A Message from our Out-going President

Wow! I can’t believe the year went by so fast. I have had a wonderful time in my role as President of the Occupational and Public Health Specialty Section. Thank you to all of you for allowing me to have a great experience. We have an outstanding bunch of scientists in our group. I want to thank everyone who has volunteered their time this year to help our specialty section.

In the summer of 2010 we held our first ever webinar. Dr Robert Tardif, who was our 2009 Paper of the Year Award Winner, from the University of Montreal, presented “The Effect of Workload on Biological Monitoring of Occupational Exposure to Toluene and N-Hexane: Contribution of Physiologically Based Toxicokinetic Modeling.” We had over 30 people attend. We are hoping to make this an annual event, so be on the lookout for more information about our 2011 webinar.

The yearly SOT meeting in Washington, D.C. was clearly a success. OPHSS was sponsor of one Continuing Education Class “Protecting Human Health: Use of Toxicological and Epidemiological Data in Determining Safe Levels for Human Exposure” and one Symposia “Toxicological Considerations in the Gulf of Mexico Oil Spill.” OPHSS also endorsed 8 scientific sessions.

We also had about 50 attendees at the OPHSS reception who were able to hear the very interesting presentation of Dr. John Howard, Director of the National Institute of Occupational Safety and Health, whose talk was entitled “OSHA and NIOSH at 40: Where do we go from here?” Our members enjoyed the festivities of the 50th Anniversary of SOT. Also presented at the Annual Meeting was the Paper of the Year Award. Our Paper of the Year for 2010 was “Multi-Walled Carbon Nanotube (Baytubes®); approach for derivation of occupational exposure limit,” published in Regulatory Toxicology and Pharmacology by Jurgen Pauluhn. The Best Manuscript Award for Postdocs went to Guang-Bi Jin for “Aryl Hydrocarbon receptor activation reduces dendritic cell function during influenza virus infection” (TOXICOLOGICAL SCIENCES VOL. 116, NO. 2, pp. 514-522, 2010) and the Best Abstract Award for Graduate Students went to Corie A. Ellison for this abstract, “Construction and Validation of a Human PBPK/PD Model for Dermal Chlorpyrifos Exposure Utilizing Human Biomarker Data.”

Please welcome our new slate of officers for 2011. Dr. Michael Madden is our new President, Dr.
Michael Ottlinger is our Vice President, Dr. Andy Maier is our Vice President-Elect, Dr. Jenny Roberts is our Secretary/Treasurer, Dr. Amanda Persad and Dr. Bill Luttrell are our Councilors, Dr. David Taylor Szabo is our Postdoc Representative, and Lydia Louis is our Student Representative.

Again, thank you for your support of our specialty section!
Allison L. Stock, Past President, Occupational & Public Health Specialty Section

Another successful OPHSS Reception at 2011 SOT!

Our OPHSS Award Winners Receiving Their Awards

Paper of the Year:
Presented to Dr. Jurgen Pauluhn (right) by OPHSS President Dr. Mikchael Madden (left) for his publication “Multi-Walled Carbon Nanotube (Baytubes®); approach for derivation of occupational exposure limit” in Regulatory Toxicology and Pharmacology. 2010. 57(1): 78-89.

Dr. Pauluhn will be giving us a WEBINAR on the topic related to his Paper of the Year in the fall. Look for a special announcement on this in the coming months.

Best Abstract by a Student:
Corie A. Ellison was presented with the Best Abstract Award by Dr. Michael Madden for the abstract entitled, “Construction and Validation of a Human PBPK/PD Model for Dermal Chlorpyrifos Exposure Utilizing Human Biomarker Data.” Corie is mentored by Dr. Jim Olsen (right photo, left).

Best manuscript by a Post-Doc:
Guang-Bi Jin received the Best Manuscript Award for his publication entitled “Aryl Hydrocarbon receptor activation reduces dendritic cell function during influenza virus infection” in Toxicological Sciences. 2010. 116: 514-522. Dr. Jin was joined by his mentor Dr. Paige Lawrence (right photo, left).
We would like to thank our outgoing officers for their service!

Dr. Allison Stock, President, May 2009 – May 2010
Dr. Anne Chappelle, Councilor, May 2008- May 2010

Dr. Anne Chappelle, Councilor, shown in the image on the left, receiving her plaque from President Dr. Michael Madden. Dr. Katherine Kraft, right image, accepting the plaque on behalf of our Out-Going President, Dr. Allison Stock.

We need your help for SOT 2012:

Call for POY Selection Committee Volunteers

OPHSS would like to call on its members to volunteer for the Paper of the Year Award presented at the SOT Annual Meeting for the most outstanding paper published in the calendar year. We thank the members of the selection committee this past year for the time and effort they put in to bring this award to fruition. Now it’s time to gear up and get ready for the task of selecting the award winning paper to be presented in San Francisco in 2012.

OPHSS members interested in serving on this committee can contact Bill Luttrell (bill.luttrell@oc.edu) or Amanda Persad (Persad.Amanda@epamail.epa.gov) for more information on how you can help. This award is for midcareer/senior scientists whose research contributes to the area of occupational and public health.
INTRODUCING THE 2010-11 OPHSS EXECUTIVE COMMITTEE

MEMBER PROFILES

Michael C. Madden, Ph.D. – President

Dr. Mike Madden is a research biologist working at the U.S. Environmental Protection Agency (EPA) in Chapel Hill, NC. He examines biological responses and health effects in people exposed to ambient air pollution, including particulate matter (PM), ozone, oxides of nitrogen, aldehydes, diesel engine exhaust, and biofuels combustion emissions. His work also involves validating biomarkers of exposure, and identifying potentially sensitive and susceptible populations. His research strategies employ the use of an array of approaches from in vitro exposures of cells to controlled exposures with animal models, with additional controlled and field studies of exposed subjects. In 2003, he was awarded an EPA Gold Medal (the highest honor the Agency bestows on employees for environmental improvement and public service) as part of a team for their research on ambient airborne PM toxicity. As a steward and officer in the local American Federation of Government Employees Union, he promotes the welfare of EPA bargaining unit employees. Additionally Mike holds adjunct faculty positions at the University of North Carolina-Chapel Hill (UNC) in the Curriculum in Toxicology and also the Department of Environmental Sciences and Engineering. He has mentored dozens of undergraduate, graduate, and medical students, and postdoctoral fellows in the early stages of their research careers. Mike has served as an Associate Editor for Inhalation Toxicology since 2004.

Mike was awarded a Bachelor of Science degree (1977) from Manhattan College, starting his research career examining killifish ecology in New York City marshes. At Manhattan, he was inducted into the Phi Beta Kappa and Sigma Xi societies. Examining the pharmacokinetics of polycyclic aromatic hydrocarbons in oil spills using oysters led to a Master of Science degree (1980) at the University of Georgia. Mike received a Ph.D. in toxicology from UNC-Chapel Hill in 1986. Switching his research emphasis from water to air pollution, he examined alterations in lung lipid metabolism with ozone exposure for his doctoral research. While a student at UNC, he started participating in both the National SOT and Regional SOT Chapter meetings, and became a Councilor for the Inhalation and Respiratory Specialty Section from 2003-2005. Mike was a postdoctoral fellow and research associate at UNC until 1995 when he joined the EPA.

Michael E. Ottlinger, Ph.D., DABT – Vice President

Dr. Michael E. Ottlinger has B.S. and M.S. degrees in Physics and a Ph.D. in Biophysics (1988, Johns Hopkins University). His doctoral work was on the action of Clostridium difficile toxins in pseudomembranous colitis and antibiotic-associated diarrhea. He was a postdoctoral fellow in Pathology at Harvard Medical School from 1989 to 1993, working on kinase regulation of cellular proliferation, and, later, a fellow in Pathology and Laboratory Medicine at the Boston Children’s Hospital Medical Center where he worked on the use of
troponin T as a marker of cardiac injury following chemotherapeutic drug administration. In 1994 he became Chief of Clinical Chemistry and Toxicology at the Boston Veterans’ Affairs Medical Center. In 1999 he joined the Centers for Disease Control and Prevention’s National Institute for Occupational Safety and Health, working in the area of occupational toxicology. During that time he was primarily occupied with halogenated solvents safety and updating adult lead safety guidelines. Most recently (2005) he joined U.S. EPA’s Office of Emergency Management as part of the National Decontamination Team. His current duties include: serving as liaison to U.S. EPA Region 9 (California, Nevada, Arizona); BioWatch consequence management planning; and large scale event decontamination and remediation planning. During Hurricane Katrina he served in the New Orleans Incident Command Post as Environmental Unit Leader. CAPTAIN Ottlinger (retired) also served in the U.S. Navy, on active duty onboard the USS Whipple (FF-1062), and as a Navy Reserve officer attached to the Office of Naval Research and the Navy Warfare Development Command. He is currently an Adjunct Assistant Professor in Pathology at the University of Cincinnati School of Medicine. He is a Diplomate of the American Board of Toxicology (DABT) and is also certified in both clinical and toxicological chemistry (NRCC). He served two terms (six years) on the board of directors of NRCC and three years on the Clinical Laboratory Standards Institute area committee for chemistry and toxicology.

Andrew Maier, Ph. D., CIH, DABT – Vice President-Elect

Dr. Maier has 18 years of professional work experience in the areas of environmental health, industrial hygiene, and toxicology. He is currently the Director for the non-profit organization Toxicology Excellence for Risk Assessment (TERA) where he leads efforts in developing occupational and environmental exposure guidelines. He completed his Ph.D. in toxicology from the University of Cincinnati, where he currently holds a position as an Adjunct Associate Professor. He earned a M.S. in Industrial Health from the University of Michigan and is Board certified in both toxicology and comprehensive industrial hygiene practice. Dr. Maier is active in communicating his findings to the broader scientific community through active participation in professional societies and through publication of his work. Recently his research efforts have focused on methods and approaches for using biological exposure and effect markers to reduce uncertainties in risk assessment and methodologies for deriving occupational exposure limits. He is past-chair of the American Industrial Hygiene Association Workplace Environmental Exposure Levels (WEEL) Committee and is also currently serving as a Toxicology Fellow with the National Institute for Occupational Safety and Health.

Jenny R. Roberts, Ph.D. – Secretary/Treasurer

Dr. Jenny R. Roberts is a Research Biologist in the Health Effects Laboratory Division (HELD) at the National Institute for Occupational Safety and Health (NIOSH) in Morgantown, WV. Her research has focused on in vivo models to evaluate lung inflammation, injury, immunomodulation, and development of pulmonary disease that may occur after exposures to a variety of different occupational particulates, including metals, fly ash,
diesel, welding fume, and, more recently, metal-based nanomaterials.

She received her undergraduate degrees from Boston University in 1996, and was employed as a Research Assistant at the Harvard School of Public Health in the Department of Environmental Health before accepting her position at NIOSH. Dr. Roberts received her Ph. D. from the School of Medicine at West Virginia University in 2006, where she also currently holds an adjunct assistant professor appointment. She also currently serves as a member of the editorial board of *Inhalation Toxicology*. Dr. Roberts has been an active member of SOT since 2002, a member of the Allegheny-Erie Regional Chapter since 1999, and also holds membership in the Nanotoxicology and Inhalation and Respiratory Specialty Sections.

**William E. Luttrell, Ph.D., CIH – Councilor**

Dr. Bill Luttrell has been a member of SOT since 1991, and a part of the OPHSS for many years. He began his career in occupational health as an industrial hygienist and toxicologist in the U.S. Navy Medical Service Corps from 1977-1997. Following that he was a member of the faculty of Old Dominion University in the Environmental Health Program until 2000, teaching courses in toxicology, occupational health and industrial hygiene. From 2000 to 2005, he served as a toxicologist at the Navy Environmental Health Center. Since 2005, he has been Associate Professor of Chemistry and Chair of the Department of Chemistry & Physics at Oklahoma Christian University (OC), teaching courses in organic chemistry and toxicology, and sponsoring undergraduate research.

He began his education at the University of Louisville, earning a B.S. in chemistry (1975), then a M.S. in chemistry (toxicology) from Old Dominion University (1983), and he finished a Ph.D. in biomedical sciences (toxicology) from Eastern Virginia Medical School (1993). His research interests have been in the effects of environmental and workplace exposures to chemical toxins on drug metabolizing enzyme systems. Most recently he has studied the effects of a series of ketone compounds on the activity of liver microsomal carboxylesterase activity. Dr. Luttrell has published two books, the most recent entitled “Toxicology Principles for the Industrial Hygienist,” which involved several members of OPHSS as chapter authors and technical reviewers. He has over fifty research papers and informational articles in journals such as *Biochemical Pharmacology, Fundamentals of Toxicology, Neurotoxicology, Military Medicine, Environmental Research*, and the *Journal of Chemical Health and Safety*.

In addition to SOT, he is a member of the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists, and the American Chemical Society. He is an active member of the Toxicology Committee of AIHA and serves on the Board of Editors of the *Journal of Chemical Health and Safety*. Dr. Luttrell is a Diplomat of the American Academy of Industrial Hygiene with Certification in Comprehensive Practice.
Amanda Persad, Ph.D. – Councilor

Dr. Amanda S. Persad is an epidemiologist with the U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS) program. For the past six years, Dr. Persad has been involved in the development of chemical-specific human health assessments that aide in the risk decision-making process within the Agency. She earned her doctorate in Public Health from the University of South Florida and has been certified by the American Board of Toxicology since 2006. Her career experience covers a broad range of disciplines including genetic bench research during her postdoctoral tenure at the National Institute of Infectious Diseases in Japan, infection control at Florida Hospital, and food toxicology consulting with the Burdock Group. Dr. Persad has been an active member of the SOT since 2000, presenting research in toxicology, epidemiology and risk assessment, and has previously served as the Secretary/Treasurer of Occupational and Public Health Specialty Section (2008-2010).

Allison Stock, Ph.D. – Past President

Currently, Dr. Allison Stock is employed by Chevron Energy Technology Company. Her current work is focused primarily on occupational health issues of workers in the petroleum industry. Prior to Chevron, Allison was the Air Pollution Team Leader at the National Center for Environmental Health (NCEH), Centers for Disease Control and Prevention. At NCEH, her responsibilities included directing studies of air pollution (indoor and ambient) including a cohort study of children living in storm damaged housing on the US Gulf Coast. She was also the Carbon Monoxide Poisoning Prevention Activity Lead and developed the first national surveillance system to capture severe carbon monoxide poisoning events.

Allison completed her undergraduate education in Biology and Art History at Trinity University in San Antonio, TX. She completed her Ph.D. (1999) and her Master of Public Health (1994) at the University of Texas School of Public Health-Houston. Her doctoral work focused on the role of peripheral benzodiazepine receptors in lindane induced distal nephrotoxicity. After completing her doctoral work, Allison became an Association of Public Health Laboratories Fellow in the Division of Laboratory Sciences at NCEH where she actively participated in research on phthalate exposures. In 2001, she joined the Epidemic Intelligence Service and completed the program in 2003. Allison has been a member of SOT since 1993 when her thesis advisor urged her to join as a student member. She is also a member of the International Society for Environmental Epidemiology, Council of State and Territorial Epidemiologists, and the American Public Health Association.
David Szabo, Ph.D. – Postdoctoral Representative

David Szabo is currently an Oak Ridge National Laboratory postdoctoral fellow working at the United States Environmental Protection Agency, National Center for Environmental Assessment where he is involved in interpreting data to identify human health effects from exposure to environmental chemicals for at the NCEA-Washington Division. At NCEA he is investigating methods to incorporate emerging science (e.g. transcriptomics, proteomics and metabolomics, etc.) to advance the next generation of risk assessments. During his doctoral studies in toxicology at the University of North Carolina, he investigated the toxicokinetics and endocrine disruption of emerging environmental chemicals under the mentorship of Dr. Linda Birnbaum, Director of the NIEHS. Initial work identified hepatic nuclear receptor mediated mechanism of thyroid hormone disruption after PBDE (polybrominated diphenyl ethers) exposure in laboratory animals. More recently, he has characterized the absorption, distribution, metabolism, excretion and toxicity of HBCD (hexabromocyclododecane), the latest generation of flame retardant mixtures under review for listing consideration to the Stockholm Convention's list of POPs. Future interests include the incorporation of emerging science for the next generation of risk assessments, risk communication, and decision making for the protection of public health.

Lydia Louis, M.P.H. – Student Representative

Lydia M. Louis is a Ph.D. candidate with the Joint Graduate Program in Toxicology at Rutgers University, the State University of New Jersey. She holds an MPH with a concentration in Environmental and Occupational Health from the University of Medicine and Dentistry of New Jersey, and a Bachelor’s Degree in Cell Biology/Neuroscience and French from Douglass College, Rutgers University.

As a doctoral candidate, Lydia conducts research on the cell signaling mechanisms regulating beta-endorphin expression in the adult brain and neuroendocrine system, as a result of acute and chronic alcohol exposure. She also serves as a full time Teaching Assistant in the department of Life Sciences at Rutgers University. In addition, she serves as a Graduate Fellow Mentor in an all-female residence hall, mentoring women in science. Lydia hopes to combine her interests in public health and pursue a career in Children’s Environmental Health upon graduation.
SHOWCASING OUR OPHSS MEMBERS!

Meet Dr. Ira Richards

Dr. Ira S. Richards is a Toxicologist and Professor at the University of South Florida (USF). He has a joint appointment with the College of Public Health and the College of Medicine. Dr. Richards has authored many journal articles and book chapters in the areas of clinical, occupational and environmental toxicology and published the textbook ‘Principles and Practice of Toxicology in Public Health’ in 2008. The second edition of the book will be published in 2012. He earned his Ph.D. from New York University and has since been an active member in such societies as Sigma Xi, Delta Omega, SOT, International Society on Toxicology, American Academy of Clinical Toxicology and the American Chemical Society. In addition to his academic appointment, Dr. Richards is internationally recognized as a forensic toxicology expert with extensive experience with petrochemical and agrochemical industries/manufacturing/general industrial/environmental/workplace covering a wide range of classes of chemicals including pesticides, solvents, heavy metals, irritants, particulates, carcinogens, pharmaceuticals, illicit substances.

We asked Dr. Richards to share some information with us about his current research, teaching efforts, and advice that he may have for students entering the field of toxicology.

Current laboratory effort is focused on the effects of irritants on the electromechanical properties of airway smooth muscle and the detection of urinary biomarkers to diagnose, evaluate, and monitor individuals with suspected cardiovascular or non-specific inflammation and oxidative stress. Increased expression of these markers is associated, in varying degrees of specificity, with cardiac damage, oxidative stress and inflammation. Establishing a link between biomarker expression in urine and drug-induced cardiac damage for example is an important step in developing a diagnostic tool that may permit rapid diagnosis and selection of an appropriate clinical intervention.

At USF, Dr. Richards teaches several toxicology and pathobiology courses to graduate students pursing masters or doctorate degrees. A typical toxicology course of his may have physicians, nurses, students of environmental science, engineering, geology, etc., in addition to those with a concentration in toxicology. He instills in students the importance of toxicology in making rational decisions with respect to protecting the public health from the chemical agents we are exposed to, by identifying those chemicals that pose the greatest risk for toxicity and by enabling safer chemicals to be developed. He also emphasizes that the need for interdisciplinary approaches and international perspectives to problem solving is critical. He is currently planning collaborations of teaching and research between USF and Chinese Universities.

Lastly, we like to end on a personal note and asked Dr. Richards to tell us what his favorite pastime or hobby is.

His major hobby is gardening, especially vegetable gardening. Dr. Richards believes that if so much effort is expended in growing a plant, then it should be edible.
News From Headquarters:

SOT CCT Meetings Eligible for Seed Money and Profit Sharing

SOT Sponsors two types of meetings outside of the SOT Annual Meeting: Contemporary Concepts in Toxicology (CCT) and Non-SOT meetings. CCT meetings are one- to two-day focused, open registration, scientific meetings in contemporary and rapidly progressing areas of toxicological sciences. Non-SOT meetings are sponsored by other not-for-profit organizations and SOT will either endorse or provide sponsorship money to toxicology-related meetings.

The Society will underwrite all the liabilities of the CCT meeting with the expectation that the meeting will at least break even financially. The goal of providing $25,000 seed funds is to stimulate the creation of CCT meeting proposals.

For more information about CCT meetings, please visit the SOT Web site.

OTHER NEWS & ANNOUNCEMENTS


APHA 139th Annual Meeting, "Healthy Communities Promote Healthy Minds & Bodies." Washington, DC. October 29-November 2, 2011. See the website for further details: http://www.apha.org/meetings/AnnualMeeting/

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Think green before you print!