FQPA Science Review Board Members
Biographical Sketches
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Sophie J. Balk, M.D.

Dr. Sophie Balk is a general pediatrician at Children's Hospital at Montefiore and Professor of Clinical Pediatrics at the Albert Einstein College of Medicine. She practices pediatrics and teaches in a community-based health center in the Bronx, New York. For the last 2 decades, Dr. Balk's academic work has focused on educating clinicians about environmental health issues relevant to children. She was Chairperson of the American Academy of Pediatrics (AAP) Committee on Environmental Health from 1999 – 2003. She was Associate Editor of the 1st and 2nd editions of *Pediatric Environmental Health,* a manual for clinicians published by the AAP and is Associate Editor of the upcoming 3rd Edition. She founded and was Chairperson of the Academic Pediatrics Association Special Interest Group on Environmental Health. She is an immediate past member of the Environmental Protection Agency's Children's Health Protection Advisory Committee. Dr. Balk has published and lectured regionally and nationally on smoking cessation, sun safety and other environmental health issues relevant to clinical practice.

Dana Barr, Ph.D.

Dr. Dana Barr has been employed at the Centers for Disease Control and Prevention for 22 years. During her tenure at CDC, she has devoted much of her time to the development of methods for assessing human exposure to a variety of environmental toxicants including current-use pesticides, phthalates, organochlorine chemicals (pesticides and PCBs), phytoestrogens, diethylene glycol, methyl eugenol, vinyl chloride and others. Dr. Barr is considered one of the preeminent human exposure assessment experts in the field and thus is highly sought after to work with noted epidemiologists on exposure assessment studies. She has authored or coauthored over 200 peer reviewed publications and many published abstracts. Some of these papers have been landmark papers showing human exposure to pesticides in the general population and determining appropriate matrices for biomonitoring at each life stage. She has served as the treasurer of the International Society of Exposure Science (ISES; formerly ISEA) and currently serves as Editor- in-Chief of its official journal, *Journal of Exposure Science and Environmental Epidemiology*. She is also an active member of the International Society of Environmental Epidemiology, Society of Toxicology, American Chemical Society, American Society for Mass Spectrometry, and the Association of Official Analytical Chemists. She has served many important roles in the field of exposure assessment including serving on EPA review boards such as the Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel, chairing and cochairing sessions at international and domestic meetings, serving on the National Children's Study working group for chemical exposures, serving as an international expert in pesticide methodology and exposure assessment, serving on the German Research Foundation's Committee for Standardizing Analytical Methods for Occupational and Environmental Chemistry, and serving on ILSI/HESI's steering and technical committees for the Integration of Biomonitoring Data into Risk Assessment. As a result of her efforts, Dr. Barr has received many awards including ISEA's Daisy Award for Outstanding Investigator, two HHS Secretary's awards for exposure-health investigations involving diethylene glycol and

methylparathion poisoning, 2004 Federal Scientific Employee of the Year, CDC's Mackel Award for outstanding collaboration among epidemiology and laboratory, and EPA's Silver Medal for outstanding contributions to the development of protocols for the National Children's Study. Dr. Barr received her BS in Biology from Brenau University in 1987 and her Ph.D. in Analytical Chemistry from Georgia State University in 1994.

Deborah Bennett, Ph.D.

Dr. Deborah Bennett is an Associate Professor in Environmental and Occupational Health in the Department of Public Health Sciences at the University of California, Davis. Dr. Bennett's research focuses on the fate, transport, and exposure of chemicals in both the indoor and multimedia environments within the context of both environmental risk assessment and environmental epidemiology. Her work utilizes both modeling and measurement techniques, bridging the gap between these two lines of inquiry. Current research interests include exposure to pesticides from indoor uses, relating environmental measures to biological measures for flame retardants, exposures and resulting risks from hazardous air pollutants, supporting exposure assessments in Autism studies, quantifying intake fraction and exposures to agricultural workers. Dr. Bennett received the Early Career Award from the International Society of Exposure Assessment and was an EPA STAR Fellow. She has served on an EPA Science Advisory Board committee as well as other EPA committees and was a US representative to OECD/UNEP Workshop on the use of Multimedia models. She serves as the treasurer for the International Society for Exposure Assessment. Dr. Bennett received her doctoral degree in mechanical engineering from UC Berkeley, worked as a scientist at the Lawrence Berkeley National Laboratory, and was a member of the faculty at the Harvard School of Public Health.

Brian Curwin, Ph.D.

Dr. Brian Curwin has worked in the field of pesticide exposure assessment for 13 years. Currently he is a Senior Research Fellow and Team Lead for the Exposure Assessment II group in the National Institute for Occupational Safety and Health where he leads several occupational exposure assessment studies. He has been the principal investigator of studies assessing occupational exposure to pesticides including investigations of take-home pesticide exposure among farmers and their families, and pesticide exposure among tobacco harvesters. Prior to coming to NIOSH in April 2000, Dr. Curwin worked as a regulatory scientist for 5 years conducting occupational pesticide exposure assessments for the Pest Management Regulatory Agency of Health Canada. His work has been presented at international conferences and published in peer reviewed journals. He is regarded as an expert in pesticide exposure assessment among the national and international pesticide exposure research community. This is evidenced by recent invitations to participate in international workshops on pesticide exposure, numerous presentations at international conferences, requests to peer review scientific articles for journals, requests for reprints of his published articles, and requests for advice on pesticide exposure assessment.

Dr. Curwin received his MS degree in occupational health from McGill University, Montreal, Canada in 1994 and his PhD degree in exposure assessment from Utrecht University, Utrecht, Netherlands in 2006. He has been a member of the International Society for Exposure Analysis

(ISEA) for several years and is currently on the ISES board as a government representative. Dr. Curwin has received the U.S. Civil Service Special Act Award (2008, 2006, 2002), the U.S. Department of Health and Human Services Secretary's Award for Distinguished Service (2002), the Treasury Board of Canada Award of Excellence (1999) and the Health Canada Departmental Award of Merit (1998). He has also been nominated for the Charles C. Sheppard Science Award for Outstanding Peer Reviewed Research Papers (2003) and received an Alice Hamilton Award for Excellence in Occupational Safety and Health, Honourable Mention, Human Studies Category (2007).

Paul Hamey, M.Sc.

Mr. Paul Y. Hamey is a Principal Scientist at the UK Government's Health & Safety Executive's Chemicals Regulation Directorate (CRD). The CRD is responsible for the regulation of agricultural pesticides, biocides, industrial chemicals and detergents in the UK. (CRD was formed in 2008 when the former Pesticides Safety Directorate joined HSE.) Paul leads a team of scientists responsible for human pesticide exposure assessments, and risk assessments. He is also responsible for providing high level advice on exposure matters within the UK. Paul has BSc in Biology from the University of York (1979) and an MSc in Bioaeronautics from the Cranfield Institute of Technology (1983). Paul has over twenty years experience of assessing occupational exposures to pesticides and conducting regulatory risk assessments which includes both work at the UK level and chairing a group of European experts developing harmonized approaches within Europe.

He is a member of the secretariat to the UK Government's independent Advisory Committee on Pesticides (ACP), and attends meetings of the ACP's Medical and Toxicology Panel, and the independent Pesticide Residues Committee. He also attended the former Application Technology Panel and the Pesticide Labelling and Container Design Panel. He also has represented the UK in various European Commission ad hoc expert meetings, and is currently serving as an ad hoc working group member of the European Food Safety Authority's Panel on Plant Protection Products and their Residues. He has also participated in European Commission projects providing training to scientists in exposure assessment in the Czech Republic, Hungary, Lithuania, and Poland.

Dallas Johnson, Ph.D.

Dr. Dallas E. Johnson is a Professor Emeritus in the Department of Statistics at Kansas State University. He received his B.S. degree in Mathematics Education at Kearney State College, a M.A.T. degree in Mathematics from Colorado State University, a M.S. degree in Mathematics from Western Michigan University, and a Ph.D. degree in Statistics from Colorado State University. He is the co-author (with George A. Milliken) of four books: *Analysis of Messy Data, Vol. I - Designed Experiments, Analysis of Messy Data, Vol. II - Nonreplicated Experiments, Analysis of Messy Data, Vol. III - Analysis of Covariance* and *Analysis of Messy Data, Vol. I - Designed Experiments 2nd Edition.* He is also an author of *Applied Multivariate Methods for Data Analysts*. He has published extensively in the areas of linear models, multiplicative interaction models, design of experiments, and in techniques for analyzing messy

data. He has also been an active presenter of short courses on Analysis of Messy Data and Applied Multivariate Methods, and he has been a statistical consultant for nearly 40 years.

Dr. Johnson is a member and Fellow of the American Statistical Association and a recipient of a 2004 Founders Award from the American Statistical Association. In 1997, he received the Don Owen Award, in 2005, he received the Commerce Bank Distinguished Graduate Faculty Member Award. He is the founding editor of the *Journal of Agricultural, Biological, and Environmental Statistics*, a journal jointly published by the American Statistical Association and the International Biometric Society.

Nancy Kim, Ph.D.

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.

John C. Kissel, Ph.D., P.E.

Dr. John C. Kissel is currently Professor of Environmental and Occupational Health Sciences at the University of Washington in Seattle. He holds a Ph.D. in Civil/Environmental Engineering from Stanford University and is a registered professional engineer. Dr. Kissel's research interests generally involve human exposure assessment, with emphasis on exposures related to waste management practice, agricultural use of pesticides, and consumer products. He is particularly interested in probabilistic prediction of exposure and reconciliation of model predictions with observed biomarker data. Dr. Kissel is a former President and Councilor of the International Society of Exposure Science and also served one term as chair of the Exposure Assessment Specialty Group within the Society for Risk Analysis. He was a member of a National Academy of Sciences Committee that evaluated Superfund-related remediation of mining wastes in the Coeur d'Alene Basin in Idaho and has served as an ad hoc member of EPA's FIFRA Science

Advisory Panel on multiple occasions. His recent research activities have been funded by US EPA, NIOSH and the Washington State Departments of Ecology and Health.

Paul J. Lioy, Ph.D.

Dr. Lioy is Professor and Vice Chair in the Environmental and Occupational Medicine,UMDNJ-RWJMS. He is the Deputy Director of Government Relations at the Environmental and Occupational Health Sciences Institute (EOHSI) of NJ and Director of its Exposure Science Division. His expertise includes human exposure to environmental and occupational pollution, multi-media exposure issues for metals and pesticides, air pollution, theory of exposure to dose relationships, and the study of exposure and/or effects of pollution on human health in urban and non-urban areas, and controlled environments. His research also includes homeland security and emergency response, and is on the Executive Committee of the University Center for Disaster Preparedness and Emergency Response of UMDNJ-RWJMS, RWJH, and Rutgers U. He has over 245 peer reviewed papers, and has been and is a member of numerous editorial boards. Dr. Lioy is a member of the U.S. EPA Science Advisory Board, and the Collegium Ramazzini, and was on the Board of Environmental Studies and Toxicology of the NRC. He is a Past-President of the International Society of Exposure Science (ISES. In 1998 he received the ISES, Jerome Wesolowski Award for Lifetime Achievement in Exposure Analysis, and in 2003 received the Frank Chambers Award for lifetime achievement in Air Pollution from the Air and Waste Management Association. In 2008 he honored by Rutgers University as The Graduate School's Distinguished Alumnus for Physical Sciences, Mathematics, and Engineering, and received the ISES Distinguished Lecture Award. Recently, he was honored by the Daughters of the American Revolution, National Founders Trustees with the 2009 Ellen Hardin Walworth Medal for Patriotism.

Chensheng Lu, Ph.D.

Dr. Chensheng (Alex) Lu is the Mark and Catherine Winkler Assistant Professor for Environmental Exposure Biology at the Harvard School of Public Health Department of Environmental Health. Dr. Lu has a Ph.D. in Environmental Health from the University of Washington (Seattle, WA), and his primary research interest is to use variety of biomarkers for assessing human exposures to environmental chemicals. One of Dr. Lu's ongoing research projects is to integrate biomarkers of exposure, physiologically based pharmacokinetic model and cumulative risk assessment tools for quantifying children's longitudinal exposure to pesticides *via* dietary intakes and its risks by comparing to benchmark doses used by regulatory agencies. He is also interested in developing the cholinesterase adduct-base biomarker to assess the health effects from exposures to organophospate pesticides. In Dr. Lu's Exposure Biology Lab at Harvard School of Public Health, he is developing several analytical methods/biosensors using GC/MS and LC/MS/MS to quantify exposures *via* the analysis of specimen samples in supporting our research program. The current method developments include pesticide residues in food samples, pyrethroids in saliva, pesticide metabolites in urine, bisphenol-A and phthalate monoesters in urine, and cholinesterase adducts in red blood cells. Dr. Lu collaborates extensively with scientists/researchers in academia as well as in federal research labs, such as the National Center for Environmental Health, Pesticide Laboratory at the Center for Disease Control and Prevention, Food and Drug Administration regional labs, the National Institute for

Environmental Health Science. He has been an *ad hoc* member of the US EPA's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) since 2004. He also serves as the associate editor for Journal of Exposure Science and Environmental Epidemiology and Environmental Health Perspectives.

Peter D.M. Macdonald, D.Phil., P.Stat.

Dr. Peter D. M. Macdonald completed his D.Phil in Biomathematics at the University of Oxford and joined McMaster University in 1971. He teaches statistics at all levels, supervises graduate students and consults in applied statistics. He holds P.Stat. accreditation from the Statistical Society of Canada. For much of his time at McMaster he was Coordinator of the Graduate Program in Statistics. Sabbatical positions include l'Institut National de la Santé et de la Recherche Médicale in Villejuif, France, in 1977-78 and La Trobe University, Bundoora, Australia, in 1986. He was President of the Statistical Society of Canada in 1990-91. His main areas of research include stochastic models for cell proliferation, mark-recapture methods, mixture distributions, fisheries length-frequency analysis, and the reconstruction of ancient Safaitic genealogies. His current work is concerned with developing an R package for fitting finite mixture distributions and helping scientists in diverse areas of application to use it. He has served as an ad hoc member of numerous FIFRA Scientific Advisory Panels for the USEPA since 2000.