

US EPA ARCHIVE DOCUMENT

FQPA Science Review Board Biographical Sketches
May 12-15, 2009

1. Dr. M. Paige Adams is an Assistant Research Scientist in the Department of Biological and Agricultural Engineering, University of Georgia. Her research is focused on the effects of concentrated animal feeding operations (CAFO's) on watersheds. She is currently conducting research on the fate and transport of pathogens associated with the poultry industry, examining the effectiveness of mandated indicator species in detecting other poultry pathogens, and use of in-stream ponds as a mechanism for reduction of pathogenic and indicator species. She plans to initiate watershed-scale monitoring of steroid hormones associated with the poultry industry as a precursor to studies of the fate and transport of the hormones and major degradation products in natural water systems, bed sediments, and soils. Her previous research examined the attenuation of atrazine in a restored riparian forest buffer.
2. Dr. Xuefeng Chu is an Assistant Professor of water resources engineering in the Department of Civil Engineering at North Dakota State University. He has 20 years of research and teaching experience in areas of contaminant transport modeling in surface and subsurface environments, pesticide fate and transport modeling, watershed hydrologic modeling, groundwater modeling and management, groundwater and surface water interactions, and water resource systems analysis. Dr. Chu has been actively involved in more than 20 research projects and he is the developer of three Windows-based hydrologic and environmental modeling software packages. His research findings have been published in peer-reviewed journals and presented at national and international conferences. Dr. Chu is a recipient of the 2007 National Science Foundation Faculty Early Career Award, which supports his fundamental hydrologic studies on overland flow generation and evolution.
3. Dr. Frederik de Laender is a Post-Doctoral Research Associate in ecosystem studies at the NIOO-KNAW (Nederlands Instituut voor Ecologie- Koninklijke Nederlandse Akademie van Wetenschappen), Centre for Estuarine and Marine Ecology (Centrum voor Estuariene en Mariene Ecologie) in Yerseke, The Netherlands. His research deals with improving ecological relevance of chemical risk assessment using many different modelling techniques. Currently, he is involved in a project on bioaccumulation in arctic food webs. Dr. de Laender has been an invited reviewer for a number of scientific journals and a referee for some national international research programs.
4. Dr. Daniel Devlin is a Professor and Extension Specialist and Coordinator, Environmental Quality in the Department of Agronomy at Kansas State University. He

has a Ph.D. from Washington State University and has been a faculty member at Kansas State University since December, 1985. His responsibilities include coordinating interdisciplinary research and extension soil and water quality programs with state, federal, and local agencies, organizations, and committees. He serves as Kansas State University's research and extension representative to interagency committees on environmental quality and watershed planning. He provides leadership in developing and delivering coordinated interdisciplinary research and educational programs, which includes watershed planning, prevention of sediment, bacteria, nutrient and pesticide contamination of ground and surface water, and general water quality issues. He also has responsibility for securing and administering funds for research and demonstration projects on water quality issues. During his career, he has studied pesticide surface and ground water movement, developed best management practices for pesticides for Kansas and the Midwest, and developed and delivered innovative educational programs in Kansas resulting in documented reductions in atrazine herbicide runoff into surface waters.

5. Dr. William Effland is a Soil Scientist working in the Resource Inventory and Assessment Division of the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). He has worked extensively in environmental pedology for more than 23 years. Currently, he conducts modeling and statistical analysis, program analysis, and watershed studies of the effects of conservation practices on the environment in conjunction with other federal, state and local government agencies and non-governmental organizations for USDA's Conservation Effects Assessment Project. He is also involved in research related to exploratory spatial data analysis and information visualization, soil diversity, and applications of pedology to landscape ecology and other sciences. Dr. Effland previously worked for an environmental consulting and engineering firm as a project leader for laboratory and field studies related to NEPA, RCRA and CERCLA at federal facilities of the Departments of Defense and Energy as well as an environmental scientist in the Environmental Fate and Effects Division of the EPA Office of Pesticide Programs.
6. Dr. Tim Ellsworth is a soil physics faculty member in the Dept. of Natural Resources and Environmental Sciences at the University of Illinois. He teaches geostatistics, soil physics, and environmental science. His research focuses on soil sampling theory and practical applications, characterizing solute transport in soil and developing soil-based nutrient management strategies. He has been an invited speaker at local, regional, national, and international conferences and symposia, and has published approximately 40 refereed articles as well as numerous reports and conference proceedings. He is co-founder of the not-for-profit organization Growers Science Network which aims to improve agriculture, rural communities, and the environment.

7. Mr. James F. Fairchild has worked as an ecologist for the United States Geological Survey since 1981. Currently, he is a Research Ecologist and Section Leader of the Community Ecology Section (Ecology Branch) at the Columbia Environmental Research Center. The Community Ecology Section investigates and monitors the effects of physical, chemical and biotic stressors on fish, invertebrate, plant, and soil communities, and develops and tests new methods for environmental assessment and monitoring. Mr. Fairchild's research has been conducted under laboratory, outdoor mesocosm, and field conditions. Mr. Fairchild has published over 70 peer review journal publications. He served as Associate Editor for the journal *Environmental Toxicology* from 2000-2008 and as a peer-reviewer for 15 other professional journals. He has served on a dozen USEPA scientific review panels including the FIFRA Scientific Advisory Panel and Science Advisory Board.
8. Robert Gilliom directs the Pesticide National Synthesis Project of the National Water Quality Assessment Program, U.S. Geological Survey, a position he has held since 1990. In this role, he has been responsible for the design, execution, and data analysis of studies of pesticides in streams and ground water nationwide. Prior to the Pesticide Project, he served as project chief for USGS San Joaquin Valley Studies from 1984-1989 and was with the Systems Analysis Group, a USGS data-analysis research team, during 1981-1984. His research has focused on water-quality assessment, ranging from statistical methods for data analysis, to regional and national assessments of nutrients, trace elements, and pesticides. Such work has included a national-scale analysis of pesticide occurrence in hydrologic systems and the significance of pesticide mixtures to stream ecosystems. Mr. Gilliom has served on numerous advisory committees and groups, including the International Life Sciences Institute (ILSI) committee on "Assessment of methods to estimate pesticide concentrations in drinking water sources," USEPA FIFRA SAP, and numerous USGS and interagency workgroups involved with the design of water-quality monitoring.
9. Dr. Thomas La Point is Professor and former Director of the Institute of Applied Science at the University of North Texas. Dr. La Point's primary research and teaching interests include contaminant effects on freshwater aquatic communities, specifically in how metals and organic contaminants affect benthic population dynamics and freshwater fisheries. He has published on ecosystem measures, contaminant bioaccumulation, and sub-lethal effects on aquatic populations. Dr. La Point has served on several USEPA FIFRA SAPs concerned with pesticides and ecological risk and has worked as a consultant for EPA on Superfund issues at large sites. He has recently (2003-05) served on a National Academy of Sciences (NAS) National Research Council (NRC) Committee on Superfund Site Assessment and Remediation in the Coeur d'Alene River Basin. Dr. La Point is currently serving as Chair of a Water Environment Research Foundation

subcommittee on whole-effluent testing as an indicator of aquatic health. He has served on several NSF, USEPA and USGS panels to review proposals submitted for funding. Dr. La Point is also serving on the editorial boards for Chemosphere and Environmental Toxicology and Pharmacology and has served as Editor of the Society of Environmental Toxicology and Chemistry (SETAC) Special Publication Series.

10. Dr. Robert Lerch is a Soil Scientist in the Cropping Systems and Water Quality Research Unit, United States Department of Agriculture (USDA), Agricultural Research Service (ARS) located in Columbia, MO. He has 22 years of research and project management experience. This includes seven years as the project manager of a long-term study related to the use of sewage sludges for dryland winter wheat production, and 16 years as an ARS scientist leading numerous research projects. He is nationally and internationally known for research on herbicide fate and transport, analytical methods development, and the impact of prevailing and best management practices on water quality. Several of these research topics exemplify long-term, systems level research that have resulted in the creation of extensive soil and water quality databases from field to regional scales. His recognition of important and relevant research topics has resulted in successfully-funded grant proposals totaling \$3.49 million in external funding since 1997.
11. Dr. Jeffrey Novak is a Research Soil Scientist with the United States Department of Agriculture (USDA), Agricultural Research Service (ARS) and is stationed at the Coastal Plains Soil, Water and Plant Research Center, in Florence, South Carolina. He has been a Soil Scientist with the USDA-ARS for over 16 years. He is a nationally and internationally known expert on the fate and transport of pesticides, nutrients, and trace elements in agricultural, riverine, and wetland systems. Additionally, he has published in the areas of utilization of water treatment residuals for phosphorus binding and on tillage and crop management practices to increase soil carbon sequestration. Dr. Novak has served on scientific advisory panels including the USEPA FIFRA SAP and one on trace metal accumulation in soils that receive animal manure at the 2007 OTEANE International meeting in Archamps, France. Dr. Novak has been a journal editor for the Journal of Soil and Water Conservation Society and the Journal of Environmental Quality and has served as a Technical Advisor for an International Scientific Technical Center (Moscow, Russia) sponsored project with scientists from the Institute of Soil Science, Almaty, Kazakhstan.
12. Dr. J.C. Randolph is Professor of Environmental Science and Director of the Center for Research in Energy and the Environment in the School of Public and Environmental Affairs (SPEA) at the Indiana University in Bloomington. He has over 30 years experience in implementation and administration of environmental science programs. His research interests include: forest ecology, ecological aspects of global environmental change with particular interests in forests and agriculture, environmental aspects of

energy development, and applications of geographic information systems (GIS) and remote sensing in environmental and natural resources management. Much of his current research concerns climate change effects on Midwestern agriculture and forests. He also studies carbon dynamics of temperate deciduous forests at the AmeriFlux site in south-central Indiana and has worked in tropical forests in eastern Brazil, Venezuela, Costa Rica, Guatemala, and Honduras, principally through research activities of the Center for the study of Institutions, Population, and Environmental Change (CIPEC). Dr. Randolph has been at Indiana University since 1973 when he came from Oak Ridge National Laboratory.

13. Dr. Jason Rohr is an Assistant Professor in the Department of Integrative Biology at the University of South Florida where he oversees research on the interactive effects of pollution, climate change and disease on aquatic ecosystems, communities and populations. Much of his research has emphasized the direct and indirect biological effects of the herbicide atrazine, but he has also studied several other agrochemicals and surfactants. Dr. Rohr has published 32 peer-reviewed papers and has been awarded 10 grants totaling over \$2 million from several funding agencies, such as the Environmental Protection Agency, United States Department of Agriculture, and the National Science Foundation. His areas of expertise include experimental design and statistical modeling, ecotoxicology, and community and disease ecology.
14. Dr. Geoffrey Scott is the Director of NOAA's Center for Coastal Environmental Health and Biomolecular Research and the Acting Director of the Hollings Marine Laboratory with laboratories in Charleston, SC and Oxford, MD. Dr. Scott also holds adjunct faculty appointments at the University of South Carolina's Arnold School of Public Health, the Marine Biomedicine Program at the Medical University of South Carolina, the Marine Biology Program at the University of Charleston, and the Institute of Environmental and Human Health at Texas Tech University. His research at NOAA has focused on agricultural and urban nonpoint source runoff issues throughout the southeastern US including studies of several pesticides as potential endocrine disruptors in estuarine salt marsh mesocosm studies. He has also worked as an aquatic toxicologist for the EPA, Director of Toxicology at the Research Planning Institute's Wide Awake Landing Field Station, and as a faculty member of the Arnold School of Public Health at the University of South Carolina. Dr. Scott has served on numerous advisory panels to government and industry including: (1) the Interstate Shellfish Sanitation Conference, (2) EPA's Advisory Board, Panel on Endocrine Disrupting Chemicals, (3) EPA's FIFRA Scientific Advisory Panel, (4) EPA's Environmental Technology Verification Program, Water Stakeholder Committee Member; (5) Governor of South Carolina's Primary Health Care Task Force; (6) the South Carolina Coastal Pesticide Advisory Committee; (7) United Nations Gulf of Guinea Large Marine Ecosystem Team Member; and (8) Research Delegation Exchange with the Black Sea Research Institute.

15. Dr. Frieda Taub is Professor Emeritus, School of Aquatic and Fishery Sciences, at the University of Washington, engaged in algae-grazer-microbial community metabolism research. In 2008, she was a Peer Reviewer for Aquatox Release 3 model that included ecological risk assessment and parameter sensitivity. Most of her earlier research involved the ecological responses of aquatic communities to chemicals including antibiotics, copper, and insecticides; this resulted in the Standardized Aquatic Microcosm protocol involving 10 phytoplankton, 5 animals, and microbes, ASTM E1366 Standard. She was a member of EPA's Science Advisory Board, Environmental Pollutant Movement and Transformation Committee (1979-81); a consultant to EPA's SAB Ecological Processes and Effects Committee (1990-3); and a member (1998-2002 during which seven EPA-SAB-EPEC documents were published); also she served on EPA's Science Advisory Group for the Multiscale Experimental Ecosystem Research Center, University of Maryland (member 1993-97, chair 1997- 2001). She serves on the State of Washington's State Environmental Policy Act Committee (SEPA). She is an AAAS Fellow and a member of Ecological Society of America, American Society of Limnology and Oceanography, Society of International Limnology, Society of Toxicology and Chemistry, and American Society for Testing Materials, among others. Her publications include ca. 70 peer-reviewed articles and chapters. She edited the book, Lake and Reservoir Ecosystems, Vol. 24 of Ecosystems of the World, Elsevier.
16. Dr. Linda Young is a Professor of Statistics at the University of Florida where she teaches, consults, and conducts research on statistical methods for studies in public health, agricultural, environmental, and ecological settings. Dr. Young has a Ph.D. from Oklahoma State University. Her recent research has focused on linking disparate data sets and the subsequent analysis of these data using spatial statistical methods. Dr. Young has been the editor of the Journal of Agricultural, Biological and Environmental Statistics. She is currently associate editor for Biometrics, Journal of Environmental and Ecological Statistics, and Sequential Analysis. Dr. Young has served in a broad range of offices within the professional statistical societies, including President of the Eastern North American Region of the International Biometric Society, Vice-President of the American Statistical Association, Chair of the Committee of Presidents of Statistical Societies, Treasurer of the International Biometric Society, and an Executive Committee member of the National Institute of Statistical Science's Board of Trustees. Dr. Young is a fellow of the American Statistical Association and an elected member of the International Statistical Institute. She has served on numerous panels for the National Science Foundation and the Environmental Protection Agency.