Acosta was appointed to the Committee on Toxicity Testing and Assessment of Environmental Agents for the National Academy of Sciences, which resulted in two pioneering reports on Toxicology in the 21st Century, 2007-2008. He is Chair of the Board of Directors of Toxicology Excellence in Risk Assessment, a non-profit organization that specializes in helping the public sector and government arena on risk assessment issues in the environment. Dr. Acosta was recently appointed to a three-year term on the Science Board of FDA, which advises the Commissioner on national issues in the areas of drugs, food, and cosmetics. He is the recipient of several awards and honors, including President of the Society of Toxicology (2000-2001), the 2006 Foundation Award in Excellence from the Pharmaceutical Research and Manufacturers of America Foundation, and Fellow of the Academy of Toxicological Sciences. For the past 16 years, Dr. Acosta has not been actively involved in any personal research projects and has not received any research funding from external government or private organizations.

Anderson, Henry

Wisconsin Division of Public Health

Dr. Henry A. Anderson holds positions as the State Health Officer, State Environmental and Occupational Disease Epidemiologist, and Chief Medical Officer in the Wisconsin Division of Public Health, Department of Health Services, and adjunct professorships at the University of Wisconsin-Madison, School of Medicine and Public Health, Department of Population Health Sciences, and the University of Wisconsin Institute for Environmental Studies, Center for Human Studies. He holds a B.A. in Biology from Stanford University, and an M.D. from the University of Wisconsin-Madison. Dr. Anderson's expertise includes public health; preventive, environmental, and occupational medicine; respiratory diseases; epidemiology; human health risk assessment; and risk communication. His active research interests include: disease surveillance, childhood asthma, lead poisoning, reproductive and endocrine health hazards, drinking water contaminants, occupational and environmental respiratory disease and sport fish consumption advisory communication. Dr. Anderson served on the U.S. Environmental Protection Agency's (EPA) National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances. He was chair of the Environmental Health Committee of the EPA Science Advisory Board, served on the chartered EPA SAB, and is past Chair of the Board of Scientific Counselors for the National Institute of Occupational Safety and Health. Dr. Anderson has served on five National Academy of Sciences Committees including Toxicity Testing for Assessment of Environmental Agents and just completed service on the Committee, Water Reuse: Potential for Expanding the Nation's Water Supply Through Reuse of Municipal Wastewater. He was a founding member of the Agency for Toxic Substances and Disease Registry Board of Scientific Counselors (1988-1992). Dr. Anderson serves on the Presidential Advisory Board on Radiation Worker Compensation. He has served on the Armed Forces Epidemiology Board and the Centers for Disease Control and Prevention (CDC)/ National Center for Environmental Health Director's Advisory Committee. Dr. Anderson is a fellow of the Collegium Ramazzini and the American Association for the Advancement of Science. He is associate editor of the American Journal of Industrial Medicine. Dr. Anderson was certified in 1977 by the American Board of Preventive Medicine with a sub-specialty in occupational and environmental medicine and in 1983 became a fellow of the American College of Epidemiology. He is a state government employee and his research has been supported by the State of Wisconsin and grants from U.S. government agencies, primarily U.S. Department of Health and Social Services/Centers for Disease Control and Prevention and the U.S. Environmental Protection Agency.

Bartell, Scott

University of California - Irvine

Dr. Scott M. Bartell is Associate Professor in public health, statistics, and epidemiology at the University of California, Irvine. His research interest is environmental health methodology, with applications in environmental epidemiology, exposure science, and risk assessment. Recent projects include epidemiologic analysis of particulate matter exposure and arrhythmia in the Cardiovascular Health and Air Pollution Study, linkage of fate and transport models and a pharmacokinetic model for perfluorooctanoic acid with data from the C8 Health Project, and development of statistical methods for biomarker based exposure estimation and for epidemiologic analysis of aggregated data. He has served on a variety of scientific advisory committees for the National Research Council, the Environmental Protection Agency, the Centers for Disease Control and Prevention, the National Institute of Environmental Health Sciences, and the Department of Energy. Dr. Bartell earned his PhD in epidemiology and MS in statistics from the University of California, Davis, and his MS in environmental health from the University of Washington. Current and recent research funding sources include the National Institutes of Health, the Centers for Disease Control and Prevention, the U.S. Environmental Protection Agency, California Air Resources Board, and Garden City Group, Inc.

Bruckner, James V.

University of Georgia

Dr. James V. Bruckner is currently a Professor of Pharmacology and Toxicology in the Department of Pharmaceutical and Biomedical Sciences of the College of Pharmacy of the University of Georgia (UGA). He holds a B.S. in Pharmacy and a M.S. in Toxicology from the University of Texas in Austin, and a Ph.D. in Toxicology from the University of Michigan. Dr. Bruckner organized and directed the UGA Interdisciplinary Toxicology Graduate Program in Toxicology for 15 years. Prior to that time he held a tenured faculty position at the University of Texas Medical School at Houston. Dr. Bruckner's primary areas of expertise are general toxicology, toxicokinetics (TK) and human health risk assessment. His primary research focus is on the toxicology and TK of volatile organic chemical contaminants of drinking water, drug-chemical interactions at environmental exposure levels, metabolic and toxicokinetic bases for susceptibility of children to chemicals, and physiological modeling of solvents and pyrethroid insecticides. The relevance of experimental designs to health risks of "real life" chemical exposures is of particular interest to Dr. Bruckner. His research funding for toxicology studies of problems of national concern from the past 35 years has consistently come from federal agencies including the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy, the Centers for Disease Control, and the U.S. Air Force (USAF), and a contract from the Pyrethroid Working Group (PWG). Dr. Bruckner has published more than 200 journal articles, book chapters and abstracts. Many of these papers focus on the toxicology, TK and PBPK modeling. He has served on a variety of expert panels and committees for the EPA, the National Institute of Environmental Health Sciences, National Aeronautics and Space Administration, USAF, Agency for Toxic Substances and Disease Registry/CDC, the U.S. Food and Drug Administration, and National Academy of Sciences (NAS). Dr. Bruckner's NAS appointments have included, among others, the Committees on Safe Drinking Water, Pesticides in Diets and 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. Such work has frequently involved assessment of health risks to populations living in the proximity of military chemical and nuclear disposal sites (e.g., Camp Lejeune, NC; Fort Detrick, MD; Savannah River site, SC). Dr. Bruckner is currently a member of the American Conference of Governmental Industrial Hygienists Threshold Limit Value (ACGIH TLV) chemical substances panel and the NAS Committee on Toxicology.

Cohen, Mitch

New York University

Dr. Cohen is an Associate Professor in the Dept. of Environmental Medicine at NYU School of Medicine. He received his PhD from the University of Florida, and then undertook two post-doctoral rotations (Pulmonary Biology, Molecular Biology) upon arriving at NYU. His main areas of research are in the pulmonary immunotoxicology and toxicology of metals, but his work has led him to also study the effects from host exposure to one or more of multiple gas/particulate ambient pollutants. His most recent work has focused on determining the mechanisms by which exposure of First Responders to World Trade Center dusts during the first week after the event has increasingly led to the development of numerous non-cancer pulmonary disorders. Dr. Cohen has served on both US Government advisory/review committees/study sections (ad hoc) and spoken to government agencies overseas on matters related to metal/environmental pollution and potential health risks to their local populations. He also is an official member of the NYC Mayor's WTC Medical Working Group (since 2009). Dr. Cohen has been a member of SOT and the ACS for many many years (as well as the Society for Leukocyte Biology and [previously] the American Association for Cancer Research). Within SOT, Dr. Cohen has served as Councilor, VP, and President of the Immunotoxicology Specialty Section (SS) and (currently) as Councilor for the Inhalation/Respiratory Systems SS.

Cooper, Arthur

New York Medical College

Dr. Arthur J. L. Cooper is a Professor of Biochemistry and Molecular Biology at New York Medical College, Valhalla, New York and an Adjunct Professor of Biochemistry in Neuroscience at the Brain and Mind Institute of the Weill Medical College of Cornell University (WMCCU). Dr. Cooper received BSc, MSc and DSc degrees from London University. After obtaining a PhD in Biochemistry from the WMCCU, he spent two years as a Postdoctoral Fellow at Brandeis University. In 1975 he returned to WMCCU, becoming full professor in 1989. From 1996 to 2007, he maintained a laboratory at the Burke Medical Research Institute in White Plains, New York. In 2007 he moved to New York Medical College. Dr. Cooper has held many editorial positions, including member of the Editorial Staff of the Journal of Biological Chemistry (1986-1991) and Editorial Boards of Protein Expression and Purification (1996-2007), Journal of Amino Acids (2010-present) and Analytical Biochemistry (1995-present). He has been an Executive Editor of Analytical Biochemistry since 2000. In addition, Dr. Cooper has been a manuscript reviewer for more than 100 different journals. Since 1980, he has been an ad hoc reviewer for many NIH Study Sections. He has also been a reviewer for the VA, NSF, the Wellcome Trust Foundation and many other funding agencies in the US and abroad. For much of his career, Dr. Cooper has been funded by the NIH. Currently, he is the author or co-author of over 220 scientific publications. A large part of Dr. Cooper's career has been devoted to studying energy, nitrogen, sulfur (and more recently selenium) biochemistry and metabolism. He has contributed to the discovery of several new enzymatic reactions and mechanistic pathways, and helped solve the metabolic steps in a branch of the biogeochemical sulfur cycle. He has identified many pyridoxal 5'-phosphate-dependent enzymes involved in the metabolism of several xenobiotics (including halogenated alkenes and the anti-cancer drugs cisplatin and busulfan). He was the first to show that pathological length polyglutamine repeats (as occur in at least nine neurodegenerative diseases, including Huntington disease) are excellent substrates for transglutaminases. He recently headed a team that showed an enzyme (-amidase) to be identical to a protein (Nit2) previously noted to be a putative tumor suppressor. Ongoing work is aimed at unraveling the biochemistry of seleno-amino acids in order to understand the chemopreventive nature of organoselenium. Dr. Cooper was instrumental in devising methods for the use of cyclotron-generated ¹³N (positron-emitter, t_{1/2} 9.96 min) as a tracer for studying nitrogen metabolism. This work led to the discovery of an unexpectedly rapid turnover of certain nitrogen-containing metabolites in rat tissues. Excess ammonia is neurotoxic, and hyperammonemia is a major contributing factor to the encephalopathy associated with liver disease and several inborn errors of metabolism. Studies of [¹³N]ammonia metabolism in normal and liver disease rats by Dr. Cooper and colleagues have served, in part, as a basis for modeling by several groups of cerebral ammonia metabolism in normal and hyperammonemic human brain using PET and MR techniques.

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 and 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, including factors such as stress and those related to low socioeconomic status as well. These research efforts have resulted in over 130 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. Dr. Cory-Slechta's research addresses the behavioral and central nervous system effects arising from exposures to various metals including lead, mercury and arsenic particularly in combination with stress (NIH, EPA Star).

Dourson, Michael

Toxicology Excellence for Risk Assessment

Dr. Michael Dourson is the Director of Toxicology Excellence for Risk Assessment (TERA). He has a PhD in toxicology from the University of Cincinnati in 1980 and is a Diplomate of the American Board of Toxicology (ABT). He has lead TERA's development of partnerships among diverse groups to address chemicals of high visibility, such as formaldehyde, perchlorate, chloroform, and soluble nickel, and cooperative ventures such as the Voluntary Children's Chemical Exposure Program, the International Toxicity Estimates for Risk database (available at Toxnet), and the Alliance for Risk Assessment. He also worked 15 years for EPA, holding several leadership roles and winning awards for joint efforts, such as the creation of EPA's Integrated Risk Information System. In 2003, he won the Society of Toxicology (SOT) Lehman award for major contributions that improve the scientific basis of risk assessment. In 2007, he was elected a Fellow of the Academy of Toxicological Sciences. In 2009, he won the International Society of Regulatory Toxicology and Pharmacology's International Achievement Award in recognition of his outstanding contributions nationally and internationally to the advancement of regulatory science. In 2009, he was also selected a Fellow for the Society for Risk Analysis (SRA) for substantial achievement in science relating to risk analysis and service to SRA. Dr. Dourson has co-published well over 100 papers on risk assessment methods, including methods for assessing risk in sensitive subgroups, on use of animal and human data in the assessment of risk, or on assessments for specific chemicals. He has also co-authored well over 100 government risk assessment documents, made well over 100 invited presentations, and chaired well over 100 sessions at scientific meetings and independent peer reviews. He has been elected to multiple officer positions in the American Board of Toxicology, the Society of Toxicology (SOT), and the Society for Risk Analysis. In addition to numerous appointments on government panels, such as EPA's Science Advisory Board, he is also a media resource specialist in risk assessment for the SOT, member on the editorial board of several journals, and vice chair of the NSF International Health Advisory Board.

Eastmond, David

University of California - Riverside

Dr. David A. Eastmond is a professor and chair of the Department of Cell Biology & Neuroscience at the University of California, Riverside. He received his B.S. and M.S. degrees from Brigham Young University in Provo, Utah and his Ph.D. from the University of California, Berkeley. From 1987 to 1989, he was served as an Alexander Hollaender Distinguished Postdoctoral Fellow at Lawrence Livermore National Laboratory. Shortly thereafter, Dr. Eastmond joined the faculty at UC Riverside where he is actively involved in research and teaching in the areas of toxicology and risk assessment. The research in Dr. Eastmond's laboratory focuses on the mechanisms involved in the toxicity and carcinogenesis of environmental chemicals. His research has centered on the metabolism and chromosome-damaging effects of various environmental chemicals including benzene, a widely used industrial chemical and environmental pollutant, and ortho-phenylphenol, a commonly used fungicide and disinfectant. Dr. Eastmond has served as the president of the Environmental Mutagen Society and as a Jefferson Science Fellow in the US State Department. He has also participated on a variety of review panels related to chemical mutagenesis, carcinogenesis and risk assessment including panels for the US Environmental Protection Agency, the US Food and Drug Administration, the International Programme for Chemical Safety, the International Agency for Research on Cancer, the Organisation for Economic Cooperation and Development, Health Canada and the International Working Group for Genotoxicity Testing. He currently serves as the chair of the Board of Scientific Counselors for the National Toxicology Program and as a member of the Carcinogen Identification Committee for the California Environmental Protection Agency.

Foster, William Michael

Duke University Medical Center

Dr. W. Michael Foster, Ph.D., joined the faculty of School of Medicine at Duke University in Durham, NC in 2000 and is a Research Professor in the Department of Medicine in the Division of Pulmonary, Allergy and Critical Care Medicine. He provides on an annual basis lectures to undergraduate students in the Nicholas School of the Environment of Duke University, and mentoring at the post-doctoral level to physician scientists in fellowship training of the Pulmonary Division. In addition to faculty and committee responsibilities as a member of the Department of Medicine, Dr. Foster supervises a Small Animal Model and Human Inhalation Core Facility within the Pulmonary Division. Before coming to Duke University Dr. Foster held faculty and teaching appointments at the State University of New York at Stony Brook

(1977-1991), and the Johns Hopkins University School of Public Health (1991-2000). Dr. Foster frequently participates as an ad hoc reviewer for the NIH Center for Scientific Review (2005-present) and was a participant in the peer review of EPA Clean Air Research Centers (2010). Dr. Foster has been a member of the American Physiologic Society (since 1982), and the American Association for the Advancement of Science (2005). At present (2009-2012) Dr. Foster is an EPA Science Advisory Board member of the Ozone Review Panel for the Clean Air Scientific Advisory Committee (CASAC), and previously during 2007 and 2008 he served on the committee of the National Research Council of the National Academies that evaluated morbidity and mortality risk from tropospheric ozone. For the years 2006/2007 he served as the President of the Inhalation and Respiratory Specialty Section of the Society of Toxicology. Dr. Foster joined the editorial board of the Environmental Health Perspectives journal as an Associate Editor in 2010, and is an editorial board member of the American Journal Respiratory Cell and Molecular Biology (2009- present). He is the author or co/author of over 115 journal articles and book chapters that focus on the pulmonary system and/or environmental health. His research interests, and in a sense hallmarks of his scientific career and accomplishments, encompass a paradigm that links cardio-pulmonary injury to air pollutant exposure using established data bases of epidemiological investigations and his own laboratory-based studies on humans and animal models. Dr. Foster's laboratory is currently supported through extramural funding sources from the Department of Health and Human Services and includes program project (P01, n=1) and investigator initiated (R01, n=5) type awards for which he is the designated Principal and/or Co-Investigator of the research plans. These awards have term dates ranging from 2012 to 2017; 2 additional awards with fundable priority scores are pending NIH Council approval. Research in his lab encompasses 3 separable areas: 1) environmental triggers of exacerbation for obstructive airway disease; 2) development of therapeutic targets to treat inflammatory airway disease; and 3) host (genetic) factors of susceptibility to oxidant lung injury. The end points of this research enhance understanding of health risk from exposure to airborne toxins, and the interdependence between therapy, health risk, and establishment of regulatory standards for air quality that reduce poor health outcomes following exposure to ambient air pollutants.

Franzblau, Alfred

University of Michigan

Dr. Alfred Franzblau graduated from the University of California School of Medicine in San Diego, completed residency training in Internal Medicine at the University of Washington, and had advanced training in Occupational and Environmental Medicine at The Mount Sinai Hospital in New York before joining the faculty at the University of Michigan School of Public Health in 1989. He is board certified in both Internal Medicine and Preventive/Occupational Medicine, and he is a certified B reader. His professional activities include teaching, research, and the clinical practice of occupational and environmental medicine. Research interests include work-related musculoskeletal disorders (e.g., carpal tunnel syndrome, tendinitis and osteoarthritis), chemical exposures (e.g., dioxins and metals in the environment), and occupational and environmental lung disease (e.g., pneumoconioses, asthma, hypersensitivity pneumonitis). From 2003-2006 he co-chaired the Health IRB at the University of Michigan, and from 2001-2009 he served as a scientific advisor to the UAW-GM National Joint Committee for Health and Safety. He is a member of the USEPA Science Advisory Board Exposure and Human Health Committee, and he has served as a reviewer for numerous journals, government agencies and the Institute of Medicine. Since 1/1/2011 he has served as Associate Dean for Research of the University of Michigan School of Public Health, and he also holds academic appointments at the University of Michigan Medical School and College of Engineering. Current major sources of research funding are the Asbestos Relief Trust, South Africa, National Institutes of Health, and the Dow Chemical Company.

Garry, Vincent F.

University of Minnesota

Vincent F. Garry, MD., MS, DABT is Professor (Emeritus 2004) in the Department of Laboratory Medicine and Pathology at the University of Minnesota. His research interests focus on Human Environmental Pathology and Toxicology of Birth and Developmental Toxicants. He trained in developmental biology (MS 1964 Fordham U), toxicology (U of Kansas 1968-1971, Post Doc fellow mentor John Doull MD) and received his MD from the University of Michigan in 1967. He was drafted during the Vietnam era and served from 1971-1974 at the Department of Defense Edgewood Chemical Biological Center (ECBC). He later completed a residency in clinical pathology at the University of Minnesota (1974-1976) and has remained on the faculty since that time (Professor (emeritus) 2004). During his tenure at the university, he served as director of the environmental medicine and pathology program. In that role he conducted major studies on birth defect s among children of pesticide applicators, developed and used short term in vitro bioassays to assess developmental toxicity and conducted human biomarker studies. He was called to active duty during desert storm and served as consultant to the Edgewood Chemical Biological Center. He is a retired member of the Board of Directors of the American Board of Toxicology. In his dotage, he remains somewhat active as a member of the CDC/NIOSH study section dealing with occupational/environmental health issues; writer of several published developmental toxicology text book chapters, reviewer for TAAP (associate editor), EHP and other journals and, finally, conducts disability reviews for the social security administration.

Goeden, Helen

Minnesota Department of Health

Dr. Goeden is a principal toxicologist and human health risk researcher for the Health Risk Assessment Unit at the Minnesota Department of Health (MDH). She received her Ph.D. degree in Environmental Health/Toxicology at the University of Cincinnati and a B.S. in Biological Sciences at the College of St. Scholastica, Minnesota. She is currently the scientific lead for the Drinking Water Contaminants of Emerging Concern program. Responsibilities include: toxicological assessment of a wide range of environmental contaminants (e.g., industrial, agricultural, pharmaceutical, consumer product); development of state-wide health-based criteria for groundwater and drinking water; leadership role in state and federal workgroups regarding the development, improvement, and integration of risk assessment methods and public health policies that are protective of sensitive or more highly exposed populations (e.g., infants and children); and case-by-case health risk assessments or research projects specific to emerging environmental health threats (e.g., perfluorochemicals). Dr. Goeden has served on the Water Quality Association Toxicological Review Committee and currently serves as a member of the NSF International Health Advisory Board and the Federal State Toxicology and Risk Assessment Committee (FSTRAC) planning committee. She has lectured on toxicology and risk assessment at UM Schools of Public Health. She is a member of the Society of Toxicology and was a founding member of the national Dose-Response Specialty section of the Society for Risk Analysis.

Harris, Cynthia M.

Florida A&M University

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

Hauser, Russ

Harvard University

Dr. Russ Hauser's research focuses on the health risks of exposure to environmental chemicals that alter human development and reproductive function through disruption of endocrine signaling. Dr. Hauser is the Frederick Lee Hisaw Professor of Reproductive Physiology at the Harvard School of Public Health and Professor of Obstetrics, Gynecology and Reproductive Biology at Harvard Medical School. Dr. Hauser, in collaboration with physicians from the Massachusetts General Hospital, Harvard Medical School, is studying the effects of bisphenol A, phthalates, parabens and chlorinated chemicals on male and female reproductive health. He is also conducting a prospective cohort study on children in Chapaeusk, Russia, where he is investigating the relationship of exposure to dioxins and dioxin-like compounds with growth and pubertal development. Dr. Hauser served on the National Research Council, National Academies committee that prepared the report, Phthalates and cumulative risk assessment: The tasks ahead. He served on two committees of the Institute of Medicine, National Academies, on Gulf War and Health and one committee on Veterans and Agent Orange, Update 2010. Dr. Hauser is a member of two U.S. EPA Science Advisory Boards, Exposure and Human Health Committee (EHC) and the Dioxin Review Panel. He is serving on the U.S. Consumer Product Safety Commission's Chronic Hazard Advisory Panel (CHAP) examining the effects of phthalates on children's health. Dr. Hauser is an Advisory Board member of Environmental Health Perspectives, Journal of the National Institute of Environmental Health Sciences. He is a member of the Environmental Health Sciences Review Committee for the National Institute of Environmental Health Sciences. He was a member of The Endocrine Society's Endocrine Disruptors Task Force. Dr. Hauser has served as the Chair of the Environment and Reproduction Special Interest Group, American Society for Reproductive Medicine. He received an M.D. from Albert Einstein College of Medicine and an M.P.H. and Sc.D. from the Harvard School of Public Health where he completed a residency in occupational medicine. He is board certified in occupational medicine.

Hays, Sean

Summit Toxicology

Dr. Sean Hays is the President and founder of Summit Toxicology, a toxicology and risk assessment consulting firm headquartered in Colorado, and is Assistant Clinical Professor in the Colorado School of Public Health at the University of Colorado Denver and affiliate faculty in the Department of Chemical and Biological Engineering at Colorado State University. Sean received a B.S. in biomedical engineering from Texas A&M University, an M.S. in Physiology from the University of Vermont, an M.S. in chemical engineering from Colorado State University, and a Ph.D. in Toxicology from the University of Utrecht. Sean has over 18 years of experience, where he specializes in conducting exposure assessments, deriving acceptable exposure limits (i.e., reference doses and reference concentrations, cancer slope factors, occupational exposure limits, and minimal risk levels), and developing pharmacokinetic (PK), physiologically based pharmacokinetic (PBPK), and pharmacodynamic (PD) models for drugs and chemicals. Dr. Hays is also regarded as a leader in the field of interpreting human biomonitoring data. Sean has served as President of the Biological Modeling Specialty Section of the Society of Toxicology and President of the Industry Advisory Board for the Colorado State University School of Biomedical Engineering. Dr. Hays does not currently receive any research grants.

Klaunig, James E.

Indiana University

Dr. James E. Klaunig is Professor of Environmental Health at Indiana University, Bloomington. He received his BS in biology from Ursinus College, Collegeville PA, and a Ph.D. in experimental pathology from the University of Maryland, Baltimore, MD. Previously he spent 20 years on the faculty as Robert Forney Professor and Director of Toxicology at Indiana University School of Medicine. His research has been devoted to understanding the mechanisms and human risk of environmental and pharmaceutical toxicants particularly their role in carcinogenesis. His research is supported by the NIH, DOD and non federal sources of support. He is active in the Society of Toxicology having served on elected and appointed committees over the past 30 years. He serves as a member of National Academy of Sciences

Committee on the Analysis of Cancer Risks in Populations near Nuclear Facilities and a Member of the Board of Directors of Toxicology Forum. He has received several awards for his academic and service work including the Kenneth P. DuBois Award from the Midwest SOT, the George H. Scott Award (Toxicology Forum), the Benjamin Trump Lectureship Award (Aspen Cancer Conference), member the Freehold HS Alumni Hall of Fame. From Indiana University, he has also received the Otis R. Bowen, M.D. Distinguished Leadership Award and the Indiana University Board of Trustees' Teaching Award. He received the Sagamore of the Wabash, the highest award given for service to the State of Indiana for his tenure as the State Toxicologist of Indiana. He is a former Associate Editor of Toxicological Sciences and Editor in Chief of Toxicologic Pathology. He is a Fellow in the Academy of Toxicological Sciences. He has published over 210 peer reviewed manuscripts and book chapters and has mentored over 50 MS, Ph.D., and postdoctoral fellows in Toxicology.

Lash, Lawrence

Wayne State University

Dr. Lawrence H. Lash is a Professor and Associate Chair of the Department of Pharmacology at Wayne State University School of Medicine in Detroit, MI. He received his B.A. in biology in 1980 from Case Western Reserve University in Cleveland, OH and his Ph.D. in biochemistry in 1985 from Emory University School of Medicine in Atlanta, GA. After a postdoctoral fellowship in pharmacology and toxicology at the University of Rochester in Rochester, NY (1985–1988), he joined the faculty at Wayne State. Dr. Lash teaches medical and graduate students and has research interests in the areas of drug metabolism and transport, renal toxicology, and in vitro toxicology models. His research has been funded by the National Institutes of Health, the U.S. EPA, the Department of Defense Peer-Reviewed Medical Research Program, and the pharmaceutical industry. Major research contributions have included discovery and identification of transport mechanisms for glutathione across renal basolateral plasma and mitochondrial inner membranes, identification of mitochondria as a potent and early intracellular target in the nephrotoxicity induced by the trichloroethylene metabolite DCVC, provision of pharmacokinetic and metabolic data for the environmental contaminants tri- and perchloroethylene in human and rodent liver and kidney, and demonstration of the therapeutic potential of modulating mitochondrial glutathione transporters in diabetic nephropathy, compensatory renal hypertrophy, and prostate cancer. Dr. Lash has authored more than 170 peer-reviewed publications and reviews and has edited or co-edited 4 books. Dr. Lash is very active in service to the academic and regulatory scientific community. He has served for several years as an Associate Editor for The Journal of Pharmacology and Experimental Therapeutics, Toxicology and Applied Pharmacology, and Pharmacology and Therapeutics, is on 7 other editorial boards, reviews manuscripts for several other journals in the fields of pharmacology, toxicology, and physiology, and has served as both a regular and ad hoc member of several study sections for the National Institutes of Health Center for Scientific Review, the National Institute of Environmental Health Sciences, and the National Institute of Diabetes, Digestive and Kidney Diseases. Dr. Lash has served since 2009 as an established peer reviewer for U.S. EPA Provisional Toxicity Value (PTV) manuscripts, he has been a workshop participant for 4 IRIS database risk assessment reviews, and consulted for the National Research Council for their report on "Biomarkers of Urinary Toxicity" (1992-1995) and for the U.S. EPA on their human health risk assessments for trichloroethylene (1996-2000) and perchloroethylene (1998-2000).

Li, Abby A.

Exponent Incorporated

Dr. Abby A. Li is a Senior Managing Scientist in the Health Science Practice of Exponent Inc., an international scientific consulting firm. She holds a B.A. in Chemistry and a Ph.D. in Pharmacology and Physiology from the University of Chicago. Dr. Li's research interests include evaluating the neurotoxic potential of industrial and agricultural chemicals and applying quantitative risk assessment approaches to neurotoxicity endpoints. Her research has been funded by government grants and industry, most recently by the United Kingdom Department of Environment, Food and Rural Affairs (UK DEFRA). Dr. Li has served on international and national panels for workshops on integration of in vivo and in vitro screening methods and development of databases for prioritizing chemicals for further testing and regulatory decision-making. Prior to joining Exponent Inc., Dr. Li was Senior Science Fellow at Monsanto, providing expertise in toxicology/risk assessment. She led the neurotoxicology group at Monsanto's Environmental Health Laboratory where she conducted pharmacokinetic, toxicology and neurotoxicology studies for industrial chemicals, agricultural products, and pharmaceuticals. These studies included guideline, specialized mechanistic studies, as well as human and in vitro studies. Dr. Li served on the National Academy of Science's National Research Council Committee on Toxicity Testing and Assessment of Environmental Agents in the 21st century, the EPA's Science Advisory Board (SAB) Environmental Health Committee, and the EPA's SAB Risk and Technology Review Committee evaluating effects of industrial emissions of hazardous air pollutants on public health and the environment. She served on panels sponsored by the National Academies of Science and the State of California Environmental Protection Agency's Office of Environmental Health Hazard Assessment on application of computational toxicology and development of toxic information clearinghouse for green chemistry initiatives. She has been a member of several International Life Science Institute Committees on adult and developmental neurotoxicity testing (DNT), and toxicity testing strategies for pesticides. Dr. Li served on the U.S. expert teams to the Organization for Economic Cooperation and Development (OECD) for the development of international test guidelines for adult and developmental neurotoxicity testing. She has been a member of the Scientific Planning Committee for the Society of Toxicology, the International Neurotoxicology Association, and several international conferences on alternative (in vitro and non-mammalian) screening approaches for DNT.

Lichtveld, Maureen

Tulane University

Maureen Lichtveld, M.D., M.P.H has an over 30 year career in environmental public health and currently is Professor and Chair of the Department of Global Environmental Health Sciences, Tulane School of Public Health and Tropical Medicine. Her research interests include environmentally-induced disease such as asthma and cancer, health disparities, environmental health policy, disaster preparedness, and public health systems. She holds an endowed chair in environmental policy and serves as Associate Director, Population Sciences of the Louisiana Cancer Research Consortium. Dr. Lichtveld has a track record as an expert in community-based participatory research with a special emphasis on persistent environmental health threats affecting health disparate communities living in disaster prone areas. Prior to joining Tulane University, Dr. Lichtveld completed a successful 18 year career at the Centers for Disease Control and Prevention (CDC)'s Agency for Toxic Substances and Disease Registry (ATSDR) in several leadership capacities. She worked closely with the US EPA to conduct health assessments and studies in communities living near hazardous waste sites nation-wide. She also provided leadership in establishing the Environmental Justice and minority environmental health research programs while at CDC/ATSDR and was honored as CDC's Environmental Health Scientist of the Year. Dr. Lichtveld is a member and former Chair of the Science Board of the American Public Health Association, and current Chair of the Environmental and Occupational Health Council of the Association of Schools of Public Health, and

Chair of the National Public Health Leadership Society. She serves as an expert consultant to the Institute of Medicine and on numerous editorial boards of globally recognized peer reviewed journals including the American Journal of Public Health, public health's most prestigious journal. Dr. Lichtveld is the Principal Investigator (PI) of three research consortia funded by the National Institutes of Health: the Head Off Environmental Asthma in Louisiana (HEAL) study, examined the relationship between exposure to Post-Katrina mold and exacerbation of Childhood asthma. She is the Co-PI of the Gulf Coast Trans disciplinary Research Center for Community Health, a multi-institutional collaborative center engaged in health disparities, disaster, and environmental health research. She is also PI of the Transdisciplinary Research Consortium for Gulf Resilience On Women's Health (GROWH), a research partnership between academia and community organizations formed to strengthen the health security and resilience of vulnerable pregnant women and women of reproductive age potentially affected by the Deep Water Horizon oil spill and at risk of future disasters. Dr. Lichtveld was recently awarded two Gulf Coast-wide projects to strengthen environmental health capacity and literacy. Key aspects of the programs include establishing an environmental medicine referral network, deploying a cadre of trained community health workers, and creating an emerging scholars program in environmental health science targeting upper level high school students and their teachers. Her recent sources of grants include NIH, the National Institute of Environmental Health Sciences, the National Institute on Minority Health and Health Disparities, CDC, and the Baton Rouge Area Foundation.

McDonald, Jacob

Lovelace Respiratory Research Institute

Dr. Jacob McDonald currently is Scientist and Director of the Chemistry and Inhalation Exposure Program (CIEP). The CIEP program oversees key functional areas of chemistry analytical/bioanalytical, pharmacokinetics, metabolism, and inhalation toxicology at LRRRI. He trained in the environmental chemistry and toxicology field. Dr. McDonald collaborates with biotechnology and pharmaceutical researchers to develop products through proof of concept and to market. This includes characterization of dosimetry in animals and humans, assessment of pharmacokinetics and pharmacodynamics in animal models, and intervention studies in animal models of disease and injury. Dr. Jacob McDonald, PhD, received a BS in biology/environmental chemistry from the University of La Verne (CA) in 1996 and a PhD in environmental chemistry and toxicology from the University of Nevada in 2000. Dr. McDonald has 10 years of as a study director and program manager. Dr. McDonald joined LBERI in 2000 and currently is Senior Scientist and Director of the Chemistry and Inhalation Exposure Program (CIEP). He is also Associate Director of Translational Science. The CIEP program oversees key functional areas of chemistry (analytical/bioanalytical), PK, and metabolism at LBERI. Also, Dr. McDonald has been successfully managing it since 2004. Dr. McDonald is trained in both the analytical chemistry and toxicology fields, where his graduate work focused on developing and implementing analytical methods in gas chromatography (GC), high performance liquid chromatography (HPLC), and mass spectrometry (MS) (including, structural elucidation). After he came to LBERI, he expanded his hands-on experience with training in LC-MS and a wide range of additional instrumentation that advanced his knowledge and skills in analytical and bioanalytical chemistry. Dr. McDonald also trained as a study director in toxicology, pharmacology, and PK. Dr. McDonald is Principal Investigator of the NIH National Toxicology Program (NTP) Contract on the Absorption, Distribution, Metabolism and Excretion (ADME) at LBERI. LBERI has supported the NTP through this contract since 2002, and has received excellent reviews for its support of PK and metabolism. Dr. McDonald has over 120 publications, 150 published abstracts and many presentations at technical meetings. Several of these include pharmacokinetic and analytical/bioanalytical methods for studies applied to pharmacology programs.

Mirer, Franklin E.

Hunter College of The City University of New York

Dr. Franklin E. Mirer is a toxicologist and certified industrial hygienist. His primary scientific interest is exposure and risk assessment in the occupational environment, and regulatory policy. He also has studied particulate air pollution in the urban environment. Dr. Mirer has been Professor of Environmental and Occupational Health in City University of New York (CUNY) School of Public Health since 2006. He retired as Director of the UAW Health and Safety Department after 30 years of service. Dr. Mirer received a Ph.D. in organic chemistry from Harvard University in 1972, and trained further as a Research Fellow in Toxicology at the Harvard School of Public Health. Dr. Mirer most recently served on the CDC National Conversation on Chemical Exposures and Health Leadership Council and Scientific Understanding Work Group, the NAS Framework Committee to Review NIOSH Research Programs and Evaluation Committee for the NIOSH Health Hazard Evaluation Program; and IARC Working Groups for Monographs 101 and 89. Dr. Mirer developed and delivered testimony before OSHA regarding a dozen health and safety standards, and has testified before House and Senate Committees on occupational safety and health and regulatory policy matters. He has authored scientific papers on exposure assessment, risk assessment and epidemiology.

Morandi, Maria

Independent Consultant

Dr. Maria Morandi received a BS degree in Chemistry from the City College of New York, and MS and Ph.D. degrees in Environmental Health Sciences from the Norton Nelson Institute of Environmental Medicine at New York University. She is certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene. She served as a Research Professor and the Director of the Inhalation and Pulmonary Physiology Core at the Center for Environmental Health Sciences in the Department of Biomedical and Pharmaceutical Sciences at the University of Montana in Missoula, Montana. Prior to that, she was in the faculty of the School of Public Health at the University of Texas in Houston. Dr. Morandi's current research focus is on developing methods for assessing exposures to wood smoke and respiratory effects in humans and in animal models, and on determining the physiochemical characteristics of engineered nanoparticles that might explain their bioactivity and potential risk to public health. She has done extensive research on the development of passive sampling methods for monitoring personal exposures to volatile organic compounds, which have been applied by she and others to assess adults' and children's exposures in large population studies, including residents of disadvantaged communities. She has over fifty peer-reviewed publications on these methods and other exposure-related subjects. Dr. Morandi is a member of the Committee on Acute Exposure Guideline Levels of the Board on Environmental Studies and Toxicology of the National Research Council, National Academies of Science. She has served in multiple national-level committees and review panels, including EPA's Clean Air Scientific Advisory Committee Ozone and Lead Review Panels, and the Integrated Human Exposure/Health Effects Committee and the Research Strategies Advisory Committee of the EPA Science Advisory Board. Dr. Morandi also served in the Mine Health Research Advisory Committee of the Mining Safety and Health Administration, the Board of Scientific Councilors of the National Toxicology Program of the National Institute of Environmental Health Sciences, and the Board of Scientific Councilors of the Agency for Toxic Substances and Disease Registry. She was a

member of the Occupational Safety and Health Study Section of the National Institute of Occupational Safety and Health, where she still serves as ad-hoc consultant.

Penn, Arthur

Louisiana State University

Dr. Arthur Penn is Professor in the Department of Comparative Biomedical Sciences and Director of the Inhalation Research Facility at the Louisiana State University School of Veterinary Medicine in Baton Rouge, LA. He came to LSU in 1998 after spending twenty years on the faculty of the Department of Environmental Medicine at NYU Medical Center in New York. He received an A.B. from Columbia, a Ph.D. in Molecular Biology from the University of Pennsylvania and did post-doctoral work in Lipoprotein Biochemistry at Lawrence Livermore National Laboratory in Livermore, CA, before taking up his position at NYU. His major research interest is in the effects of inhaled airborne combustion products (vapor phase and particulate) on acceleration of atherosclerosis and asthma. His laboratory was one of the first to report that inhalation of environmentally-relevant levels of second-hand smoke (SHS) results in accelerated atherosclerosis. A major recent focus on the effects of gestational exposure to SHS on adult-onset diseases has revealed (in collaboration with colleagues at the University of Alabama at Birmingham) that in utero SHS exposure of mice results in accelerated adult atherosclerosis that is associated with mitochondrial damage, even in the absence of a high fat diet. Additionally, in utero SHS exposure aggravates inflammatory responses and functional changes in adult mouse lungs, accompanied by a characteristic set of gene expression alterations, in a mouse asthma model.

Persky, Victoria

University of Illinois at Chicago

Dr. Victoria Persky is a Professor of Epidemiology in the School of Public Health, University of Illinois at Chicago. She received her undergraduate degree from Radcliffe College, M.D. from Albert Einstein College of Medicine, and completed residencies in Internal Medicine at University of Alabama in Birmingham, Montefiore Hospital in New York and Northwestern University. In addition to her epidemiology research, she practiced medicine part time for 30 years in a community-based health center on the Westside of Chicago. For the last 20 years her research focus has been in environmental epidemiology, with a major focus on endocrine effects of organochlorines. Currently, she is Principal Investigator and Co-Investigator of grants examining the effects of community-based interventions on morbidity from asthma and associations of PCBs, Dioxins and PBDEs with hormonal levels in consumers of Great Lakes fish. She is a past member of the National Institutes of Health (NIH) Infectious, Reproductive, Asthma and Pulmonary Conditions (IRAP) epidemiology study section and the Chicago Asthma Consortium Advisory Board and is a current member of the Board of Mobile C.A.R.E Foundation, the Cook County Lead Prevention Advisory Council and the Environmental Justice Journal Editorial Board. She is a member of the EPA Science Advisory Board reviewing the Draft Report "EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments"

Philbert, Martin

University of Michigan

Dr. Martin Philbert is Professor of Toxicology and Dean of the University of Michigan School of Public Health. He earned his Bachelor of Science degree from the College of Arts and Technology at Cambridge, and his doctorate from the London University Royal Postgraduate Medical School. He was awarded a postdoctoral fellowship in the Neurotoxicology Laboratories at Rutgers University. Dr. Philbert served as a research assistant professor at Rutgers' Neurotoxicology Laboratories until 1995 when he joined the faculty at the University of Michigan School of Public Health as an assistant professor of toxicology. He was promoted to associate professor in 2000 and to professor in 2004. He served as associate chair for research and development in the Department of Environmental Health Sciences from 2000-03. In 2004, Dr. Philbert was appointed senior associate dean for research of the School of Public Health, a position he held through 2010 when he was appointed as Dean. He also served as interim director of the Center for Risk Science and Communication from 2004-10. He has maintained a continuously federally funded portfolio of basic research activities throughout his career. His research focuses on the development of flexible polymer nanoplatfoms for optical sensing of ions and small molecules and the early detection and treatment of brain tumors (funded by the National Institutes of Health and National Cancer Institute). Other research interests include the mitochondrial mechanisms of chemically-induced neuropathic states and the modulation of immune-gastrointestinal function by nanosilver (both projects funded by the National Institutes of Health). Dr. Philbert served as the Vice-Chair of the National Academies National Research Council (NCR) Committee for the Review of the Federal Strategy to Address Environmental, Health, and Safety Research Needs for Engineered Nanoscale Materials, and Chaired the U.S. Food and Drug Administration (USFDA) Science Board Committee on Bisphenol A. Dr. Philbert served on the National Advisory Environmental Health Council of the National Institute of Environmental Health Sciences and provides consultation to federal agencies on a variety of issues surrounding emerging nanotechnologies. He is a Standing Member of the US Food and Drug Administration Science Advisory Board and the past chair of the U.S. Environmental Protection Agency (U.S. EPA) Board of Scientific Counselors.

Pleus, Richard

Intertox, Inc.

Richard C. Pleus, PhD, is the founder and Managing Director of Intertox, Inc., an independent & internationally known scientific consulting and research organization. Dr. Pleus is a toxicologist with over 25 years' experience assessing the risk to humans exposed to chemical agents via agricultural practices (point and non-point sources), food, consumer products, therapeutic agents, the workplace, and the environment. Dr. Pleus has studied the potential human hazard for a wide variety of cancer and non-cancer (e.g. respiratory, reproductive, neurological) endpoints due to inhalation, ingestion, and dermal exposure. He has conducted hundreds of human health risk assessments, in which he develops literature search strategies, assesses the state of the science and the weight of evidence, conducts hazard identification, and develops acceptable exposure limits for both inhalation and oral exposure, using the same or similar processes as those used by US EPA to develop Reference Doses (RfD) and Reference Concentrations (RfC). He has also developed Occupational Exposure Limits (OEL) for workplace chemicals. Dr. Pleus is the co-founder and Chief Scientist of Intertox Decision Sciences, LLC, a risk-management company offering software and database solutions for several industries. Dr. Pleus is a Steering Committee member for the upcoming 2015 Environmental Nanotechnology Gordon Conference, and was a Steering Committee member for the 2013 Gordon Conference in the same series. He is a member of the US delegation to the International Organization for Standardization and a delegate for the US-Russian Bilateral Presidential Commission on Science and Technology. He served on the External Peer Review Panel of the US EPA Toxicological Review of Nitrobenzene (CAS No. 98-95-3) in 2009. Dr. Pleus also served on the FIFRA Scientific Advisory Panel in the 2004 Consultation

on Dermal Sensitization Issues for Exposure to Pesticides, regarding hexavalent chromium. His credentials include a BS in Physiology, with honors, from Michigan State University; an MS in Environmental Health and a PhD in Environmental Toxicology from the University of Minnesota; and postdoctoral research in neuropharmacology at the University of Nebraska Medical Center.

Ramos, Kenneth

University of Louisville School of Medicine

Dr. Kenneth Ramos is Distinguished University Professor of Biochemistry and Molecular Biology and Director of the Center for Environmental Genomics and Integrative Biology at the University of Louisville School of Medicine. He is a leading expert in the study of gene-environment interactions and personalized and genomic medicine. A major focus in his laboratory is the elucidation of molecular mechanisms of reactivation of mammalian retroelements and their role in reprogramming the human genome. Dr. Ramos completed a B.S. in Pharmaceutical Sciences and Chemistry (Magna Cum Laude) at the University of Puerto Rico, a Ph.D. in Biochemical Pharmacology at the University of Texas at Austin, and an M.D. degree with postgraduate preliminary training in Internal Medicine at the University of Louisville Health Sciences Center. He has held faculty positions at the University of the Sciences in Philadelphia, Texas Tech University Health Sciences Center, Texas A&M University and the University of Louisville School of Medicine. He is currently affiliated with the Center for Environmental Genomics and Integrative Biology, James Graham Brown Cancer Center, Center for Genetics and Molecular Medicine, Birth Defects Center, Gheens Center for Aging, and Center for Environmental and Regulatory Metabolomics. Dr. Ramos is a recipient of the Society of Toxicology Achievement Award, Astra Zeneca Traveling Lectureship Award and Distinguished Service Award from the American Heart Association. He was named Associate of the National Academy of Sciences and Fellow of the Academy of Toxicological Sciences. His recent sources of grants include the National Institute of Environmental Health Sciences, the National Cancer Institute, Astra Zeneca, and the Kentucky Lung Cancer Research Program.

Rhomberg, Lorenz

Gradient, Inc.

Lorenz R. Rhomberg, PhD FATS, is a Principal at Gradient, an environmental consulting firm based in Cambridge, Massachusetts, where he specializes in critical review of toxicological information, human health risk assessment, and science policy issues for environmental and consumer chemical exposures. He is a member of several scientific societies, including the Society for Risk Analysis, for which he served as a Councilor from 2002-2004, and as President of the New England Chapter in 1997-1998, as well as the Society of Toxicology, serving as a Councilor of the Risk Assessment Specialty Section from 2003-2005. Before joining Gradient in 1999, he was on the faculty of the Harvard School of Public Health. From 1984-1994 he was a risk assessor at the U.S. Environmental Protection Agency in Washington. Dr. Rhomberg earned his Ph.D. in population biology from the State University of New York at Stony Brook and an Honours B.Sc. in biology from Queen's University in Ontario. In 2009, Dr. Rhomberg was named Outstanding Risk Practitioner of the Year by the Society for Risk Analysis, and in the same year was named a Fellow of the Academy of Toxicological Sciences. He has served on six committees convened by the National Academy of Sciences, two as chair. For the U.S. EPA, he served on several FIFRA Scientific Advisory Panels and on chemical assessment peer review groups, including the 2000 EPA Dioxin Peer Review panel and the recent 2009 public meeting on reassessment issues.

Ryan, P. Barry

Emory University

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

Skoglund, Robert

3M Company

Dr. Robert Skoglund is a toxicologist, environmental chemist, and industrial hygienist. He is presently a Senior Laboratory Manager at the 3M Company in St. Paul, Minnesota, and is responsible for the science-based and globally consistent assessment and communication of the hazards and risks of materials important to 3M. In addition he serves as an Adjunct Professor at the University of Minnesota, where he teaches and advises students in both the Toxicology Graduate Program and the School of Public Health's Division of Environmental Health Sciences. Dr. Skoglund has a doctorate and a master's degree in Environmental Health from the University of Minnesota where he specializes in environmental chemistry and toxicology, is board-certified in both general toxicology by the American Board of Toxicology and the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene, and has over twenty-five years of

experience in regulatory and applied toxicology. Areas of expertise include the assessment and communication of the physical, health, and environmental hazards and risks of consumer and industrial products and their manufacturing processes. Areas of limited research and teaching include the incorporation of advances in toxicology testing and risk analysis into the assessment of materials within a global legislative and regulatory framework and the science-based assessment of sustainable or green products. Dr. Skoglund is presently active, through technical, advocacy, governing, and advisory boards, in professional organizations including the Society of Toxicology, the American Industrial Hygiene Association, and the Society for Chemical Hazard Communication, and trade organizations, including the Consumer Specialty Products Association and the American Chemistry Council. Dr. Skoglund presently serves on the Advisory Board for the NIEHS Midwest Consortium for Hazardous Waste Worker Training. In the past he served as a US industry representative to the Coordinating Group for the Harmonization of Chemical Classification Systems during the development of the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as well as at the European Commission's REACH Implementation Projects (RIP) during the development of their guidance, including RIP 3.2: Chemical safety reports and safety data sheets and RIP 3.3: Information requirements on intrinsic properties of substances.

Squibb, Katherine S.

University of Maryland School of Medicine

Katherine S. Squibb, PhD is a Professor in the Department of Medicine at the University of Maryland in Baltimore, and Co-Director of the University of Maryland System-Wide Graduate Program in Toxicology. Dr. Squibb received her PhD in biochemistry from Rutgers, the State University of New Jersey in 1977 and completed a postdoctoral fellowship at the National Institute of Environmental Health Sciences (NIEHS) in Research Triangle Park, NC in 1982. In addition to a basic research interest in cellular mechanisms of metal ion toxicity and carcinogenicity, Dr. Squibb's research involves the study of health effects of ambient air particles and the renal toxicity of heavy metals, with a current focus on human health effects of metals released from embedded metal fragments. Since 1994, Dr. Squibb has also worked in the risk assessment/public health field, providing technical support to citizen groups involved in the evaluation of health effects and remediation of hazardous waste sites in their communities.

Stacy, Roger

Agrium

Mr. Roger Stacy in his current position as Specialist, Industrial Hygiene for Agrium Wholesale, a globally prominent manufacturer and distributor of fertilizer products leads a team of four individuals responsible for ensuring the health and safety of manufacturing facility workers globally, and supporting responsible product stewardship in the safe use of fertilizer products marketed to other industries and the public. Roger has 37 years of experience in occupational health and safety with major international chemical firms in industrial hygiene, including recognition, evaluation and control of chemical, biological, and physical agent hazards at numerous facilities associated with petroleum exploration, production, refining and chemical product production, agricultural chemical product manufacturing, pulp and paper production, and mining. Roger's expertise in occupational and environmental health physics, chemistry toxicology, epidemiology, risk management and control have been sought externally with his appointment as an Adjunct Associate Professor and Preceptor in the Faculty of Medicine, University of Alberta since 2000, as a member of the Federal, Provincial, Territorial Radiation Protection Committee Naturally Occurring Radioactivity Material Working Group since 1998 charged with recommending Canadian Guidelines for the protection of the population from naturally occurring radioactive material, and as a member of Alberta Environment's Ambient Air Quality Committee Ammonia Working Group 2003-2005, charged with recommending air quality standards for the protection of the population of Alberta from deleterious effects of ammonia. Roger also continues to serve as an expert advisor to Alberta Human Services Occupational Health and Safety in setting Provincial Occupational Exposure Limits for the protection of worker health.

Stayner, Leslie T.

University of Illinois

Dr. Leslie Stayner is currently a Professor of Epidemiology at the University of Illinois' School of Public Health in Chicago (UIC SPH). He is also Director of the Occupational and Environmental Epidemiology Program and was formerly the Director of the Division of Epidemiology and Biostatistics at UIC SPH. He also previously worked at the National Institute for Occupational Safety and Health in Cincinnati for nearly 25 years and in his last position was the Chief of their Risk Evaluation Branch. He has been a Visiting Scientist with the International Agency for Research on Cancer (IARC) in Lyon France and has participated in numerous of their monograph meetings. He received a M.S. in Epidemiology and Occupational Health and Safety in 1980 from the Harvard School of Public Health and his PhD in Epidemiology from the University of North Carolina at Chapel Hill in 1989. His major research interests are in the area of occupational and environmental epidemiology with a primary focus on carcinogenic hazards, and on the development of epidemiologic methods. He has been involved in conducting research on cancer and exposure to asbestos, 1,3-butadiene, formaldehyde, diesel exhaust, hexavalent chromium, cadmium, silica and ethylene oxide. He has served as an advisor to numerous agencies including ATSDR, EPA, NRC/IOM, OSHA, MSHA and the WHO. He is currently engaged in a CDC funded study to examine the potential association between exposures to atrazine and nitrates in drinking water and the rate of adverse pregnancy outcomes and childhood cancer in eight Midwestern states.

Stern, Alan

New Jersey Department of Environmental Protection/University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School

Dr. Alan H. Stern is the Section Chief for Risk Assessment in the Office of Science of the New Jersey Department of Environmental Protection; Adjunct Associate Professor in the Department of Environmental and Occupational Health of the University of Medicine and Dentistry of New Jersey-School of Public Health. He received a bachelor's degree in biology from the State University of New York at Stony Brook (1975), a master's degree in cellular and molecular biology from Brandeis University (1978), a master of public health degree (1981) and a doctorate in public health from the Columbia University School of Public Health (1987). Dr. Stern is board-certified in toxicology by the American Board of Toxicology (Diplomate of the American Board of Toxicology). Dr. Stern's areas of expertise include risk assessment and exposure assessment including the application of probabilistic techniques to quantitative estimation of exposure and risk. His research interests have focused on heavy metals including lead, mercury, chromium and cadmium. Dr. Stern was a member of the National Research Council/National Academy of Sciences Committee on the Toxicology of Methylmercury (1999-2000) and a member of the recent USEPA Science Advisory Board panel for the National-Scale Mercury Risk Assessment for Coal- and Oil-Fired Electrical Generating Units (June-July 2011) as well as the USEPA Science Advisory Board Panel for Peer Review of the All-Ages Lead Model (Oct. 27-28, 2005). He has

also served on numerous USEPA-IRIS review panels including Toxicological Review of Urea (Dec. 13, 2010, Panel Chair), Toxicological Review of Trichloroacetic Acid (Dec. 10, 2009, Panel Chair), Toxicological Review of 2-Hexanone (May 22, 2008, Panel Chair), Toxicological Review of Toluene (Feb. 5, 2004, Panel Chair). Other panels, committees and workshops include, ATSDR Toxicological Profile Review of Revised Minimal Risk Levels (MRLs) for 1,4-Dioxane (March-April, 2010), ATSDR Toxicological Profile Review of Revised Inhalation MRL for 1,4-dioxane (Sept. 2011), USEPA Panel for the Review of Draft Exposure Factors Handbook (March 3-4, 2010), USEPA Workshop on Cardiovascular Toxicity of Methylmercury (Jan. 12-13, 2010), USEPA Panel for Review of "Draft Child-Specific Exposure Factors Handbook" (Sept. 19-20, 2007). Dr. Stern has authored numerous articles in peer-reviewed journals, and contributed a book chapter on Exposure Assessment for Neurotoxic Metals in "Human Developmental Neurotoxicology" D. Bellinger, ed. (Taylor & Francis, New York, 2006), and the article on "Environmental Health Risk Assessment" in the Encyclopedia of Quantitative Risk Assessment and Analysis, John Wiley and Sons Ltd., 2008.

Tyl, Rochelle

RTI International

For more than 40 years, Dr. Shelley Tyl, PhD, DABT, has been designing, directing, and performing basic and applied research studies, managing research programs, and mentoring junior scientists in the field of developmental and reproductive toxicology. Dr. Tyl's experience spans university, industrial, independent and contract R&D settings. After receiving a PhD in developmental genetics from the University of Connecticut, she was a tenured associate professor at UConn, served as head of teratology at the Chemical Industry Institute of Toxicology (now the Hamner Institutes for Health Sciences), and was manager of reproductive and developmental toxicology, and assistant director at the Bushy Run Research Center. Currently, she is the senior director of the program in developmental and reproductive toxicology (DART) in RTI International's Center for Pharmacology and Toxicology and an RTI Distinguished Fellow. She also holds an adjunct faculty position at the University of North Carolina-Chapel Hill, and teaches in their Curriculum in Toxicology doctoral program. Dr. Tyl and her collaborators have held and currently hold major government contracts in reproductive and developmental toxicology, including the EPA Endocrine Disruptor Screening Program and the Reproductive Assessment by Continuous Breeding (RACB) and Sperm Count Vaginal cytology Evaluations (SCVCE) contracts of the NIEHS National Toxicology Program. Her team also designs, performs, and reports on studies for U.S. and international pharmaceutical, agrochemical, and commodity chemical companies and consortia, under appropriate regulatory testing guidelines and Good Laboratory Practices GLPs). Dr. Tyl has an international reputation for designing, executing, and reporting the findings of hundreds of complex and comprehensive studies of the highest scientific caliber, which require compliance with appropriate GLP regulations, standards, and principles. She is an internationally acknowledged expert in the field of reproductive and developmental toxicology, and has consulted for governmental and commercial entities. She has served on federal agency advisory committees and work groups, including the Federal Endocrine Disruptors Screening and Testing Advisory Committee, the OECD Testing Guideline Program (Endocrine Disruptors), National Academies Expert Panels (most recently on Spacecraft Air and Water Exposure Guidelines), and ILSI/ HESI work groups. She was also a peer reviewer for EPA intramural research programs. She and her staff helped validate the intact weanling version of the uterotrophic assay and the adult castrate male version of the Hershberger assay for EPA Tier 1/OECD assays. She provides preclinical animal data to support development of newer and better drugs (FDA), toxicity assessments for pesticide registrations (EPA FIFRA), and commodity chemical premanufacturing notices (EPA TSCA PMNs), studies under OECD and REACH requirements, and animal study support for post-marketing surveillance (under FDA). Dr. Tyl has authored or co-authored over 105 peer-reviewed articles, over 20 book chapters, more than 90 presentation abstracts, and hundreds of study reports. She is an ad hoc reviewer for more than 10 journals and serves on the editorial board of Reproductive Toxicology. She was also co-editor (with Dr. Robert W. Kapp, Jr.) of Reproductive Toxicology, Third Edition, New York, NY: Informa Healthcare, 2010. Dr. Tyl has been an active member of and held various offices within a number of professional scientific associations, and was elected president of the Teratology Society (2003---2004), and president of the Reproductive and Developmental Toxicology Specialty Section of the Society of Toxicology (2007---2008). She has maintained certification as a Diplomate of the American Board of Toxicology, since 1983, and served on its board for 5 years (2003---2007).

Weiner, I. David

University of Florida

Dr. David Weiner is a nephrologist at the University of Florida College of Medicine, where he holds the C. Craig and Audrae Tisher Chair in Nephrology, is Professor of Medicine and Physiology and Functional Genomics, and is Chairman of the Pharmacy and Therapeutics Committee at Shands Hospital. He is also the Chief of the Nephrology and Hypertension Section of the North Florida/South Georgia Veterans Health System. Dr. Weiner is an expert in mammalian ammonia metabolism, with specific expertise in mechanisms of ammonia transport, physiologic responses to ammonia and mammalian ammonia metabolism. His research has been funded by the National Institute of Health, Department of Veterans Affairs, American Heart Association, National Kidney Foundation and the American society of nephrology. Dr. Weiner is also currently a permanent member of the National Institute of Health Kidney Molecular Biology and Genitourinary Development study section. Dr. Weiner received his M.D. degree from Vanderbilt University College of Medicine. He underwent training in Internal Medicine at the University of Texas Health Science Center at San Antonio, followed by nephrology clinical and research training at Barnes Hospital and Washington University in St. Louis. He has been at the University of Florida since 1990, where he has received numerous awards, including Exemplary Teacher Award and, on two separate occasions, the University of Florida Research Foundation Professor award.