

**U.S. EPA Science Advisory Board
 Scientific and Technological Achievement Awards
 Review Panel FY 2003-2005
 FY 2004 Member Biosketches**

Scientific and Technological Achievement Awards Review Panel FY2003-2005

Buckley, Timothy

Johns Hopkins University

Dr. Timothy J. Buckley is an Assistant Professor of Environmental Health Sciences and Epidemiology at the Johns Hopkins Bloomberg School of Public Health. Dr. Buckley joined the Hopkins faculty in 1996 after five years with the U.S. EPA's National Exposure Research Lab. His research has focused on assessing total human environmental exposure through measurements in multiple environmental media and biomarkers. Over his research career, Dr. Buckley has been responsible for the concept, design, implementation, and management of several major studies involving human exposure to PAHs, metals, VOCs, pesticides, and PCBs through multiple environmental media. These large-scale projects complement laboratory-based studies where controlled exposures are used to more fully investigate relationships between exposure, body burden, and effects. Dr. Buckley's current research includes community-based exposure assessment, evaluation of chemical treatment to reduce lead bioavailability, the role of exposure to indoor air pollution and allergens in asthma among inner-city children, exposure and effects from mobile source related air pollution, improving methods to assess dermal exposure, and the development and evaluation of exposure biomarkers. While with the U.S. EPA, Dr. Buckley received awards for his role and efforts in the National Human Exposure Assessment Survey (NHEXAS) and the Lower Rio Grande Environmental Exposure Study. His published research was recognized in 1996 with a U.S. EPA Scientific and Technology Achievement Award and again in 1999 by the Walter G. Berl Award given the Johns Hopkins Applied Physics Laboratory. Dr. Buckley is a certified industrial hygienist and has been elected to leadership positions among his professional associations including chair of the American Industrial Hygiene Association's Biological Monitoring Committee and Academic Counselor of the International Society of Exposure Analysis. Dr. Buckley received his Ph.D. in Environmental Science from Rutgers University and a Masters of Health Science in Industrial Hygiene from the Johns Hopkins Bloomberg School of Public Health.

Chien, Calvin

E. I. DuPont Company

Dr. Calvin C. Chien is currently a Senior Environmental Fellow with DuPont Company, the highest ranking technical environmental professional with the company. He has been the leader of DuPont's Environmental Remediation Technology Development team focused on Environmental Modeling and Subsurface Containment/Treatment Barrier Technologies. Besides the work in the technology area, he also has the responsibility for technical environmental support and oversight for DuPont's operations in the Asia-Pacific Region. Since 1987, Dr. Chien has been collaborating with a number of universities in the U.S. and Canada on the research in the area of environmental remediation. He is currently working with seven universities, four in the U.S./Canada and three in China. Dr. Chien served as technical reviewer for papers submitted to Hydrulic Journal of ASCE (Am. Soc. of Civil Engrs.) in late 1970s and early 1980s. He is currently serving a 3-year term on the Science Advisory Committee for EPA Rocky Mountain Regional Hazardous Substance Reseach Center. The responsibilities, among others, include the review of research proposals submitted to the center for funding. Among many awards and honors Dr. Chien has received in his career, he was the recipient of SUNY's 1997 Engineering Achievement Award, university's highest honor for engineering. He was the first winner who was an Asian and also an alumnus in the Award's 20 years of history. Dr. Chien also has received several Awards from DuPont, including three Major Contribution Awards, with significant amount of cash and an Invention Award from Westinghouse Company. Dr. Chien served on the ASCE Groundwater Management Committee as secretary, then vice president, between 1996 and 1999. He served on the Groundwater Modeling Group of the Chemical Manufacturing Association (CMA, now American Chemistry Council) as a member from 1986 to 1989 and chaired the group from 1989 to 1992. In 1994, Dr. Chien was appointed a member with the Environmental Engineering Committee (EEC) of the Science Advisory Board (SAB). He served three terms and left the board in 2000. In 1994, he served on a U.S. Department of Energy's (DOE) Outside Technical Peer Review Panel to review the department's modeling strategy and development. He was invited twice by the National Science Foundation to serve on the technical review panel for the research proposals submitted to the foundation for funding in the area of environmental science and technology. He has published several technical articles in the leading peer-reviewed journals and authored many DuPont internal technical research reports. He holds a U.S. patent on well field design technology. Dr. Chien has served as chair, co-chair, section chair, invited speaker in many conferences and panels dealing with the issues that fall in his area of expertise, mainly, groundwater hydrology, contaminant fate and transport, environmental modeling, soil and groundwater remediation technology, and in-situ solution mining. He has organized and chaired/co-chaired a number of international technical expert workshop and conferences, including the first International Containment Expert Workshop (1995) and Conference (1997), the International Environmental Modeling Expert Workshop (2000) and a Containment Expert Workshop (2002) focusing on the Long-term Performance Prediction and Verification for Containment/treatment Barriers. Dr. Chien was the planner for the well-known book prepared from the 1995 Containment Workshop and the principal editor of book for the 2000 Modeling Workshop. He was the lead editor for the 2002 Containment book, scheduled for publication this summer. Dr. Chien earned an M.S. E. and a Ph.D. in hydrology and environmental modeling from the State University of New York (SUNY) at Buffalo in 1970 and 1974, respectively. He received his B.S.E. in Hydraulic Engineering from the National Cheng-Kung University in Taiwan.

Cory-Slechta, Deborah Chair

Rutgers University

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 rose through the ranks. In 1998, she was appointed Chair of the Department of Environmental Medicine and Director of the NIEHS Environmental Health Sciences Center at the University of Rochester. From July 2000- July 2002, she was appointed 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. 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. Her research has focused largely on environmental neurotoxicants as risk factors for behavioral disorders and neurodegenerative disease. Specifically this has included work on the impact of lead on learning and attention and associated neurochemical mechanisms, and, more recently on the role of pesticides as risk factors for Parkinson's Disease. These research efforts have resulted in over 90 papers and book chapters to date (12.2003)

Gilbert, Richard O.

Battelle Memorial Institute

Dr. Richard O. Gilbert received his Ph.D in Biomathematics from the University of Washington, Seattle, Washington. He is a Staff Scientist in the Statistical and Quantitative Sciences Group at Battelle, Pacific Northwest Division in Richland, Washington. Dr. Gilbert is currently located at the Battelle Washington Office in Washington D.C. He has 32 years experience at Battelle in the statistical design and analysis of environmental studies to assess radionuclide and chemical contamination and cleanup in environmental media, with emphasis on the Nevada Test Site and other Department of Energy sites. He is perhaps most well known for his often-cited reference book Statistical Methods for Environmental Pollution Monitoring published in 1987. Dr. Gilbert's recent activities include contributing to the development of EPA guidance documents and teaching short courses on the Data Quality Objectives planning process and environmental statistical design and analysis methods, developing statistical designs for the detection of unexploded ordnance at Department of Defense sites, and assisting with the development of the Visual Sample Plan software that helps environmental professionals determine the right number and location of environmental samples. Dr. Gilbert has also managed and conducted Monte Carlo uncertainty and sensitivity analyses of environmental models, with particular emphasis on reconstructing doses received by the public from Iodine-131 emissions from the Hanford Site in Washington State in the 1945-1963 time period. Dr. Gilbert has served as a consultant to the EPA Science Advisory Board (SAB) on the Drinking Water Committee, the Statistical Consultation Subcommittee of the Environmental Engineering Committee, and Surface Impoundments Subcommittee of the Environmental Engineering Committee. He has also served as a member of the Health Physics Society's N13.31 Working Group that is writing the American National Standards Institute (ANSI) Standard Assessment of Radiation Doses Resulting from Plutonium and Americium from Soil. Dr. Gilbert is a Fellow of the American Statistical Association (ASA) and an elected member of the International Statistics Institute. He was also elected Chair of the Environmental Statistics Section of the ASA in 1995 and was awarded the Distinguished Achievement Award from the Section.

Landolph, Joseph

University of Southern California

Dr. Joseph R. Landolph is currently Associate Professor of Molecular Microbiology and Immunology and Pathology and a Member of the USC/Norris Comprehensive Cancer Center, in the Keck School of Medicine and Associate Professor of Molecular Pharmacology and Toxicology, in the School of Pharmacy, with tenure, at the University of Southern California (USC) in Los Angeles, California. Dr. Landolph received a B. S. degree in Chemistry from Drexel University in 1971 and a Ph. D. in Chemistry from the University of California at Berkeley in 1976, under the guidance of the late Professor Melvin Calvin, where he studied the metabolism of the chemical carcinogen, benzo(a)pyrene, and its ability to induce cytotoxicity in cultured mouse liver epithelial cells and morphological transformation in Balb/c 3T3 mouse fibroblasts. Dr. Landolph performed postdoctoral study in chemical carcinogenesis and chemically induced morphological and neoplastic cell transformation and mutagenesis at the USC/Norris Comprehensive Cancer Center at the University of Southern California under the late Professor Charles Heidelberger from 1977-1980. Dr. Landolph was appointed Assistant Professor of Pathology in 1980, and Associate Professor of Microbiology, Pathology, and Toxicology at USC in 1987. Dr. Landolph has served as a grant reviewer for the U. S. EPA. Health Effects Panel, for special RFAs for the NIEHS, and as an ad hoc member for the Chemical Pathology Study Section and the Al-Tox-4 Study Section of the NIH. Dr. Landolph has also been a member of the Carcinogen Identification Committee reporting to the Scientific Advisory Committee of the Office of Environmental Health Hazard Assessment of the California Environmental Protection Agency from 1994-2002. He is the recipient of numerous awards, including the Merck Award in Chemistry and the Superior Cadet Award in ROTC from Drexel University in 1971, the Edmundson Teaching Award in the Dept. of Pathology at USC in 1985, a Traveling Lectureship Award from the U. S. Society of Toxicology in 1990, and a competitive American Cancer Society Postdoctoral Fellowship from 1977-1979. Dr. Landolph's research interests and activities include studies of the genetic toxicology and carcinogenicity of carcinogenic insoluble nickel compounds, carcinogenic chromium compounds, carcinogenic arsenic compounds, and carcinogenic polycyclic aromatic hydrocarbons. His laboratory is focused on studying the ability of these carcinogens to induce morphological and neoplastic transformation of C3H/10T1/2 mouse embryo cells and the cellular and molecular biology of the transformation process. His laboratory is currently studying the ability of carcinogenic nickel compounds to induce activation of expression of oncogenes and inactivation of expression of tumor suppressor genes in cells transformed by insoluble carcinogenic nickel compounds, such as nickel subsulfide, crystalline nickel monosulfide, and green (high temperature) and black (low temperature) nickel oxides. His laboratory is also studying the molecular biology of chromium compound-induced cell transformation and the role of valence in cell transformation by various chromium-containing compounds. Dr. Landolph is an expert in chemically induced morphological and neoplastic transformation and chemically induced mutation in murine and human fibroblasts. He is the author of 32 peer-reviewed scientific publications, 21 book chapters/review articles, and has held peer-reviewed research grant support from the U. S. EPA, the U. S. National Cancer Institute, and the U. S. Institute of Environmental Health Sciences.

Maney, John P.

Environmental Measurements Assessment

Dr. John P. Maney received his Ph.D. in Analytical Chemistry from the University of Rhode Island, Kingston, Rhode Island. Dr. Maney has over 30 years experience in analytical chemistry and over 20 years experience in environmental sampling, environmental analysis and data quality issues. He has directed and founded environmental testing laboratories, managed numerous government contracts and subcontracts, which have addressed among other issues, analytical method development, analytical method validation, hazardous waste sampling, and authoring of guidance. Dr. Maney has chaired and participated in the consensus standard process for USEPA/ASTM accelerated standards regarding sampling, subsampling and data quality. For the last 11 years he has been president of Environmental Measurements Assessment (EMA), a consulting company that focuses on sampling, analytical and quality issues.

Newman, Michael C.

College of William & Mary

Dr. Newman received degrees in zoology from the University of Connecticut (B.A., M.S.) and environmental sciences from Rutgers University (M.S., Ph.D.). After his postdoctoral studies, he was a research ecologist at the University of Georgia's Savannah River Ecology laboratory. He now holds a Professor of Marine Science position at the College of William and Mary's School of Marine Science after ending a three-year term as Dean of Graduate Studies of the School of Marine Science. His research emphasizes quantitative methods in ecotoxicology with topics of interest ranging from chemical measurement statistics to QSAR-like models for predicting metal ion effects to contaminant effects on population genetics to methods of predicting community level effects. He has authored approximately 100 publications on these topics including four books, Quantitative Methods in Aquatic Ecotoxicology, Fundamentals of Ecotoxicology, Population Ecotoxicology and Community Ecotoxicology. He also edited several books, Metal Ecotoxicology, Hierarchical Ecotoxicology, Risk Assessment: Logic and Measurement, Coastal and Estuarine Risk Assessment, and Risk Assessment with Time-to-Event Models. Dr. Newman is active in advisory service. He served on OECD, EPA, DOE, NAS, and state environmental regulatory and risk assessment committees and panels. He was one of two U.S. members of an OECD team charged with assessing statistical methods for analyzing toxicity data. Work with DOE involved complex-wide consideration of data quality objectives for risk assessment activities, and various site-specific advisory services to the Savannah River and Hanford sites. He has been a member of numerous EPA teams including the FIFRA ECOFRAM working group, two FIFRA science advisory panels, the Chesapeake Bay Office science advisory board, a FQPA scientific review board, and a joint U.S. EPA-Israeli Water Agency working group. He has reviewed numerous risk assessment documents for EPA and was a consultant to the NAS (Everglades Ecosystem Assessment). He continues to work actively with various Virginia Department of Environmental Quality teams and panels.

Pohland, Frederick G.

University of Pittsburgh

DR. FREDERICK G. POHLAND is Professor and Edward R. Weidlein Chair of Environmental Engineering, Director of the Dominion Center for Environment and Energy, and Co-Director of the Groundwater Remediation Technologies Analysis Center at the University of Pittsburgh. Dr. Pohland received his B.S. in Civil Engineering from Valparaiso University and the M.S. and Ph.D. in Sanitary/Environmental Engineering at Purdue University. Dr. Pohland has been a frequent contributor to the literature, with over 150 technical and scientific publications, many of which have focused on anaerobic digestion, solid and hazardous waste management, environmental impact assessment, and innovative technologies for waste minimization, treatment and environmental remediation. Recent support has been provided by EPA, DOE, the Pennsylvania Department of Environmental Protection and the Dominion Foundation. Dr. Pohland is a Fellow and Life Member of the American Society of Civil Engineers (ASCE), and a registered Professional Engineer. Dr. Pohland is also a Diplomate in the American Academy of Environmental Engineers (AAEE), having previously served as President, Trustee, and AAEE delegate to the Board of Directors of the Accreditation Board for Engineering and Technology (ABET), where he also served as a member of the Engineering Accreditation Commission. He has served on the Governing Board of the International Water Association (IWA), as Honorary Executive Editor and Regional Editor of the IWA Journal, WATER RESEARCH, and originated and chaired the IWA Specialist Group on Anaerobic Digestion and the IWA Specialist Group on Landfill Management of Solid Wastes. Dr. Pohland also has been active in the Water Environment Federation (WEF), where he served on the Board of Control and was Chair of the Program Committee. Other memberships include the American Chemical Society, American Institute of Chemical Engineers, American Society for Microbiology, American Water Works Association, Association of Environmental Engineering and Science Professors, Solid Waste Association of North America, National Society of Professional Engineers, and the Society for Industrial Microbiology. In 1993, Dr. Pohland was elected to the National Academy of Engineering. He is a Fellow of the American Academy of Microbiology and an Honorary Member of the Water Environment Federation. In 2000, he received the AAEE Gordon Maskew Fair Award and Honorary Membership in the International Water Association, and was the ASCE Simon Freeze Memorial Lecturer for 2001.

Toranzos, Gary

University of Puerto Rico

Gary A. Toranzos is a professor of microbiology in the Department of Biology, University of Puerto Rico, Rio Piedras Campus. He got his Ph.D. in 1985 at the University of Arizona in Tucson. His research interests are varied and include water microbiology, the ecology of enteric pathogens and the development of indicators of risk. He has published extensively on all the above subjects and is currently working on projects dealing with bacterial nitrification and denitrification in soils, as well as development of new indicators of biological contamination in waters. He is currently working at the National Science Foundation as a Program Director in the Division of Molecular and Cellular Biosciences. He is an elected member of the American Academy of Microbiology, a Fellow of the American Association for the Advancement of Science and is serving a term as member of the Technical Advisory Board of the Water Environment Research Foundation.