April 19, 2004

FIFRA SCIENTIFIC ADVISORY PANEL (SAP)
OPEN MEETING
MAY 4-6, 2004
FIFRA SAP WEB SITE http://www.epa.gov/scipoly/sap/
OPP Docket Telephone: (703) 305-5805
Docket Number: OPP-2004-0099

CONSULTATION ON DERMAL SENSITIZATION ISSUES FOR EXPOSURES TO PESTICIDES

PANEL MEMBER BIOGRAPHICAL SKETCHES

Gary R. Burleson, Ph.D.

Dr. Burleson received his Ph.D. from the Medical College of Wisconsin with post doctoral training at the University of Notre Dame. He has over 20 years professional experience in academia, clinical, contract research, government research and the pharmaceutical industry. This experience includes academic appointments and affiliations at the University of Notre Dame, North Carolina State University, the University of North Carolina at Chapel Hill, and New York University; clinical experience at Milwaukee County General Hospital; contract research organization experience, government regulatory experience at the U.S. Environmental Protection Agency (USEPA); and pharmaceutical experience in drug discovery at Procter & Gamble. Dr. Burleson has scientific expertise in the following broad areas: Microbiology, Immunology, Virology, Clinical Microbiology, Viral Pathology, Pulmonary Immunology, Tumor Metastasis, Immunomodulation, Inflammation, Immunotoxicology, Hypersensitivity, and Computer Disease Modeling.

Ih Chu, Ph.D.

Dr. Chu obtained his Ph.D. in pharmacology in 1973. Following 2 year post-doctoral training, he joined Health Canada as research scientist. As Head of Systemic Toxicology and Pharmacokinetics section, he directs research on pharmacokinetics, biochemical toxicology, neurotoxicology, endocrine disputers, reproductive and systemic effects of persistent environmental pollutants. The section also engages in developing molecular biomarkers and alternative methods for toxicity and exposure assessments.

Dr. Chu's current research focuses on the interactive and mixture effects of environmental pollutants, and toxicology studies of oxygenated and renewal fuels. He leads projects funded by the Program on Energy Research and Development and Northern Contaminants Program to investigate toxicity of advanced transportation fuels and the developmental neurotoxicity of the mixtures of persistent organic pollutants. He has authored and co-authored some 150 research papers in peer reviewed journals, book chapters and reviews in toxicology. He also serves on a number of expert panels and task groups reviewing test guidelines and test methods. Research from his group has strongly impacted the development of test guidelines and regulatory requirements for toxic chemicals.

Peter Griem, Ph.D.

Dr. Peter Griem is currently a Toxicologist with the fine and specialty chemicals company Clariant (Muttenz, Switzerland) working at the German subsidiary Clariant GmbH in Sulzbach Germany. His primary areas of interest include skin sensitization and how this endpoint can be addressed in regulatory toxicology. Dr. Griem holds a Diploma degree in Biochemistry from Tuebingen University (Germany), a Ph.D. (Dr. rer. nat) in Immunology/Immunotoxicology from Duesseldorf University (Germany) and a Certification as Toxicologist from the German Society for Pharmacology and Toxicology (DGPT). He formerly worked with a toxicology consultant firm and a cosmetics company.

A. Wallace Hayes, PhD, DABT, FATS, FIBiol, FACFE, ERT

Dr. Hayes is a toxicologist with over 30 years of experience. He has written over 200 peer reviewed publications and is the editor of the textbook, Principles and Methods of Toxicology, the international Journal of Human and Experimental Toxicology and a co-editor of the Target Organ Toxicity Series. Dr. Hayes also is the editor of the Journal of Toxicology-Cutaneous and Ocular Toxicology. Before joining Harvard School of Public Health as a visiting scientist, Dr. Hayes was Vice President of Corporate Product Integrity at the Gillette Company, where he had management responsibility for the safety evaluation of a variety of consumer products, plant safety, environmental stewardship, and quality control. Dr. Hayes is an adjunct professor at Wake Forest University School of Medicine, the University of Louisville School of Medicine and the School of Public Health, The University of Massachusetts. Dr. Hayes holds degrees from Auburn University (PhD in biochemistry, M.S. in physiology) and Emory University. Dr. Hayes was a NSF predoctoral fellow at Auburn University, a NIH postdoctoral fellow at the Vanderbilt University School of Medicine, and a NATO Senior Scientist at the Central Veterinary Laboratory, Weybridge, England. Dr. Hayes currently lectures at the Harvard School of Public Health and at Virginia Polytechnic and State University and in the Risk Assessment Summer School of the International Union of Toxicology. Dr. Hayes has served the International Union of Toxicology as the editor of the Proceedings of ICT III (Developments in the Science and Practice of Toxicology) and as the editor of the Proceedings of the 5th Congress of Toxicology in Developing Countries (Toxicology in New Century-Opportunity and Challenge). Dr. Hayes has served as a delegate to IUTOX and on several IUTOX committees. In addition, Dr. Hayes has served on committees for the National Academy of Sciences, the National Institution of Health, and the Department of Defence. Dr. Hayes is a diplomat of the American Board of Toxicology, The Academy of Toxicology Sciences, the American Board of Forensic Medicine and the American Board of Forensic Examiners. He is a Fellow of the Academy of Toxicological Sciences and Institute of Biological Sciences (UK). Dr. Hayes is a registered toxicologist in the European Union (EUROTOX).

Abigail Jacobs, Ph.D.

Dr. Jacobs is currently Associate Director for Pharmacology /Toxicology for Offices of Drug Evaluation (ODEs) 4 and 5, Center for Drug Evaluation (CDER)/FDA. Dr. Jacobs received a B.S. in chemistry at the U. of Michigan, Ann Arbor, and a Ph.D. in biochemistry at the U. of California, Berkeley. After postdoctoral work in immunochemistry and mast cell biochemistry, she became a toxicologist. She spent numerous years working for the National Cancer Institute/National Toxicology Program and the Division of AIDS, NIAID, NIH, as a contractor for toxicologic evaluation before joining the Division of Antiviral Drug Products, CDER/FDA, as a toxicology reviewer in 1991. From 1995-2003, Dr. Jacobs was Pharmacology/Toxicology Supervisor of the Division of Dermatologic and Dental Drug Products, CDER/FDA. She is a standing member of the CDER, FDA, Executive Carcinogenicity Assessment Committee, is chair of a number of CDER, FDA, Pharm/Tox Coordinating Committee working groups, and represents CDER on ICCVAM (Interagency Committee for the Validation of Alternative Methods) and on a number of ICCVAM working groups. She also represents CDER/FDA on OECD pharm/tox issues.

Nancy Ann Monteiro-Riviere, Ph.D.

Dr. Monteiro-Riviere is a Professor of Investigative Dermatology and Toxicology in the Center for Chemical Toxicology Research and Pharmacokinetics, Department of Clinical Sciences, College of Veterinary Medicine, North Carolina State University (NCSU) in Raleigh NC. She received her B.S. in Biology (cum laude) from Stonehill College in North Easton, MA and her M.S. and Ph.D. in Anatomy from Purdue University in West Lafayette, IN. She completed post-doctoral training in Experimental Pathology / Toxicology at the Chemical Industry Institute of Toxicology in Research Triangle Park, NC. She joined the faculty at NCSU in 1984. Dr. Monteiro-Riviere is also a Professor in the NCSU/UNC-CH Biomedical Engineering Faculty as well as being a Research Adjunct Professor in the Department of Dermatology, School of Medicine at the University of North Carolina at Chapel Hill. She is a member of Sigma Xi and Phi Zeta honor societies. Dr. Monteiro-Riviere is President of the Dermatotoxicology Specialty Section, and past-president of the In Vitro Specialty Section of the Society of Toxicology. She presently serves on the NIH Scientific Advisory Committee on Alternative Toxicological methods (SACATM), the Board of Publications of the Society of Toxicology and Editorial Boards of the Journal of Applied Toxicology, Journal of Toxicology - Cutaneous and Ocular, Toxicology In Vitro, and Toxicology Mechanisms and Methods. Dr. Monteiro-Riviere has published more than 145 publications, holds a US patent, and has been the recipient of 9 million dollars in extramural research support from various government and private sources. Her current research interests relate to chemical absorption and mechanisms of chemical irritation to skin.

Richard C. Pleus, Ph.D.

Dr. Pleus is Director and a toxicologist of Intertox, Inc. He is an expert in neurological and reproductive toxicology with over 20 years experience assessing the risk to humans exposed to chemical and biological agents via food, consumer products, therapeutic agents, and the environment. He has a proven ability to communicate risks of toxicants to a variety of audiences – skillfully facilitating both public forums and industry meetings, in litigation support, on expert panels, and as an expert witness. His clients include industry, citizen groups, and governmental agencies, both nationally and internationally. He continues to be involved in research, publications, and education.

Dr. Pleus' research focuses on human health risk, including mode-of-action studies aimed at quantifying exposure to critical organ systems, with particular interest in human and laboratory animal nervous system development. In association with these activities, he has conducted a variety of human health risk evaluations of exposures to chemical and biological agents in air, water, food, and soil, as well as risk evaluations relating to consumer products and therapeutic agents. His work is focused on the application of academic research results to protect human health and resolve public health issues. He has presented the results of his research at national and international meetings in Australia, France, South Africa, and the Czech Republic.

Dr. Pleus' contribution to peer reviewed journals and books include his work regarding perchlorate, published in *Environmental Health Perspectives* and his chapter contribution, Perchlorate Regulation and Regulatory Activity (Chapter IX) to GFS Chemicals book *Perchloric Acid and Perchlorate*. He has also co-authored chapters to *Biological Risk Engineering Handbook: Infection Control and Decontamination* (Lewis Publishers), chapter 4, *Toxicology*, and chapter 5, *Risk Assessment*.

Dr. Pleus was an instructor for 10 years at the University of Minnesota where he taught human science classes for both lower and upper level undergraduate students. In addition, he taught courses in physiological psychology and psychopharmacology for Metropolitan State University. He periodically serves as a graduate level guest lecturer in toxicology at the School of Public Health at the University of Washington. He is an adjunct Associate Professor in the Department of Pharmacology at the University of Nebraska Medical Center, as well as a faculty member of the Center for Environmental Toxicology at the University of Nebraska. He is an elected member of the Delta Omega Honorary Society in Public Health.

Dr. Pleus' credentials include a B.S. with Honors from Michigan State University, an M.S. in Environmental Health, a Ph.D. in Environmental Toxicology from the University of Minnesota, and postdoctoral research in neuropharmacology at the University of Nebraska Medical Center.

Paul David Siegel, Ph.D., M.S.P.H.

Dr. Siegel is Team Leader-Bioorganic Chemistry/Director Scientist, Research Officer and the National Institute for Occupational Safety and Health, Analytical Services Branch/Health Effects Laboratory Division, and an Adjunct Associate Professor at the West Virginia University School of Pharmacy, Department of Basic Pharmaceutical Sciences. Dr. Siegel's major research interests are in the area of immunological sensitization and asthma from occupational chemicals. This includes modeling of exposure routes (dermal and inhalation) and asthma-like responses, biomarkers of sensitization and response, and exposure characterization. His research has resulted in 53 published abstracts and 50 peer-reviewed scientific articles, 2 book chapters, 9 internet reports and 10 invited presentations. He is chair and/or serve on multiple NIOSH committees and has taught both graduate and undergraduate Pharmacy courses, co-chaired an international occupational asthma conference and am an ad hoc reviewer for several scientific journals. He has a B.A. in Biology from the University of Missouri, Columbia, MO, a MSPH in Environmental Health from Tulane University and a Ph.D. in Pharmacology/Toxicology from Tulane University.

Alan H. Stern, D.P.H.

Dr. Stern holds a Dr.P.H. (Doctor of Public Health) and a M.P.H. in Environmental Sciences from Columbia University. He is the Chief of the Bureau for Risk Analysis in the Division of Science and Research at the New Jersey Department of Environmental Protection. He is an Adjunct Associate Professor in the Division of Environmental and Occupational Health in the School of Public Health, University of Medicine and Dentistry of New Jersey (UMDNJ), and an Adjunct Associate Professor in the Department of Environmental and Community Medicine , UMDNJ-Robert Wood Johnson Medical School. He specializes in toxicology, human health risk assessment and exposure assessment. Dr. Stern's primary research areas include risk assessment of heavy metals including mercury, chromium and lead, and probabilistic methods in health risk assessment. He regularly teaches graduate classes in risk assessment, biological monitoring of metals, and general biological monitoring of exposure. Dr. Stern is certified in toxicology (DABT) by the American Board of Toxicology. He has served on a number of peer review panels for the US EPA, National Academy of Sciences, Toxicology Excellence for Risk Assessment and the White House Office of Science and Technology Policy and National Institute of Environmental Health Sciences.