

US EPA ARCHIVE DOCUMENT

## FQPA Science Review Board Members Biographical Sketches

### **Mark T.D. Cronin, Ph.D.**

Dr. Mark Cronin is Professor of Predictive Toxicology at the School of Pharmacy and Chemistry, Liverpool John Moores University (LJMU), Liverpool, England. Dr. Cronin received his Ph.D. from Liverpool Polytechnic in the area of QSARs for environmental toxicity. He has over 20 years expertise in the application of quantitative structure-activity relationships (QSARs) to predict the toxicity and fate of chemicals; in addition to development of strategies (such as integrated testing strategies) to develop alternatives to whole animal testing for toxicity. Research in recent years has centred on the application of these alternatives for regulatory use (e.g. classification and labelling; prioritisation; data gap filling) and for product development. Endpoints currently considered cover all toxicological effects required for regulatory risk assessment including endocrine disruption. This research effort has resulted in over 150 publications in all areas of the use of (Q)SARs and expert systems to predict toxicity. Dr. Cronin has served on a number of national and international committees including the Organisation of Economic Co-operation and Development (OECD) Working Group on (Q)SARs, European Centre for the Validation of Alternative Methods (ECVAM) Task Force on Endocrine Disruption, International Steering Committee for the International Workshop on QSAR in the Environmental Sciences, and several committees at the Society of Chemical Industry (London) and Society for Environmental Toxicology and Chemistry in the United Kingdom (SETAC-UK). He is on the editorial board of five journals.

### **Nancy Denslow, Ph.D.**

Dr. Nancy Denslow is a professor in the Department of Physiological Sciences and in the Center for Environmental and Human Toxicology at the University of Florida. She received her Ph.D. from the University of Florida in Biochemistry and Molecular Biology. She was the past director of the Proteomics Core Facility in the Biotechnology Program at the University of Florida. Dr. Denslow has pioneered the use of molecular technologies for environmental toxicology especially focusing on toxicogenomics and proteomics approaches for evaluating endocrine disruption in fish models including largemouth bass, fathead minnow and sheepshead minnow. She has over 150 peer-reviewed publications and is an inventor on four patents relating to protein factors, biomarkers for endocrine disruption and proteomics methodologies. Dr. Denslow is a member of the Society of Toxicology (SOT, Junior Councilor, 2009-2010), SETAC, American Society for Biochemistry and Molecular Biology (ASBMB) and the Association of Biomolecular Research Facilities (ABRF, Executive board member 2004-2009). She is an Associate Editor for Ecotoxicology and Environmental Safety and serves as an ad hoc reviewer for National Institute of Health's National Institute of Environmental Health Sciences (NIH-NIEHS), National Science Foundation (NSF), and the Environmental Protection Agency (EPA).

**Miriam Jacobs, Ph.D.**

Dr. Miriam Jacobs is a Scientific Officer in the Assessment Methodology Unit, European Food Safety Authority (EFSA) in Parma, Italy. She received her Ph.D. in molecular toxicology from the University of Surrey, England. Her current responsibilities include: 1) contribution to qualitative or quantitative risk assessments, and development of computational toxicology/QSAR, alternatives and endocrine disruptor risk assessment needs; 2) coordination of working groups comprising external scientists and/or experts from members of the European Union (EU), 3) organization of and participation in meetings and workshops regarding toxicology risk assessment (e.g., trainer for the World Health Organization (WHO) Mode of Action Risk Assessment methodology); 4) fostering active participation in and monitoring of scientific relevant research projects, international conferences and other scientific meetings in EU Member States; and 5) setting-up networks with competent institutions in EU Member States and with other international organizations active in similar areas as EFSA (e.g., European Commission (EC), OECD, WHO/International Programme on Chemical Safety (IPCS), United Nations Environment Programme (UNEP), and United Nations Development Programme (UNDP)). She is an expert lecturer on “Advanced issues in risk assessment” at the L’École des Hautes Études en Santé Publique (EHESP) in INSERM, France. Dr. Jacobs has coordinated many international workshops and conferences. She is an editorial board member of The Open Toxicology Journal and is a regular reviewer for many scientific journals, conference proceedings, and regulatory organizations.

**M.E. (Bette) Meek, M.S.**

Ms. Bette Meek is currently the Associate Director of Chemical Risk Assessment with the McLaughlin Institute of the University of Ottawa on interchange from Health Canada, where she managed the Existing Substances Division in the Safe Environments Programme. Her responsibilities in this capacity related to development and implementation of process and methodology for the assessment of the effects on human health of Existing Substances under the Canadian Environmental Protection Act, including setting priorities for assessment from among all 23,000 commercial chemicals used in Canada by September, 2006 (i.e., categorization). She has considerable experience in the development of methodology for and evaluation of health-related data on environmental contaminants, having also managed previously programs within Health Canada on contaminants of drinking water and air. She acts as an advisor to several international organizations and has authored over 150 scientific publications in this area. Specific areas of experience include development of frameworks to increase transparency in the assessment of human relevance of animal modes of action; increasing incorporation of biological data in dose-response as a replacement for default; development of predictive exposure and hazard modelling and increasing efficiency in assessment through effective problem formulation and early and continuing peer engagement.

**Reynaldo Patiño, Ph.D.**

Dr. Reynaldo Patiño is Leader of the U.S. Geological Survey's Texas Cooperative Fish and Wildlife Research Unit, and Professor with the departments of Natural Resources Management and Biological Sciences at Texas Tech University. He received his Ph.D. from Oregon State University. As Unit Leader he oversees unit operations on behalf of its cooperators, which include Texas Tech University, Texas Parks and Wildlife Department, U.S. Fish and Wildlife Service, The Wildlife Management Institute, and the U.S. Geological Survey. His current research addresses the impact of suboptimal or changing environments on animal health and reproductive fitness. As Professor at Texas Tech University, he advises graduate students and teaches graduate courses in ecological physiology and aquaculture. He has also served as Program Director for the National Science Foundation; ad hoc member of several advisory and peer-review panels for U.S. and international agencies; and Editorial Board member, Associate Editor or Guest Editor for a number of international scientific journals. Dr. Patiño has 30 years of research experience in ecophysiology, ecotoxicology, and stress physiology of vertebrates and his work has included collaborations with colleagues in the U.S., Latin America, Japan and Europe.

**Terry W. Schultz, Ph.D.**

Dr. Terry Schultz is Emeritus Professor of Comparative and Experimental Medicine, College of Veterinary Medicine, The University of Tennessee, Knoxville, Tennessee and Director of the Biological Activity Testing and Modeling Laboratory where he oversees the *in vitro* testing of industrial organic chemicals. Dr. Schultz has a Ph.D. in Zoology from the University of Tennessee. He has more than 30 years experience in toxicological testing, QSAR modeling, and expert-system development in the field of predictive toxicology. During these 3 decades, he has actively been involved in research and publication, including in the areas of the development and use of *in vitro* systems for endocrine disruption screening and the identification of structural alerts for Estrogen Receptor (ER)-binding. Since 2007, he has served as the scientific advisor to the OECD (Q)SAR Application Toolbox.

**Leming Shi, Ph.D.**

Dr. Leming Shi is a principal investigator in computational chemistry and bioinformatics at the USFDA's National Center for Toxicological Research in Jefferson, Arkansas. Dr. Shi received a Ph.D. in computational chemistry from the Chinese Academy of Sciences. His work involves the use of chemoinformatics, bioinformatics, pharmacogenomics, toxicogenomics in small-molecule drug discovery and development. Dr. Shi conceived and has been leading the MicroArray Quality Control (MAQC) project, a community-wide effort aimed at reaching consensus on "best practices" for the generation, analysis, and application of microarray and next-generation sequencing data in the discovery, development, and review of FDA-regulated products (found at: <http://edkb.fda.gov/MAQC/> and <http://www.nature.com/nbt/focus/maqc/>). He has published over 100 peer-reviewed papers and is a co-inventor of nine issued patents.