

**Invitation for Public Comment on the List of Candidates for the
EPA Science Advisory Board
Polycyclic Aromatic Hydrocarbon (PAH) Mixtures Review Panel
January 26, 2010**

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a *Federal Register* Notice (Volume 74, Number 202, Pages 54047 – 54048) published on October 21, 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 draft technical document entitled Development of a Relative Potency Factor (RPF) Approach for Polycyclic Aromatic Hydrocarbon (PAH) Mixtures. 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, particularly with respect to PAH mixtures: chemistry; general toxicology; toxicokinetics; carcinogenesis and mode of action; genetic toxicology; dose response assessment; biostatistics; risk assessment, specifically for chemical mixtures; and application of the relative potency factor methodology.

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), relevant 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 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, for the panel as a whole, f) 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 Mr. Aaron Yeow, Designated Federal Officer, no later than February 16, 2010. E-mailing comments (yeow.aaron@epa.gov) is the preferred mode of receipt.

SAB PAH Mixtures Review Panel

Amin, Shantu

Penn State College of Medicine

Dr. Shantu Amin received his Ph.D. degree from the Stevens Institute of Technology in 1975. In 1976, he joined Princeton University, Princeton, NJ as Senior Research Fellow and beginning 1977 he moved to Institute for cancer Prevention (formerly, American health Foundation) as Associate research Scientist. He became the Head of Section of Organic Chemistry in 1983 and remained at that position until 1995. Thereafter, he was promoted to the Chief of Organic Synthesis Facility and Bio-Organic laboratory. From the year 2002-2004, he also served as Associate Chief, Division of Carcinogenesis and Molecular Epidemiology, Institute for Cancer Prevention, Valhalla, NY. In the year 2004, Dr. Amin joined the Department of Pharmacology, Penn State College of Medicine, Hershey, PA, as a Professor and as a Member of Penn State Hershey Cancer Institute. Since 1993, he is serving as an Adjunct Associate Member, Memorial Sloan Kettering, New York, NY and a Thesis Reader, New York University, School of Science, New York, NY. His research uses mechanisms of chemical carcinogenesis as a tool for developing chemopreventive strategies to reduce the morbidity and mortality from cancer. The major focus has been on structure-activity studies with mutagenic and carcinogenic polycyclic aromatic hydrocarbons (PAH) wherein his lab prepares specific model compounds among PAH mutagens, carcinogens and their metabolites for bioassays and for exploration of DNA and protein adducts. To gain a better understanding to the relationship between the DNA lesions and tumor formation, his lab is involved in the synthesis of site-specifically modified DNA oligomers containing PAH diol epoxide adducts. Synthetic accessibility of DNA containing specific adducts of sterically hindered PAHs are of immense value to an understanding of how such modified sequences are enzymatically processed within the cell and how such processing results in cell transformation. Over the last three decades his laboratory has made extensive contribution to the field of PAH research. More than two-thirds of his 300 publications are on this topic, demonstrating the growth of the PAH research field, including the development of novel methods for their synthesis to structure-activity study of the fjord vs. bay region PAHs through extensive biological investigations. Recognition of his 30 years of work on PAHs has come through citations on the covers of high-impact journals such as Cancer Research, Journal of Molecular Biology, Nucleic Acid Research, and Chemical Research in Toxicology. In 2003, he was nominated for an award for his outstanding contribution to the field of Polycyclic Aromatic Compounds (PAC) by the International Society for Polycyclic Aromatic Compounds (ISPAC). He was awarded the best scientist of the year (2003) award by the Westchester County, New York, section of American Chemical Society. Dr. Amin served as Secretary of ISPAC for the year 2002-2003. He serves as a reviewer and is on editorial board for several Scientific Journals.

Anderson, Kim

Oregon State University

Dr. Anderson is a professor in the Department of Environmental and Molecular Toxicology and Director of the Food Safety and Environmental Stewardship program both at Oregon State University. She received her PhD from Washington State University. Dr. Anderson's research focuses on environmental exposure of contaminants, contaminant mixtures and development of novel bio-analytical technologies for assessing bioavailability in multi-contaminant environments. Dr. Anderson has more than 50 referred articles, and holds 4 patents. Dr. Anderson was recruited by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Global Environmental Fund (GEF) to develop and lead a new program of international scope, briefly to design bio-analytical technologies to conduct environmental assessment for use in setting of protective standards for human and environmental health. Dr. Anderson has served on numerous panels and committees, to name a few, the Board of Directors for the Society of Environmental Toxicology and Chemistry (SETAC) North America, Chair of the Chemist Steering Committee for SETAC, Expert Advisory Panel for the Canadian Network of Toxicology Centres.

Beland, Frederick

National Center for Toxicological Research, U.S. Food and Drug Administration

Frederick A. Beland is the Director of the Division of Biochemical Toxicology at the National Center for Toxicological Research (NCTR), U.S. Food and Drug Administration (FDA). He received a B.A. degree in Biology from The Colorado College, and M.S. and Ph.D. degrees in Chemistry from Montana State University. Following postdoctoral work in the Ben May Laboratory at the University of Chicago, he was recruited by the NCTR to continue his studies in cancer research. These studies, which are funded by the NCTR/FDA and the National Toxicology Program, National Institute of Environmental Health Sciences, have resulted in nearly 300 publications. Dr. Beland is an elected member of the American and European Associations for Cancer Research and the American Chemical Society. He has served on the Program Committee for the American Association for Cancer Research, on the Board of Directors for the Division of Chemical Toxicology, American Chemical Society, as a member of the American Cancer Society Study Section on Biochemistry and Chemical Carcinogenesis, as a member of the NIH Metabolic Pathology Study Section, and as a grant reviewer for more than 20 organizations. He has been a member of the International Agency for Research on Cancer Working Group to Evaluate the Carcinogenic Risks to Humans of Diesel and Gasoline Engine Exhaust and Some Nitroarenes; of the International Agency for Research on Cancer Working Group to Evaluate the Carcinogenic Risks to Humans of Some Non-Heterocyclic Polycyclic Aromatic Hydrocarbons and Some Related Industrial Exposures; of the International Agency for Research on Cancer Working Group to Evaluate the Carcinogenic Risks to Humans of Alcoholic Beverage Consumption, Acetaldehyde, and Urethane; of the Health Effects Institute Working Group on the Health Effects of Diesel Exhaust; and of the Scientific Advisory Panel for the Chemical Industry Institute of Toxicology. He is the past editor of Cancer Letters and has been or is currently a member of the editorial board for Chemical Research in Toxicology; Carcinogenesis; Teratogenesis, Carcinogenesis, and Mutagenesis; Life Sciences Advances; Proceedings of the Society for Experimental Biology and Medicine; International Journal on Oncology; International Journal of Cancer Prevention; Mutagenesis; and BMC Cancer, and has served as a reviewer for more than 30 scientific journals.

Cavalieri, Ercole

University of Nebraska

Dr. Cavalieri received a D.Sc. in chemistry from the University of Milan, Milan, Italy, in 1962 and spent a year at the Polytechnic of Zurich in Switzerland conducting postdoctoral research on the photochemistry of steroid hormones. He then spent three years (1965-1968) as an Assistant Professor in the Department of Chemistry, University of Montreal, Montreal, Canada, before joining the laboratory of Nobel Laureate Melvin Calvin's laboratory at the University of California, Berkeley, to conduct research on mechanisms of carcinogenesis of polycyclic aromatic hydrocarbons (PAH). Dr. Cavalieri joined the faculty of the Eppley Institute in 1971 and continued research on mechanisms of carcinogenesis of PAH. In recent years, his research has evolved into studying the mechanism of carcinogenesis of natural estrogens. His research interests include the mechanisms of carcinogenesis of PAH and estrogens. This research has led to the discovery of specific estrogen metabolites responsible for the initiation of breast, prostate and other human cancers. He is the author of 200 research articles and 22 review articles. His research has been funded by the National Cancer Institute, Department of Defense Breast Cancer Research Program and Prostate Cancer Research Program.

Chen, James

National Center for Toxicological Research, U.S. Food and Drug Administration

Dr. Chen is a Mathematical Statistician (Senior Biomedical Research Service) at the National Center for Toxicological Research, U. S. Food and Drug Administration. Dr. Chen received a Ph.D. degree in Statistics from Iowa State University. He is an Adjunct Professor in the Department of Biostatistics, University of Arkansas for Medical Science and Adjunct Professor in the Department of Public Health, China Medical University, Taiwan. Dr. Chen is an associate editor of Journal of Biopharmaceutical Statistics, Journal of the Chinese Statistical Association, and BMC Bioinformatics Research Notes. Dr. Chen is an elected Fellow of the American Statistical Association (1996). He has over 200 scientific publications in peer-reviewed journals and numerous invited subject review articles. Dr. Chen has served on FDA, EPA, and interagency committees and workshops on scientific and regulatory issues and guidelines, and has provided consultations to FDA and EPA scientists on the statistical analysis of toxicological data and on risk assessment procedures.

Delistraty, Damon

Washington State Department of Ecology

Dr. Damon Delistraty is a Senior Toxicologist at the Washington State Department of Ecology (WDOE). He is certified as a Diplomate of the American Board of Toxicology (DABT) and has over 25 years of experience in environmental toxicology. Dr. Delistraty received his Ph.D. in Marine Science (College of William and Mary), M.S. degrees in Biology (San Diego State University) and Exercise Physiology (University of Wyoming), as well as a B.A. in Biology (University of California at San Diego). His current work addresses environmental restoration of the Hanford Site, as a result of legacy contamination due to plutonium production for nuclear weapons. In this capacity, Dr. Delistraty conducts research and evaluates risk assessments on radiological and nonradiological contaminants and their impact on humans and ecological receptors. Prior to his current position at WDOE, he has held several research and teaching appointments at academic institutions (Scripps Institute of Oceanography, Virginia Institute of Marine Science, Oregon State University, Eastern Washington University). As such, research funding has come predominantly from academic and government sources. Dr. Delistraty has published over 25 refereed articles, including publications on toxic equivalency factors (TEFs), environmental contaminants, aquatic toxicology, physiological biomarkers, exercise physiology, and radiological risk. He has presented his research findings at numerous scientific meetings and is an active member of several professional organizations, including the Society of Environmental Toxicology and Chemistry (SETAC) and the American Association for the Advancement of Science (AAAS). Dr. Delistraty has also taught several courses (e.g., cardiovascular dynamics, exercise physiology) and assisted with others (e.g., psychophysiology, oceanography). In addition to research and teaching activities, he has served on a number of advisory and technical workgroups (allied with WDOE, EPA, Department of Energy, Nuclear Regulatory Commission, North Atlantic Treaty Organization), tasked with evaluating specific issues in hazardous waste management, Hanford Site cleanup, and other Cold War legacy waste concerns. Dr. Delistraty has also chaired the WDOE Risk Assessment Forum which recommended adoption of CalEPA potency equivalency factors (PEFs) in the Model Toxics Control Act (Washington state cleanup regulation) to assess risk of carcinogenic PAHs.

DiGiovanni, John

The University of Texas at Austin

Dr. John DiGiovanni is the Coulter R. Sublett Chair in Pharmacy and a Professor in Pharmacology and Toxicology and Nutritional Sciences at the University of Texas at Austin. He was formerly the Director and Chairman of the Department of Carcinogenesis at The University of Texas M.D. Anderson Cancer Center, Science Park. He received his BS in Pharmacy and his PhD in Pharmacology from the University of Washington. He did his postdoctoral training in Oncology/Carcinogenesis at the McArdle Laboratory for Cancer Research, University of Wisconsin, Madison. Dr. DiGiovanni serves on numerous scientific advisory boards and is Editor-in-Chief for the journal Molecular Carcinogenesis. His research interests have focused for many years in the area of cancer cause and prevention. In particular, he has studied the mechanisms associated with polycyclic aromatic hydrocarbon (PAH) carcinogenesis for many years. In addition, he has conducted research on mixtures of PAH. Finally, he has conducted research on the mechanisms that underlie multistage carcinogenesis using the mouse skin model. Currently, his research program focuses on four major areas: i) identifying critical targets and mechanisms involved in the initiation and promotion stages of chemical as well as UV skin carcinogenesis; ii) identification of genetic determinants of susceptibility to chemically-induced skin cancer; iii) exploring novel prevention strategies for inhibiting chemical and UV skin carcinogenesis (including studies on dietary energy balance manipulation); and iv) development of new mouse models for cancer, including models for skin, head and neck and prostate cancers. Current research in the area of mechanisms of tumor initiation involves studying the target cells for tumor initiation. These cells are believed to be keratinocyte stem cells, including those that reside in the bulge-region of hair follicles. Studies are identifying genes involved in survival and proliferation of keratinocyte stem cells following exposure to DNA damaging skin carcinogens and tumor promotion agents as well as UV light. Current research on the understanding mechanism(s) of tumor promotion involves elucidating growth factor signaling pathways involved in this process using the mouse skin carcinogenesis model system (again both two-stage, chemically-mediated and UV-mediated models). His laboratory has recently developed several transgenic models based on overexpression of IGF-1, erbB2, c-src, Stat3 and Akt in skin epidermis to facilitate these latter studies. Finally, studies in the area of novel prevention strategies are attempting to understand the mechanism(s) whereby calorie restriction (CR) inhibits tumor development using models for both skin and prostate carcinogenesis and to identify CR mimetics.

Dourson, Michael

Toxicology Excellence for Risk Assessment (TERA)

Dr. Dourson is the President of Toxicology Excellence for Risk Assessment (TERA), a non-profit group which develops partnerships among government, industry and other interested groups to address risk assessments of high visibility, such as formaldehyde, perchlorate, and soluble nickel, and cooperative ventures such as the Voluntary Children's Chemical Exposure Program (VCCEP), the International Toxicity Estimates for Risk (ITER), and the Alliance for Risk Assessment (ARA). Prior to TERA, Dr. Dourson worked 15 years for EPA, holding several leadership roles and winning 4 bronze medals for joint efforts on specific key projects, such as the creation of EPA's Integrated Risk Information System (IRIS). Dr. Dourson holds a B.A. in Biology from Wittenberg University, and a Ph.D. in Toxicology from the University of Cincinnati College of Medicine. In 2003, Dr. Dourson was selected for the Society of Toxicology's (SOT) Lehman award. Two of his publications have won paper-of-the-year awards from the SOT's Risk Assessment Specialty Section (RASS). He has co-published more than 100 additional papers on risk assessment methods or assessments for specific chemicals. He has also co-authored well over 100 government risk documents, made over 100 invited presentations, and chaired over 100 sessions at meetings and independent peer reviews. He has also been elected to multiple officer positions including President of the American Board of Toxicology, President of RASS of the SOT, and Secretary of the Society for Risk Analysis. He is also a media resource specialist in risk assessment for the SOT, member on the editorial board of three journals, and vice chair of the NSF International Health Advisory Board.

Flesher, James

University of Kentucky

Dr. James W. Flesher is a Professor of Pharmacology and Toxicology at the University of Kentucky College of Medicine. He holds a B.S. from Northwestern University and a Ph.D. in Pharmacology from Loyola University. He was a research associate in Dr. Elwood V. Jensen's estrogen receptor group at the Ben May Laboratory for Cancer Research University of Chicago (1958-1960) and independently an Instructor in the Ben May Laboratory for Cancer Research (1960-1962) when he began to experiment with the potent carcinogens 3-Methylcholanthrene and 7,12-Dimethylbenz(a)anthracene (DMBA). He moved to the Department of Pharmacology at the University of Kentucky College of Medicine in 1962 and continued his studies dealing with the synthesis of new metabolites and derivatives of DMBA to test specific predictions regarding the nature of its proximate and ultimate electrophilic and carcinogenic forms. He will become Professor Emeritus July 1, 2010. Dr. Flesher's professional activities include teaching, research, and service as a reviewer and consultant. He was a member of the Carcinogenesis Program Scientific Review Committee B, National Cancer Institute (NCI), 1974-1976. There was a surge in applications dealing with the new prediction that diol-epoxides metabolites can explain the appearance of pronounced carcinogenic properties in a majority of known carcinogenic hydrocarbons. From 1975-1976 he was a member of the Training Grants Committee on Carcinogenesis, NCI. From 1976-1978, he was on the Institute Fellowship Committee, NIH. He served as a consultant to the U.S. Environmental Protection Agency Panel on Predicting Carcinogenicity of Polynuclear Aromatic Hydrocarbons on the basis of molecular structure, 1991 and for Washington Tech, Washington, D.C. June 1997. His research interests include studies of relationships between carcinogenic activity and molecular structure of polynuclear aromatic hydrocarbons and studies of synthetic and biological chemistry of new metabolites and derivatives of carcinogenic hydrocarbons, aided by the necessary tests for carcinogenic activity. His ability to synthesize new metabolites and derivatives of carcinogenic hydrocarbons, to test specific predictions of Flesher and Sydnor's unified hypothesis, which incorporates both unsubstituted and methyl-substituted polycyclic aromatic hydrocarbons into a single pathway of metabolic activation involving methyl-substitution as the first step of a chain of three substitution reactions, undoubtedly made him stand out in his professional career. His research team was supported by Grants or Contracts from the American Cancer Society, the Department of Agriculture, and NCI/National Institutes of Health. He is a member of the American Chemical Society, the American Association for the Advancement of Science, the American Association for Cancer Research, The American Society for Pharmacology and Experimental Therapeutics, and the International Society for Polycyclic Aromatic Compounds.

Gammon, Marilie

University of North Carolina at Chapel Hill

Marilie D. Gammon, PhD, Professor, Epidemiology. Dr. Gammon is Program Leader in Environmental Epidemiology for the University of North Carolina at Chapel Hill's (UNC) Department of Epidemiology, Program Leader in Chronic Disease Epidemiology for the UNC Interdisciplinary Obesity Center, and Deputy Director of UNC Center for Environmental Health and Susceptibility. Dr. Gammon's research focuses on the identification of: (1) etiologic risk factors for (a) breast cancer, including energetic (obesity, physical activity, diet) and environmental exposures (polycyclic aromatic hydrocarbons, organochlorine compounds, electromagnetic fields), and (b) esophageal and gastric cardia adenocarcinomas, including obesity, cigarette smoking, alcohol intake; and (2) predictors of survival among patients with breast cancer and esophageal cancer. Dr. Gammon is principal investigator of the Long Island Breast Cancer Study Project, a multi-institutional collaboration to identify environmental factors associated with the incidence and progression of the disease.

Gaylor, David

Gaylor and Associates, LLC

Dr. Gaylor received a B.S. and M.S. degree in Statistics from Iowa State University and a Ph. D. in Statistics from North Carolina State University. Dr. Gaylor, whose expertise is in the fields of biometry, statistics, and health risk assessment, currently is president of Gaylor and Associates, LLC. Previously, Dr. Gaylor retired from the National Center for Toxicological Research (NCTR), Food and Drug Administration, where he was the Director of the Biometry and Risk Assessment Division. In that position, Dr. Gaylor developed experimental protocols and provided statistical analyses of experiments in carcinogenesis, teratogenesis, mutagenesis, and neurotoxicity, and developed techniques to advance the science of quantitative health risk assessment. Dr. Gaylor also serves as an Adjunct Professor of Statistics at the University of Arkansas for Medical Sciences. Dr. Gaylor is a Fellow of the American Statistical Association, the Society for Risk Analysis, and the Academy of Toxicological Sciences. Dr. Gaylor has served on more than 70 national and international work groups and committees on many aspects of biometry, toxicology, and risk assessment. He is currently a member of the editorial board of four professional journals: Risk Analysis; Human and Ecological Risk Assessment; Toxicology and Industrial Health; and Regulatory Toxicology and Pharmacology. Dr. Gaylor has authored or coauthored more than 160 journal articles, 25 book chapters, and made over 100 presentations at scientific meetings on bio-statistics and a wide range of health risk assessment issues. Many of Dr. Gaylor's publications address dose response assessment, biostatistics, carcinogenesis and mode of action, and quantitative risk assessment with several papers that focus specifically on chemical mixtures, including but not limited to relative potency factors.

Geacintov, Nicholas

New York University

Dr. Geacintov was initially trained in the field of physical chemistry of polymers at the SUNY College of Environmental Sciences and Forestry at Syracuse University, but eventually became interested in the photophysical properties of aromatic compounds, especially polycyclic aromatic hydrocarbons (PAH). His interests turned towards the electronic properties of organic solids and the relationships between excitonic processes and electronic conductivity in the classic PAH crystals anthracene and tetracene. He was the co-discoverer of the phenomenon of exciton fission in tetracene crystals in 1969. In the middle seventies he became interested in the mechanisms of chemical carcinogenesis of PAH compounds, and the association between DNA damage and the initiation of cancer at the molecular and structural levels. His studies on the mechanisms of reactions of reactive PAH diol epoxide metabolites with DNA, and the structural and mutagenic properties of the PAH-DNA lesions formed, are well known in the field. In recent years, his interests have turned towards intersecting areas of toxicology, biochemistry, and molecular biology: the elucidation of the human cellular defense mechanisms against the genotoxic effects of pre-mutagenic PAH-DNA lesions, especially the highly complex nucleotide excision repair (NER) mechanism. A fascinating question in the field is why some stereoisomeric PAH-DNA lesions are easily recognized by the human NER system, while some of their isomeric adducts are completely resistant to repair and thus pose a significant health risk to the human population. The results of such studies are of importance for developing more accurate biomonitoring technologies for assessing the risks of human exposure to PAH carcinogens, and thus identifying those individuals that are genetically at high risk. The research of Dr. Geacintov has resulted in over 350 co-authored publications in a variety of internationally recognized, peer-reviewed scientific journals. He has just finished editing a book to be published by Wiley-VCH entitled Chemical Biology of DNA Damage (N.E. Geacintov and S. Broyde, eds.). His research programs have been supported by the National Science Foundation and the Department of Energy, and continues to be supported by the National Institutes of Health (since around 1987). He has been a permanent member twice, as well as ad hoc member of NIH Study sections since 1998; currently, he serves as a permanent member of the Cancer Etiology Study Section (till 2012). He was Program Chair and Organizer of the annual meetings of the Division of Chemical Toxicology of the American Chemical Society (1999-2001), served on the board of the journal Chemical Research in Toxicology for six years, and currently serves as an Editorial Board Member of the Journal of Biological Chemistry. At New York University, he served as the Chair of the Chemistry Department from 1999 to 2009, and has been a member of many University Committees such as Promotion and Tenure, Policy and Planning, etc. He is a fellow of the American Physical Society, and a member of the American Chemical Society, American Association for Cancer Research, and the American Association for the Advancement of Science.

Gennings, Chris

Virginia Commonwealth University

Dr. Chris Gennings is a Professor of Biostatistics, Virginia Commonwealth University (VCU), Richmond, VA. She received her B.A. in mathematics in 1982, University of Richmond, Richmond, VA and her Ph.D. in biostatistics from the Medical College of Virginia, VCU. Dr. Gennings brings expertise in the area of protocol review, study design and statistical support; chemical mixtures risk assessment including developing and implementing statistical techniques useful for estimating risk assessment of exposure to combinations of chemicals; designing economical study designs for mixtures of many chemicals; statistical modeling of pesticide mixtures; and integration of mixtures toxicology and statistics.

Ginsberg, Gary

Connecticut Department of Public Health

Dr. Ginsberg is a toxicologist at the Connecticut Department of Public Health within the Division of Environmental and Occupational Health Assessment. He has responsibility for human health risk assessments conducted in the state. Dr. Ginsberg serves as adjunct faculty at the Yale School of Medicine and is an Assistant Clinical Professor at the University of Connecticut, School of Medicine. He recently finished serving on the National Academy of Science Panel on Biomonitoring and he currently serves on the NAS Panel that is evaluating USEPA risk methods. He has been invited to testify at Congressional hearings on toxics issues on a number of occasions. He received a Ph.D. in toxicology from the University of Connecticut (Storrs) and was a post-doctoral fellow in carcinogenesis/mutagenesis at the Coriell Institute for Medical Research. Dr. Ginsberg's toxicology experience has involved a variety of settings: basic research, teaching, working within the pesticide and consulting industries, and now working in public health. He has published in the areas of toxicology, carcinogenesis, physiologically-based pharmacokinetic modeling, inter-individual variability and children's risk assessment. Dr. Ginsberg is also co-author of a book on toxics for the lay public, "What's Toxic, What's Not:" Berkley Books, December 2006.

Haber, Lynne

Toxicology Excellence for Risk Assessment (TERA)

Dr. Lynne Haber is the Associate Director of Toxicology Excellence for Risk Assessment (TERA). In that role, Dr. Haber is responsible for strategic direction, training and overall quality initiatives at TERA, as well as providing oversight on numerous risk assessment projects. She is a board-certified toxicologist with 18 years of experience in development of chemical assessments, and more than 12 years of experience in research to improve risk assessment methods. Her research interests include ways to improve the incorporation of mechanism/mode of action data into risk assessment, including implications for dose-response assessment; issues related to human variability and children's risk; and the use of biomarker data for dose-response assessment. She has conducted in-depth assessments of more than 30 chemicals, and acute or screening-level assessments of more than 100 other chemicals. She has published more than 20 peer-reviewed journal articles, 7 book chapters (including lead authorship of the chapter on noncancer risk assessment for Patty's Toxicology, 2001), and numerous reports for government agencies and private sponsors, and serves as an editorial reviewer for scientific journals. She has served on peer review panels organized by TERA, EPA, Texas Commission on Environmental Quality (TCEQ), Agency for Toxic Substances and Disease Registry (ATSDR), Health Canada, and the Ontario Ministry of the Environment. She has served on the Board of Scientific Counselors (BOSC) for ATSDR and EPA, and on two panels for the National Academy of Sciences (NAS)/National Research Council (NRC). Dr. Haber has presented her work at a variety of national and international venues, taught workshops and continuing education courses on risk assessment methods at the SRA and SOT annual meetings, and is a co-teacher of TERA's dose-response assessment boot camp. She has been a member of the Society for Risk Analysis (SRA) for 11 years, is currently the chair-elect of the SRA Dose-Response specialty group, and previously served as vice president and councilor of that specialty group. She also served as an officer of the Society of Toxicology (SOT) Risk Assessment Specialty Section (RASS). She received her Ph.D. in molecular biology from the Massachusetts Institute of Technology and a B.S. in chemistry from the University of California at Los Angeles (UCLA).

Hamilton, Joshua

Marine Biological Laboratory (MBL)

Dr. Joshua Hamilton is a molecular toxicologist in the Bay Paul Center for Comparative Molecular Biology and Evolution at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts, where he also serves as the MBL's Chief Academic and Scientific Officer. He joined the MBL in June 2008. Previously, he was at Dartmouth College from 1985-2008 where he was a Professor of Pharmacology and Toxicology at Dartmouth Medical School and an Adjunct Professor of Chemistry at Dartmouth College of Arts and Sciences. He was the founding Director of Dartmouth's Center for Environmental Health Sciences and directed two of its federally funded interdisciplinary program projects, and also served as an Associate Director of the Norris Cotton Cancer Center at Dartmouth. He is a member and Project Leader of Dartmouth's National Institutes of Health (NIH) – National Institute of Environmental Health Sciences (NIEHS) Superfund Basic Research Program Project which he also formerly directed from 1997-2008. Dr. Hamilton received a B.S. in biology from Bridgewater College, and an M.S. in genetics and a Ph.D. in toxicology from Cornell University. His current research interests are primarily in the areas of molecular toxicology and toxicogenomics, focusing in particular on the effects of toxic metals, polycyclic hydrocarbons, halogenated hydrocarbons, endocrine disruptors and other environmental agents of concern in the environment on gene expression, and the role of such changes in adverse health effects. Dr. Hamilton's laboratory recently discovered that arsenic can act as a potent endocrine disruptor, blocking steroid hormone mediated signaling at very low doses relevant to U.S. drinking water exposures. He has also done extensive research on mechanisms of chemical carcinogenesis working with arsenic and other metals as well as with organic chemicals such as polycyclic aromatic hydrocarbons, dioxins, PCBs and other persistent organic contaminants. A new collaborative project is applying genomic tools to develop molecular biomarkers for examining effects of toxic metals and other environmental chemicals on aquatic food webs. Dr. Hamilton has published extensively in the scientific literature on these and other research results from his laboratory. He is a member of the Society of Toxicology, the American Association for Cancer Research, the American Chemical Society, and the American Association for the Advancement of Science. He is a regular reviewer for over three dozen journals and has served as an Associate Editor on several journals including Toxicology and Applied Pharmacology and Chemo-Biological Interactions. He has served as a reviewer for several different NIH study sections, and has served as Chair of a special review panel for NIEHS. Dr. Hamilton was an external reviewer for the National Research Council's recent report, Arsenic in Drinking Water, 2001 Update and was a member of the U.S. EPA Science Advisory Board panel reviewing the 2005 Metals Risk Assessment Framework proposal. He is an external reviewer for several university centers or interdisciplinary programs at other universities. He has served as Chair of Dartmouth's Radiation Safety and Environmental Health and Safety Committees. He was a member of New Hampshire's Healthy People 2010 Committee evaluating the role of environmental agents in human health, and is a member of the State of New Hampshire's Biomonitoring Council as well as the City of Manchester New Hampshire's Environmental and Public Health Leadership Council. He is also a founding member of the New Hampshire Arsenic Consortium, composed of scientists from Dartmouth, the State of New Hampshire, the U.S. Geological Survey, and the U.S. EPA working together on arsenic as a public health problem in the northeast.

Haws,Laurie

ToxStrategies, Inc.

Dr. Laurie Haws is a Principal Health Scientist with ToxStrategies, Inc. and is based in Austin, Texas. She is a board-certified toxicologist with over 18 years of experience in the fields of toxicology and risk assessment. Dr. Haws received her B.S. in Environmental Biology from Long Island University-Southampton (1985), her M.S. in Environmental Sciences & Engineering from the University of North Carolina at Chapel Hill (1987), and her PhD in Toxicology from the University of North Carolina at Chapel Hill (1990). Dr. Haws has worked in both environmental consulting and government sectors, including serving as a manager in the Toxicology and Risk Assessment Section at the Texas Commission on Environmental Quality (TCEQ) for over 12 years. In her position with the TCEQ, Dr. Haws was responsible for overseeing all human health risk assessment activities and was also one of the primary authors of the agency's comprehensive risk-based corrective action rule (the Texas Risk Reduction Program rule). Dr. Haws has studied and evaluated potential health effects associated with a wide range of chemicals including lead, arsenic, mercury, PCBs, polychlorinated dibenzodioxins and dibenzofurans, PAHs, benzene, butadiene, chlorinated solvents, and trihalomethanes. Dr. Haws is an author on over 30 peer-reviewed publications and has presented at numerous scientific conferences. She is an active member of numerous professional societies including the Society for Risk Analysis, the Regulatory Affairs Professional Society, and the Society of Toxicology where she has held served on several elected and appointed positions. In addition, Dr. Haws has served on a number of scientific panels, technical workgroups, and advisory committees, including the World Health Organizations Toxic Equivalency Factor Review Panel. Currently Dr. Haws is serving as the Chair of the International Symposium on Halogenated Persistent Organic Pollutants to be held in San Antonio, Texas in September of 2010.

Herbrandson,Carl

Minnesota Department of Health

Carl Herbrandson has a B.A. from Case Western Reserve University, and a Ph.D. in Toxicology from the University of Minnesota. Dr. Herbrandson is member of the adjunct faculty of the University of Minnesota, School of Public Health. Dr. Herbrandson is employed as a toxicologist for the Minnesota Department of Health (MDH), where his responsibilities are focused on human health risk assessment, modeling, exposure evaluation and environmental chemistry. A large portion of his work is dedicated to assessing and modeling multiple routes of exposure to chemicals, including polycyclic aromatic hydrocarbons (PAHs). Dr. Herbrandson has been a peer-reviewer of EPA reports related to studies of drum-top fluorescent bulb crushers and AquaBlok sediment remediation. In addition, he serves on an advisory committee to EPA's Office of Solid Waste evaluating exposure to mercury from broken fluorescent bulbs, is a member of the Agency for Toxic Substances and Disease Registry (ATSDR) Mercury-containing Polymer Flooring workgroup and serves as chair of the MDH Dioxin Working Group. In 2001, Dr. Herbrandson was responsible for developing the current MDH policies for evaluating carcinogenic PAHs (cPAHs). These policies recommend analyzing 25 cPAHs and using a relative potency approach for evaluating uncharacterized PAH mixtures. Currently, Dr. Herbrandson is working with scientists at the Minnesota Pollution Control Agency to compile and evaluate data on these "extended list" PAHs, collected from sites around Minnesota. The goal of this work is to develop "fingerprints" for different PAH sources in different environmental media, and to develop sampling and analytical strategies for cost-effective evaluation of the carcinogenic potency of PAHs in environmental mixtures.

Hood,Darryl

Meharry Medical College

Dr. Darryl B. Hood is a nationally recognized expert in the area of Neurotoxicology, particularly with respect to the effects of environmental toxicants on the developing fetus and subsequent effects on learning, memory and behavior. He graduated from Johnson C. Smith University with a B.S. (cum laude) in Biology and Chemistry. He matriculated at Quillen College of Medicine of East Tennessee State University earning a Ph.D. in Biochemistry. Dr. Hood completed postdoctoral training in Biophysics and Molecular Toxicology as a National Science Foundation E.E. Just fellow in the Center in Molecular Toxicology at Vanderbilt University School of Medicine in Nashville, TN. Following his 4-year postdoctoral fellowship, he accepted a faculty position at Meharry Medical College where he currently is a tenured Professor and Center Director of the Meharry Center in Environmental Health Disparities and Medicine. The impact of ongoing research conducted in Dr. Hood's laboratory at Meharry Medical College utilizing animal models has contributed to an understanding of the etiology of a number of environmental-exposure influenced disorders such as autism spectrum disorder, cardiovascular and reproductive dysfunction, low birth weight and deficits in cognitive development relevant to populations located near environmental polluters, landfills, and toxic waste sites. Dr. Hood is a member of the Environmental Protection Agencies; National Environmental Justice Advisory Committee (NEJAC) working group which recently recommended that a reassessment of ambient levels of polycyclic aromatic hydrocarbon emissions from smokestacks be conducted. Once implemented, public policy changes such as this will serve to decrease the adverse health effects associated with environmental exposures in susceptible populations.

Keenan, Russell

AMEC Earth & Environmental, Inc.

Dr. Keenan is Vice President and Technical Director for toxicology, human health and ecological risk assessment services at AMEC Earth & Environmental, Inc., an international scientific, engineering, and professional services company of 4,400 employees. He has 25 years experience as a biologist and toxicologist and is regarded as an expert in the risk assessment of PCBs, dioxins, furans, chromium, and mercury and for the development of time-dependent probabilistic risk assessment methods. Dr. Keenan managed the first private sector Cooperative Research and Development Agreement (CRADA) with U.S. EPA in the field of regulatory toxicology and risk assessment. The CRADA provided the framework for cooperative research to develop Monte Carlo-based models for characterizing the uncertainty in reference dose estimates used in noncancer risk assessment. Subsequent to this work, he was selected to serve as one of eight independent experts in the congressionally mandated review of U.S. EPA's process for handling toxicological uncertainty in IRIS (Integrated Risk Information System). Results of this peer review were submitted to the U.S. EPA Science Advisory Board and in a report to the U.S. Congress. Dr. Keenan is also noted for his work in evaluating the human health and ecological risks associated with contaminated riverine environments, including the Hudson River PCB Superfund Site, the Housatonic River in Massachusetts and Connecticut, the Fox River in Wisconsin, the Columbia River in Oregon and Washington, the Penobscot River in Maine, tributaries of the Delaware, and rivers in the greater New York – New Jersey watershed. He has conducted over 100 human health and wildlife risk assessments for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) sites and has evaluated the risks associated with exposure to conventional and radioactive residuals from former mining operations, particularly in the western U.S. He has testified before U.S. Congressional panels and various state and federal agencies during regulatory proceedings on environmental issues. Among other accomplishments, this work has led to the establishment of EPA-approved alternative ambient water quality criteria in nine states. He is an active member in the Society of Toxicology, receiving two best paper awards, and in the Society for Risk Analysis, the National Council for Air & Stream Improvement, and the Maine Pulp and Paper Association. He received his B.S. in Biology from Bates College and his Ph.D. in Environmental Biology from Duke University.

Kim, Nancy K.

New York State Department of Health

Dr. Nancy Kim held a number of positions in the Center for Environmental Health in the New York State Health Department before retiring in April 2009. She continues to work there post retirement, part time, on several priority projects. She is also an adjunct associate professor in the Department of Environmental Health Sciences in the School of Public Health at the State University of New York at Albany. Dr. Kim graduated from the University of Delaware where she received a B.A. in chemistry. She earned her M.S. and Ph.D. in chemistry from Northwestern University. Her primary professional interest is in chemical risk assessment and exposure assessment. Dr. Kim was Interim Director of the Center that provides environmental epidemiological, toxicological, and risk assessment expertise in support of environmental health and protection programs. Most of Dr. Kim's tenure at the Department of Health was the director of the Division of Environmental Health Assessment. It has the primary responsibility for assessing the potential risk for adverse health effects from exposure to toxic substances and to study, monitor and evaluate the effects of exposure to them in homes and communities. Dr. Kim's recent panel memberships include: a) The National Academies, Board on Environmental Studies and Toxicology, Member of the Committee on Assessment of the Health Implications of Exposure to Dioxins, September 2004 to summer 2006, b) The National Academies, Water Science and Technology Board, Member of the Committee on Water System Security Research, December 2004 to December 2006, and c) The National Academies, Water Science and Technology Board, Member of the Committee on USGS Water Resources Research, Committee on the USGS's National Water-Quality Assessment (NAWQA) Program, March 2009 to February 2011.

Kleinman, Michael T.

University of California, Irvine

Michael T. Kleinman has been studying the health effects of exposures to environmental contaminants found in ambient air for more than 30 years. He holds a B.S. in Chemistry from Brooklyn College/City University of New York, an M.S. in Chemistry from the Polytechnic Institute of Brooklyn and a Ph.D. in Environmental Health Sciences from New York University. He is a Professor and Co-Director of the Air Pollution Health Effects Laboratory in the Department of Community and Environmental Medicine at University of California, Irvine. Prior to joining the faculty at U.C.I. in 1982, he directed the Aerosol Exposure and Analytical Laboratory at Rancho Los Amigos Hospital in Downey, CA. He has published more than 100 articles in peer-reviewed journals dealing with the uptake and dosimetry of inhaled pollutants in humans and laboratory animals, and effects on cardiopulmonary and immunological systems after controlled exposures to ozone and other photochemical oxidants, carbon monoxide and ambient or laboratory-generated aerosols. He chaired a National Academy committee to examine issues in protecting deployed US Forces from the effects of chemical and biological weapons. Dr. Kleinman's current studies focus on cardiopulmonary effects of concentrated ambient ultrafine, fine and coarse particles. Dr. Kleinman uses animal models (mice that are genetically predisposed to cardiopulmonary disease, aged rats as a model of aging human populations and a mouse model of allergic airways disease) to examine biological mechanisms of effects of inhaled air contaminants on the lungs and heart of normal and diseased individuals. Current studies have also addressed mechanisms by which inhaled particles can induce inflammation in the central nervous system. Dr. Kleinman is a consultant to the U.S. Environmental Protection Agency Science Advisory Board and is the Chair of the California Air Quality Advisory Committee, which reviews the scientific basis and recommendations for California's air quality criteria.

Krishnan, Khannan

Université de Montreal

Dr. Kannan Krishnan is Professor of Occupational and Environmental Health at the University of Montreal (Canada) where he is also the Director of the Human Toxicology research group (TOXHUM). He has been the leader of the risk assessment methodologies theme team of the Canadian Network of Toxicology Centres (1994-2001), and president of the Risk Assessment Specialty Section of the Society of Toxicology. A member of the U.S. National Academy of Sciences (NAS) Sub-committee on Acute Exposure Guideline Levels (2001-2004), Dr. Krishnan has been a temporary advisor for the World Health Organization for developing scientific documents on the principles for evaluating health risks in children associated with chemical exposures and for evaluating physiologically-based pharmacokinetic (PBPK) models for use in risk assessment. He is currently the vice-president of the Mixtures Specialty Section of the Society of Toxicology. His expertise is in the areas of mixture toxicology, PBPK modeling, structure-pharmacokinetic relationships and health risk assessment methods. He has been a peer reviewer of several IRIS updates, risk assessments, mixture risk assessment supplemental guidance and efforts on interactions for the United States Environmental Protection Agency. He has also been actively involved as a reviewer of documents on toxicological profiles of chemicals, interaction profiles involving environmental contaminants and mixture risk assessment guidelines for the Agency for Toxic Substances and Disease Registry. He is currently on the editorial boards of Toxicological Sciences, the Official Journal of the Society of Toxicology, John Wiley's Journal of Applied Toxicology, and the free access e-Journal of Toxicology, and has previously served on the editorial boards of the International Journal of Toxicology, an Official Journal of the American College of Toxicology, as well as the Journal of Child Health. An author of a text book on environmental pollution, Dr. Krishnan has authored or co-authored over 90 full-length publications and 250 abstracts. Dr. Krishnan obtained his Ph.D. in public health from the Université de Montréal in 1990, his M.S. in toxicology and environmental chemistry from McGill University in 1987 and his B.S. in agriculture from Annamalai University, India in 1983.

LaVoie, Edmond

Rutgers, The State University of New Jersey

Prof. Edmond J. LaVoie received his BS degree in Chemistry from Fordham University in 1971 and his Ph.D. degree from the State University of New York (SUNY) at Buffalo in 1975. He was a Postdoctoral research Fellow at the University of Virginia working with the late Professor S. Morris Kupchan on natural products isolation and characterization. He was an Associate Division Chief of Environmental Carcinogenesis at the American Health Foundation on in Valhalla, NY where he worked from 1976-1988. In 1988 he was appointed Professor of Medicinal Chemistry at Rutgers University within the Ernest Mario School of Pharmacy where he presently is Professor and Chair of the Department of Medicinal Chemistry. His research has included studies on the occurrence and mechanisms of metabolic activation of polycyclic aromatic hydrocarbons and other tobacco-related carcinogens. He received a NIH MERIT award (1988-1998) associated with these studies. His present research interests are in the discovery and the development of novel pharmaceuticals. He has published over 200 peer-reviewed articles and has twenty-five US patents. On five different occasions, he has been recognized as the William Levine Teacher of the Year at the School of Pharmacy. He has served as a member on several NIH, ACS, and other public and private review panels. He also served as a review on international grant review committees including the Swiss National Science Foundation and the Science Foundation of Ireland.

Mahadevan, Brinda

Merck Research Laboratories

Dr. Brinda Mahadevan received her BSc. in Agriculture from the University of Agricultural Sciences, Bangalore India, an M.S. in Bacteriology and Ph.D. in Microbiology, Molecular Biology, and Biochemistry from the University of Idaho, USA. Dr. Mahadevan started her postdoctoral research in molecular biology and toxicology, investigating the mechanisms of chemical carcinogenesis on exposure to polycyclic aromatic hydrocarbons (PAH) at Oregon State University. Later, as Research Assistant Professor in the department of Environmental and Molecular Toxicology at Oregon State University, she initiated her independent research career in elucidating the mechanisms by which carcinogenic PAH affect the ability of environmental complex mixtures to alter the cellular enzymes involved in the metabolic activation of PAH to carcinogenic DNA binding metabolites. She has trained and mentored many students, initiated and executed collaborative research projects in the area of carcinogenesis, chemoprevention and DNA repair. Currently she is a senior scientist in genetic toxicology at Merck Research Laboratories, Summit, NJ. Dr. Mahadevan has been an active member of several scientific societies, has published and has been an adhoc reviewer for journals in the area of environmental and molecular toxicology. Dr. Mahadevan has given presentations and co-chaired sessions at annual meetings of the Environmental Mutagen Society (EMS), Society of Toxicology (SOT) and Genetic Toxicology Association (GTA). She leads the "New Technologies" Special Interest Group (SIG) at EMS. She was recently invited to present on "Transcriptional responses to complex mixtures" at the Alexander Hollaender Course held in Kolkata, India. In addition, she is the Vice President of the Women In Toxicology-SIG-SOT, a board member of the GTA, and a representative of the American Scientists of Indian Origin, SOT-SIG.

Mumtaz, Moiz

Agency for Toxic Substances and Disease Registry

Dr. Moiz Mumtaz is a Science Advisor in the Division of Toxicology, Agency for Toxic Substances and Disease Registry (ATSDR), Centers for Disease Control and Prevention (CDC) and an adjunct faculty at the Environmental Occupational Health Department, Emory University. His involvement in several agency wide activities has led to a) the establishment of a mixtures research program for determining significant human exposures to environmental chemicals, b) the establishment of a computational toxicology laboratory for characterizing the behavior of chemicals after they enter the human body or estimating the toxicity of chemicals based on structure-activity relationships (SAR), and c) the revision of ATSDR guidelines and policy for clearing publications. Dr. Mumtaz obtained his Ph.D. in Toxicology from the University of Maryland and received his M.S. in Chemistry/Entomology from Oregon State University. Dr. Mumtaz started his professional career as a chemist after completing his M.Sc. in Analytical Chemistry from Osmania University, India. Dr. Mumtaz has actively published his research findings in several peer-reviewed journals during the past two decades. These publications have covered a wide range of research areas pertinent to medicine and human health that included, but were not limited to dopamine metabolism and mental health; chemical analysis of xenobiotics and environmental chemicals; health risk assessment of chemicals and susceptible human populations. Dr. Mumtaz is a full member of the Society of Toxicology (SOT), and the past- president of the SOT Mixtures Specialty Section and ex-member of the SOT Scientific Liaison Task Force. He represents ATSDR on several inter-agency workgroups such as the Department of Health and Human Services (DHHS) Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM), Mixed Exposures Work Group, and the National Occupational Research Agenda for the National Institute for Occupational Safety and Health.

Penning, Trevor

University of Pennsylvania School of Medicine

Trevor M. Penning, PhD, Professor of Pharmacology, Biochemistry and Biophysics, and Obstetrics-Gynecology, is the Director of the Center of Excellence in Environmental Toxicology (CEET) at the University of Pennsylvania, School of Medicine. The CEET is one of only twenty-two Environmental Health Science Core Centers funded by the National Institute of Environmental Health Sciences and is the first such Center in the Commonwealth of Pennsylvania. Dr. Penning completed a BSc degree with 1st Class Honors in Physiology & Biochemistry at the University of Southampton, UK in 1972. He then completed his PhD thesis in Biochemistry in 1976 with Professor M. Akhtar F.R.S. at the same institution. He then moved to The Johns Hopkins University School of Medicine and conducted postdoctoral training with Professor Paul Talalay, member of the National Academy of Sciences. It was during this time he developed a keen interest in steroid and carcinogen metabolizing enzymes. He joined the faculty of the University of Pennsylvania as an Assistant Professor of Pharmacology in 1982. Dr. Penning was appointed Full Professor in 1994 and was interim-chair of Pharmacology from 1995-1996. He is now internationally recognized for his research on steroid hormone enzymology and mechanisms by which polycyclic aromatic hydrocarbons (PAHs) cause cancer. His research is now focused on the structure-function of Aldo-Keto Reductases (AKRs) and their roles in steroid hormone action and lung cancer (<http://www.med.upenn.edu/akr>). He currently is the recipient of four R01 grants from the National Institutes of Health (NIH) as follows: 1R01-CA39504-Aldo-Keto Reductases and PAH Activation/Metabolism (which is in its 24th year of funding); 1R01-DK47015-Structure-Function of Steroid Hormone Transforming AKRs (which is in its 17th year of funding); 1R01-CA90744-Human Aldo-Keto Reductases and Nuclear Receptor Action; and 1R01-ES015857-Pathways of PAH Activation in Human Lung Cells. He is also Co-Principal Investigator on a Pennsylvania Department of Health grant: Center for the Study of Gene-Environment Interactions in Lung Cancer. He is the Co-leader of the Tobacco and Environmental Carcinogenesis Program at the Abramson Cancer Center. He has published over 170 peer-review articles and is the recipient of five U.S. patent applications. He has served on the Editorial Boards of the Journal of Biological Chemistry, Chemical Research in Toxicology, and Steroids. He was elected to the Johns Hopkins Society of Scholars in 1998. He is a consultant to the WHO International Agency for Research on Cancer. He was a permanent member of the Cancer Etiology Study Section at NIH from 2004-2208. He was Program Chair for the Division of Chemical Toxicology of the American Chemical Society 2005-2006. In 2005, he assumed the Directorship of the CEET <http://www.med.upenn.edu/ceet>.

Putzrath, Resha

Department of the Navy

Dr. Putzrath is board certified by the American Board of Toxicology and a Fellow of the Society for Risk Analysis. She currently serves as a civilian technical expert for the Navy and Marine Corps Public Health Center including for the Office of the Secretary of Defense for the Emerging Chemicals Program, Bureau of Naval Medicine and Surgery, Chief of Naval Operations, Naval Facilities, and Navy and Marine Corps facilities inside and outside the continental United States dealing with chemical and toxicological and regulatory compliance on public health issues. She was selected to serve on the Air Force Technical Peer Review Team for toxicology and risk assessment of the Massachusetts Military Reservation, the Added Ingredients Review Committee of the Life Sciences Research Office, the ad hoc Working Group of the National Toxicology Program Board of Scientific Counselors, and the Advisory Board of the Association of Schools of Public Health. She has served as a panel member for EPA's Expert Peer Consultations and has served as an Expert Peer Reviewer for EPA and the Agency for Toxic Substances and Disease Registry. Dr. Putzrath earned her M.S. and Ph.D. in biophysics from the University of Rochester, School of Medicine and Dentistry, and her A.B. in physics from Smith College. After her appointment as a Research Fellow in Physiology at Harvard Medical School, she was a Fellow in the Interdisciplinary Programs in Health at Harvard School of Public Health. Her subsequent employment included serving as a toxicologist and risk assessor for: EPA's Hazardous Waste Enforcement Task Force; the National Academy of Sciences; Environ Corporation; Organization Resources Counselors, Inc.; Step 5 Corporation; and Georgetown Risk Group. She has taught risk assessment, risk management, and risk communication at Johns Hopkins University, at the National Institutes of Health, and through various professional societies.

Ramesh,Aramandla

Meharry Medical College

Dr. Ramesh is an Assistant Professor in the Department of Biochemistry & Cancer Biology at Meharry Medical College in Nashville, TN. He obtained a Ph.D degree in Environmental Toxicology from the Ehime University in Japan in 1992. His areas of expertise are biotransformation, metabolism, bioavailability, toxicokinetics, acute and subchronic toxicity of PAHs. His current research interests are PAHs-induced colorectal cancer and chemoprevention of PAH-induced carcinogenesis by resveratrol. Dr. Ramesh has extensively published in this area (more than 30 peer-reviewed publications and successfully completed 4 National Institutes of Health (NIH)-funded projects in this area. Dr. Ramesh also serves on the editorial board of the journal "Polycyclic Aromatic Compounds" and has served as a reviewer to evaluate grant proposals submitted to the National Environment Research Council, United Kingdom on the bioavailability of PAHs.

Rogan,Eleanor

University of Nebraska Medical Center

Dr. Eleanor Rogan is a Professor in the Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Omaha, and Professor and Chair of the Department of Environmental, Agricultural and Occupational Health, College of Public Health, University of Nebraska Medical Center. Dr. Rogan received an A.B. from Mount Holyoke College and a Ph.D. from The Johns Hopkins University, in biochemistry. She has been a faculty member at the University of Nebraska Medical Center since 1976. Dr. Rogan spent over 25 years studying mechanisms of carcinogenic activation of polycyclic aromatic hydrocarbons. More recently her research has focused on mechanisms of cancer initiation by endogenous and exogenous estrogens, with particular emphasis on breast and prostate cancer. She has published numerous studies in this field, including paradigm-shifting translational studies. Dr. Rogan has published 195 peer-reviewed scientific articles. Her research has been funded by a variety of funding agencies, including the National Cancer Institute, the National Institute for Environmental Health Sciences, the Department of Defense Breast and Prostate Cancer Research Programs, and the Nebraska Department of Health and Human Services.

Rybicki,Benjamin

Henry Ford Hospital

Dr. Benjamin A. Rybicki is Senior Scientist in the department of Research Epidemiology and Biostatistics at the Henry Ford Hospital and adjunct Associate Professor in the Case Western Reserve University Department of Epidemiology and Biostatistics. Dr. Rybicki received his master's of health science degree in Human Genetics/Genetic Epidemiology from Johns Hopkins School of Hygiene and Public Health in 1988 and his doctorate in Epidemiology from the University of Michigan School of Public Health in 1996. He has been bioscientific faculty at Henry Ford Hospital since 1998. Dr. Rybicki's research interests are in the molecular and genetic epidemiology of prostate cancer and sarcoidosis in which he has two separate NIH-funded research programs. His research program of the molecular epidemiology of prostate cancer has been NIH-funded since 2000 and led to the first published epidemiologic study of polycyclic aromatic hydrocarbon (PAH)-DNA adduct levels in human prostate cells appearing in Cancer Research in 2004. Since then his group has also published the first studies of 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP)-DNA adducts in human prostate that demonstrated a direct association between the levels of this heterocyclic amine in prostate and consumption of grilled red meat. Dr. Rybicki has over 90 peer-reviewed research publications and has served as reviewer for numerous scientific journals. He also served as a grant reviewer on NIH and Department of Defense study sections and in grant review sessions for the National Institute of Environmental Health Sciences.

Stone,David

Oregon State University

Dr. Dave Stone is an assistant professor at Oregon State University (OSU), in the Department of Environmental and Molecular Toxicology and is the Director of the National Pesticide Information Center, a cooperative agreement between the Environmental Protection Agency and OSU. Dr. Stone specializes in risk assessment and human health effects related to agricultural chemicals, biotoxins and persistent pollutants. In addition, Dr. Stone serves as a co-leader on OSU's Superfund Research Program (SRP) entitled "PAHs: New Technologies and Emerging Health Risks." An objective of the SRP is to translate investigator research into applied outcomes, including the refinement and application of risk assessment methods for PAHs. Additional duties include Director of the Community Outreach and Education Core of the OSU Environmental Health Science Center and as an adjunct clinical faculty member in the Department of Preventative Medicine and Public Health at Oregon Health and Science University. Prior to coming to OSU, Dr. Stone served as the public health toxicologist for the Oregon Department of Human Services. Dr. Stone evaluated numerous Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) sites for PAHs as a result of contamination from wood treatment facilities. Dr. Stone served as the principle risk assessor for a cooperative between the State of Oregon and the Agency for Toxic Substances and Disease Registry. He has served as chair of the Oregon Persistent Pollutant Science Workgroup, a member of the Oregon Air Toxics Science Advisory Committee, as an expert panel on the Environmental Protection Agency's review of cyanotoxins and the national National Oceanic and Atmospheric Administration's workgroup on responding to Harmful Algal Blooms. Dr. Stone is a member of the Society of Toxicology, the American Public Health Association and the American Association of Pesticide Safety Educators.

Strickland,Paul

Johns Hopkins University

Dr. Paul T. Strickland is a Professor of Environmental Health Sciences in the Johns Hopkins Bloomberg School of Public Health, with a joint appointment in Oncology in the Johns Hopkins Kimmel Comprehensive Cancer Center. He is Director of the Division of Occupational and Environmental Health in the Department of Environmental Health Sciences. He graduated with a B.S. in Physics from the University of Virginia, and an M.Sc. and Ph.D. in Environmental Health Sciences from New York University. He spent two years as an International Agency for Research on Cancer (IARC) fellow at the Paterson Institute for Cancer Research in Manchester, United Kingdom (UK), and five years as a Research Scientist at the Frederick Cancer Research Center, prior to joining the faculty at Johns Hopkins. Dr. Strickland's research interests focus on molecular biomonitoring of genotoxic agents and genetic polymorphisms associated with their metabolism in human populations. He has studied toxicant metabolites and molecular damage in subjects with known or suspected exposure to various occupational or environmental toxicants. This approach has widespread application in assessing previous exposure to toxicants and is increasingly used as a predictor of ultimate disease risk. Over the past 20 years, Dr. Strickland has served on organizing/steering committees, working groups, and discussion panels for a variety of organizations including the Environmental Protection Agency, Department of Energy (DOE), United States Department of Agriculture, IARC, American Association for Cancer Research, Mid-Atlantic Society of Toxicology, ASP, and International Society of Exposure Analysis. He has served in an advisory capacity for the National Institute of Environmental Health Sciences (NIEHS) Superfund programs, the UK Ministry of Agriculture Fisheries and Food, the Deployment Toxicology Science Work Group of the United States Department of Defense, the National Cancer Institute (NCI) Cooperative on Interdisciplinary Studies of Cancer, the UK/US Cancer Learning Network, and the NCI Early Cancer Detection Network. He has served as a reviewer on study sections and site visits for National Institutes of Health, NCI, NIEHS, National Science Foundation, DOE and HEI, and has been a member of review committees for the Robens Institute of Industrial & Environmental Health (UK), the Dutch Cancer Institute, the Lymphoma Foundation, and the Environmental Hazards Research Centers of the USDVA.

Taioli,Emanuela

State University of New York (SUNY) Downstate Medical Center

Dr. Taioli obtained her Medical Degree from the University of Milano, where she also completed her Residency in Cardiology. She obtained an M.S. and a PhD. in Epidemiology from Columbia University. Dr. Taioli worked under a North Atlantic Treaty Organization (NATO) fellowship at the American Health Foundation in New York, and then as an Assistant Professor in the Department of Environmental Medicine at New York University. During that period, she conducted studies on genetic susceptibility to environmental factors in lung and breast cancer, and differences in estrogen metabolism with ethnicity in women. She then accepted a position as the Director of the Unit of Molecular and Genetic Epidemiology at the main University Hospital in Milano (Italy). She became the Principal Investigator of the International Study on Genetic Susceptibility to Environmental Carcinogens project, a pooled analysis of individual epidemiologic and genetic data including over 200,000 subjects, which was started in 1997 and funded by the European Commission for Research. Dr. Taioli has also been a technical advisor to the Italian Ministry of Health between 2002 and 2004. In that capacity, she was a member of the European High Group of Reflection on Patients Mobility, and she has participated in drafting the national anti-smoking law that was approved in January 2003 by the Italian parliament. Between 2005 and 2008, Dr. Taioli was Director of the Division of Cancer Prevention and Population Science at the University of Pittsburgh Cancer Institute, where she also held the Arnold Palmer Endowed Chair in Cancer Prevention. During that period, she developed a successful partnership with Hampton University under National Institutes of Health (NIH) funding, to teach Epidemiology to undergraduate minority students. She has been the Chair of the Department of Epidemiology and Biostatistics, and is currently a Professor of Epidemiology at the State University of New York (SUNY) Downstate. Dr. Taioli is the co-author of over 250 peer reviewed papers.

Talaska,Glenn

University of Cincinnati College of Medicine

Glenn Talaska is Professor of Environmental Health at the University of Cincinnati College of Medicine. Dr. Talaska's research program is focused on the development and validation of biomarkers of workplace and environmental exposure to carcinogens as well as their mechanisms of action. He has published over 100 articles in the scientific press on these topics. Dr. Talaska is the Vice Chair of the American Conference of Governmental Industrial Hygienists (ACGIH) Biological Exposure Indices (BEI) Committee and Secretary of the Scientific Subcommittee on Occupational Toxicology (SCOT) of the International Congress of Occupational Health (SCOT). He serves on the editorial boards of the Journal of Occupational and Environmental Health, the International Archives of Occupational and Environmental Health, Polycyclic Aromatic Compounds and the Journal of Public Health.