

ONLINE



Communiqué

Special Issue 2010

SOT News

President's Message



*President
Cheryl Lyn Walker*

This has been an exciting year for our Society, and I have been fortunate to have the opportunity to lead us in the implementation of our new Strategic Plan. Because of the efforts of 2008–2009 SOT President **Kenneth S. Ramos** and his Council, the Society had a roadmap that focused on our members' highest priorities. Through the efforts of the 2009–2010 Council, and the Society's leadership, committees, and task forces, these priorities have already begun to make an impact through many new and exciting activities.

Our collective accomplishments have been many, and here is a snapshot of some of the achievements of the past year.

Increase Scientific Impact: The Scientific Program Committee's continued implementation of a thematic meeting approach was essential to achieving success in this area. This year's themes are at the leading edge of the field focusing on Cell Signaling, Gene-environment Interactions, Metabolic Disease, Mitochondrial Basis of Disease, Toxicity Testing in the 21st Century, and Translational Toxicology. Many distinguished scientists who have done seminal work in these areas, including Nobel Laureate **Dr. Ferid Murad** and **Sir Philip Cohen**, will be speaking at the Annual Meeting. An overview of themes for 2011 is also included in this issue of the newsletter.

In addition, the work done by SOT's liaison groups established between SOT leadership and key funding and regulatory agencies, including NIEHS, NICHD, EPA, and FDA, continued to make an impact by promoting the goals of the Society and providing input into decision making at these agencies.

Advocate for the Value of Toxicology: SOT development of a Congressional Science Briefing on "Advances in Toxicity Testing to Inform Chemical Policy" and conferring the first SOT Congressional Science Leadership Award to Representative **David Wu** (D-OR) have increased awareness among policymakers of the importance of toxicology to human health and disease prevention.

Build for the Future of Toxicology: SOT continued its commitment to foster the next generation of toxicologists, from K–12 students to undergraduates, graduates students, and postdocs. To help SOT plan more effectively, a Professional Needs Assessment Survey was conducted and a Job Market Survey will follow to enhance our knowledge base and align future initiatives in this area with the realities of the marketplace.

Expand and Deepen Member Engagement: The Current Concepts in Toxicology Workshops and the Regional Chapter Annual Meetings attracted leading toxicologists to present their cutting-edge science. Moreover, SOT began implementing a long-term initiative to partner with national and global organizations to maximize the reach of SOT’s vision of “creating a safer and healthier world by advancing the science of toxicology.”

Strengthen Organizational Effectiveness: Implementation of new Web-based communication tools, such as the widely used WebEx Meeting platform, have increased effectiveness and collaboration across the Society. In addition, the Society has embraced social networking, and a new professional network, ToXchange, will be previewed at the 2010 Annual Meeting. Everyone is encouraged to stop by the SOT Resource Pavilion to participate in ToXchange.

To help us continue to meet our strategic objectives, you are encouraged to attend the SOT Annual Business Meeting on Tuesday, March 9. If you have long-range planning ideas you would like added to the agenda, please send these to SOT Executive Director **Shawn Douglas Lamb** at [SOT Headquarters](#).

Now, I hope you will use the contents of this newsletter to begin scheduling your time at the 2010 Annual Meeting. I look forward to seeing you at the Awards Ceremony as we celebrate the honors conferred on these distinguished scientists. The 2010 SOT Honorary Members, Dr. Ferid Murad and Sir Philip Cohen, will deliver the Plenary and Medical Research Council Lecture, respectively. In addition, the Society will hold special sessions to meet NIEHS NTP Director, **Linda Birnbaum**, U.S. FDA NCTR Director, **William Slikker, Jr.** and U.S. EPA NHEERL Director **Harold Zenick**. In the days ahead, you will want to rely on the comprehensive [SOT Itinerary Planner](#), which includes all the many other sessions of interest not featured in this limited space.

Looking forward to seeing each of you in Salt Lake City!

Cheryl Lyn Walker,
2009–2010 SOT President

SOT Launches ToXchange Professional Network—A New Member Resource

ToXchange has been launched to improve toxicology information exchange between SOT members through a professional, private, and secure social networking collaboration tool. At the heart of ToXchange is an enhanced SOT membership directory that allows SOT members to:

- Update a customized SOT member profile you can edit on-line 24/7;

- Search for and find other SOT members based on their profile information;
- Be found by other SOT members; and
- Communicate with your SOT peers with easy-to-use, secure networking tools.

This enhanced SOT member profile is the first step in building a searchable collaboration tool. Members are encouraged to add a picture and CV. In addition, members may pull in content from other social networking systems, making ToXchange the one-stop professional on-line resource.

In 2009, a special Council Subcommittee on Social Networking comprised of **Susan J. Borghoff**, Chair; **Matthew S. Bogdanffy**, **Martin A. Philbert**, **Patricia E. Ganey**, and **Shawn Douglas Lamb**, Executive Director, was formed to improve toxicology information exchange between SOT members and invited guests through professional, private, and secure collaboration tools.

Working closely with SOT staff, the subcommittee set strategic objectives to achieve an improved toxicology information exchange *via* a social networking platform that would seek to increase collaboration of members through increased connectivity; increase the awareness of the value of toxicology and vision of SOT; provide SOT members more tools to help achieve their professional objectives; and improve the ability for SOT members to advocate for toxicology.

ToXchange will be featured at the upcoming SOT 49th Annual Meeting in Salt Lake City. Be sure to visit the SOT Resource Pavilion, Booth #1901 in the Exhibit Hall, for on-site information during ToxExpo™ on how to get started during ToxExpo™ hours on Monday, March 8 through Wednesday, March 10, and have a profile picture taken and receive a small gift. For more information on how to access and update your SOT member profile page, go to the [ToXchange Web site](#).

2010–2011 Council and Committee Members Elected

Vice President-Elect:

William Slikker, Jr.

Treasurer-Elect:

John B. Morris

Councilors:

Donald A. Fox

Michael P. Waalkes

Awards Committee:

Robert E. Chapin

Serrine S. Lau

Ruth A. Roberts

Membership Committee:

Abigail C. Jacobs

Alice R. Villalobos

Nominating Committee:

(From Membership-At-Large)

Deborah A. Cory-Slechta

(From Regional Chapters)

Michael F. Hughes

(From Specialty Sections)

Vicki L. Dellarco

Kimberley A. Treinen

2010–2011 Committee Members List Available May 1 on the SOT Web Site!

2010 SOT Award Winners

Achievement Award

Gary W. Miller

Arnold J. Lehman Award

Edward V. Ohanian

Best Postdoctoral Publication Awards

Bret Bessac

Manabu Nukaya

Nicholas Radio

Board of Publications

Best Paper Award

Identification and Characterization of Toxicity of Contaminants in Pet Food Leading to an Outbreak of Renal Toxicity in Cats and Dogs (*ToxSci.* 2008, 106: 251–262)

Roy L.M. Dobson, Safa Motlagh, Mike Quijano, R. Thomas Cambron, Timothy R. Baker, Aletha M. Pullen, Brian T. Regg, Adrienne S. Bigalow-Kern, Thomas Vennard, Andrew Fix, Ranate Reimschuessel, Gary Overmann, Yunching Shan, and George P. Daston

Distinguished Toxicology Scholar

Harihara M. Mehendale

Education Award

Tetsuo Satoh

Publication Communications

Philip Wexler

Translational Impact Award

Kenneth E. Martin

SOT AstraZeneca IUTOX Fellowship

Asongalem Emmanuel Acha, *Cameroon*

Ayse Basak Engin, *Turkey*

Ronnie A. D. Frazer-Williams, *Sierra Leone*

Yan Li, *China*

Jesus Olivero-Verbel, *Colombia*

Suresh V.S. Rana, *India*

Ganna Shayakhmetova, *Ukraine*

Vanessa Steenkamp, *South Africa*

Marcelo Wolansky, *Argentina*

Motao Zhu, *China*

AstraZeneca Traveling Lectureship Award

J. Chris Corton

Colgate-Palmolive Awards for Student Research Training in Alternative Methods

Maxwell C. K. Leung, David T. Szabo,

Natalia M. VanDuyn

Colgate-Palmolive Grants for Alternative Research

Pat Allard, Duncan C. Ferguson

Mehmet Uzumcu

Enhancement of Animal Welfare Award

Leonard M. Schechtman

Founders Award

James S. Bus

Leading Edge in Basic Science Award

Richard S. Paules

Merit Award

Marion F. Ehrich

Perry J. Gehring Diversity Student Travel

Award

Nygerma L. Dangleben

Syngenta Fellowship Award in Human Health Applications of New Technologies

Haitian Lu

2009 Novartis Graduate Fellowship

Yue Chi

Pfizer Undergraduate Student Travel Award

Annie Carlton, Alisha Chitrakar, Megan Culbreth, Change Woo Lee, Sharon Ochs

Two New Endowment Funds Exemplify the Many Options For Investing in the Future of Toxicology



Gabriel L. Plaa Education Award Fund



Gabriel L. Plaa

The Gabriel L. Plaa Education Award Fund was created by his former student, **Curt Klaassen**, in December 2009 to memorialize **Dr. Gabriel L. Plaa's** contributions in toxicology, his leadership, mentorship, and friendship. Proceeds from this Fund will be used to provide cash stipends to award recipients selected on the basis of the scientific merit of papers proposed for presentation at the Annual Meeting by graduate or post-graduate students of toxicology. The Plaa Award will be aligned with the Mechanisms Specialty Section and award recipients will be selected based on the scientific quality of an abstract in mechanistic toxicology accepted for presentation at an SOT Annual Meeting. This award will serve to recognize Dr. Plaa's significant role in the education of graduate and post-graduate students in

toxicology, and his outstanding contributions to applying mechanistic toxicology to the area of chemical-induced liver injury.

Dr. Plaa was the SOT President (1983–1984), editor of *Toxicology and Applied Pharmacology* (1972–1980), and a recipient of numerous SOT Awards: Achievement (1967), Arnold J. Lehman (1981), Education (1987), and Merit (1996). He was extraordinarily charitable with his time for the advancement of science nationally and internationally and served on various scientific committees and editorial boards. Dr. Plaa was an instructor and assistant professor at Tulane University from 1958–1962, assistant and associate professor at the University of Iowa from 1962–1968, and then

moved to the University of Montreal where he was Chairman of Pharmacology for 12 years and held other administrative positions including Vice-Dean of Research and Graduate Studies. All the while, he was conducting an active research program until his retirement in 1996. His influence in training toxicologists was truly extraordinary as many of his former students also achieved leadership roles and received awards from SOT.

Pacific Northwest Toxicology Development Fund

The Pacific Northwest Toxicology Development Fund was created in December 2009 by a group of donors and the Pacific Northwest Chapter Executive Committee (PNCEC) to support Regional Chapter activities. Proceeds from this fund can be used to support three discrete objectives that are designed to provide development opportunities and professional recognition of toxicologists within the Pacific Northwest Regional Chapter of the SOT. The three objectives are listed and described below in more detail.

1. **To Foster Student Engagement:** Proceeds from the Fund may be used to support activities that enhance development of the Pacific Northwest Chapter's emerging toxicologists. These activities may include providing travel stipends for the graduate student and postdoctoral representatives serving on Pacific Northwest Chapter's Council to attend the SOT Annual Meeting, registration fees for undergraduates to attend the Pacific Northwest Chapter Annual Meeting, and support of short, directed internships for trainees in Pacific Northwest regional institutions.
2. **To Create Special Educational Programs:** Proceeds from the Fund may be used to develop special educational programs offered in conjunction with the Pacific Northwest Chapter's Annual Meetings. These programs may include career workshops, continuing education courses, or community outreach events.
3. **To Recognize Outstanding Achievement by Pacific Northwest Regional Toxicologists:** Proceeds from the Fund may be used to provide a cash stipend to the recipient of a Pacific Northwest Toxicology Achievement Award. This Achievement Award will recognize toxicology scholarship, leadership, and service of an individual within the Pacific Northwest Chapter and will be presented at the Pacific Northwest Chapter Annual Meeting. Achievement Award recipients will be invited to present a plenary lecture on their work and the decisions and activities that led to their achievements. The lecture is intended to provide mentorship and inspiration to Regional Chapter members, to foster cooperation between regional toxicologists, and to highlight the importance of work done in the broader community.

As with all Endowment Funds, all expenditures made from the proceeds must comply with the SOT's designation as a 501(c)3 organization. The PNCEC will be responsible for identifying one or more objectives to be supported each year and for developing detailed criteria for nomination and selection of the award recipients, including organization of the award selection committee.

By-Laws Change for Education Committee Passed

SOT Voting Members have approved the change of the Education Committee from an elected to an

appointed committee. The change will provide more flexibility to populate this group with individuals having specific skills and interests matched to current important strategic education activities. Furthermore, the composition will not be restricted to Full Members, which allows more diversity in addressing ways that SOT can advance and promulgate education in toxicology.

Upcoming Ballot: Constitution and By-Laws Proposed Changes – Emeritus Membership Category and Scientific Program Committee to Increase Terms.

Each year, SOT Council undertakes a complete review of the Constitution and By-Laws of the Society of Toxicology and determines if modifications are needed to reflect organizational adjustments and to facilitate SOT reaching its strategic objectives. Below are proposed changes which have been approved by SOT Council and are related to Article Third of the Constitution: Membership; Article Second of the By-Laws: Membership; and Article Fourth of the By-Laws, Standing Committees.

The proposed changes will be discussed at the SOT Annual Business Meeting on Tuesday, March 9, 2010, in Salt Lake City, Utah. After consideration of member comments, a ballot will be disseminated to the voting members. For the Constitution, a two-thirds approval vote of the ballots cast is required for adoption. For the By-Laws, a two-thirds vote of ballots received within 60 days is required.

The two changes that are being proposed are: one, to add an Emeritus membership category; and two, to extend the term of Scientific Program Committee members. The addition of a seventh category of membership, Emeritus, will recognize and reward career-long participation in the Society. The extended term of Scientific Program Committee members will allow for greater continuity as the Committee members learn the complexities of the SOT Annual Meeting scientific program development process.

If you have comments on either of these proposals, please send them to [Shawn Lamb](#), SOT Executive Director.

Constitution Changes

Article Third: Membership

Section 1. There shall be ~~six~~ seven categories of membership: Full, Associate, Postdoctoral, Student, Honorary, ~~and~~ Retired, and Emeritus.

Section 8. Emeritus. A Full or Associate member of the Society who has paid dues continuously for 40 years may be accorded emeritus status upon approval of Council.

Previous Section 8 now becomes Section 9 (no other changes).

Previous Section 9 now becomes Section 10 with the following changes:

Section 10. Voting. Each Full member of the Society together with each Retired or Emeritus member

~~who was previously a Full member described under Section 2 of the Article~~ shall be entitled to vote (a) on procedural matters raised during the annual business meeting of the Society and on all matters pertaining to the affairs of the Society which are duly presented for consideration at special business meetings of the Society membership and (b) by mail or by electronic transmission for election of officers of the Society and such other officials to be elected by the members under the By-Laws in force and (c) by mail or by electronic transmission on such other matters as may from time to time, pursuant to the By-Laws upon action taken at any business meeting of the members, be approved for submission to the Full membership. ~~All other members of the Society~~ (Associate, Postdoctoral and Student members, and Retired and Emeritus members who were not previously Full members shall have no voting rights. ~~A Retired or Emeritus member, who was a Full member previously, shall retain voting rights.~~

By-Laws Changes

Article Second: Membership

Section 1. Candidates for all categories of membership, except Postdoctoral, Student, Honorary and Retired, and Emeritus, shall be presented by at least two Full members of the Society on forms provided by the Executive Director. Candidates for Postdoctoral or Student membership require only a letter from their research advisor attesting to their student or postdoctoral status. Completed applications shall be returned to the Executive Director who shall refer them to the Membership Committee for its recommendations to Council. The candidates recommended by the Membership Committee shall be forwarded to Council through the Executive Director. Final approval or disapproval of the candidates recommended by the Membership Committee shall require a majority vote of Council. Candidates approved in this manner shall be notified by the Executive Director and shall henceforth be considered members.

Section 2. Applications for all categories of membership except Honorary, and Retired, and Emeritus, shall be processed and new members shall be admitted three times per year. The deadlines shall be as follows: the Executive Director shall receive applications by May 1, September 1, or January 1; the Membership Committee shall return its recommendations to the Executive Director by June 1, October 1, or February 1; Council shall take final action and those whose membership applications are approved by Council shall be notified of official membership by September 1, January 1, or April 1. Dues for incoming members shall be assessed and/or prorated according to a policy set forth by Council.

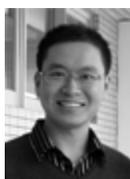
Article Fourth. Committees

Section 5. Scientific Program Committee. The Scientific Program Committee shall consist of the Vice President as Chair, the Vice President-elect, and twelve members of the Society who hold no elective office. ~~Four shall be appointed annually by the President for three year terms of office. Three shall be appointed annually by the President for four-year terms of office.~~ The Scientific Program Committee shall make recommendations to the Council as to informative and appropriate scientific programs and shall be responsible for the planning and organization of the scientific program of the Annual Meeting. The Scientific Program Committee also shall make recommendations to Council regarding special scientific meetings and/or symposia.

2010 Student Award Recipients and Finalists Named by the SOT Awards Committee

The SOT Awards Committee has selected graduate student award recipients and finalists to be recognized at the SOT 49th Annual Meeting in Salt Lake City, Utah, in March.

Three recipients were selected for the Colgate-Palmolive Awards for Student Research Training in Alternative Methods:



Maxwell C.K. Leung of Duke University will travel to the lab of **Dr. Michael Aschner**, Vanderbilt University, to assess the effect of persistent mtDNA damage on neural integrity using fluorescence microscopy with *C. elegans* strains engineered to express green fluorescence protein (GFP) in neurons;



David Szabo of the University of North Carolina at Chapel Hill will be working on the generation of a PBPK model for HBCD stereoisomers using the ACSLX computer software at the software at the lab of **Dr. Claude Emond** at the University of Montreal, Quebec, Canada; and



Natalia VanDuyn of Indiana University will work in the lab of **Dr. William Atchison** at Michigan State University to learn techniques to determine how MeHg affects calcium levels in mitochondria and mitochondria membrane potential in primary *C. elegans* cultures and mammalian cell cultures.



Haitian Lu of Michigan State University is named the first recipient of the Syngenta Fellowship Award in Human Health Applications of New Technologies for his project titled “Characterization of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD)-Mediated Effect and Mechanism of Action on the Humoral Immunity Using Primary Human and Mouse B Lymphocytes.”

The Novartis Graduate Fellowship finalists, who will be interviewed by the Awards Committee at the SOT 49th Annual Meeting in Salt Lake City, are **Eric Liberda** of New York University and **Stephanie Lee Ondovcik** of the University of Toronto. The fellowship recipient will be announced at the SOT Awards Ceremony on Sunday, March 7, along with all other award recipients.

Many graduate students will attend the 2010 Annual Meeting with the aid of Graduate Travel Support from SOT, the Battelle Foundation, Burroughs Wellcome Fund, and Millennium Pharmaceuticals, Inc. The list of these 75 students is available in the [Historical Awards Listing](#) on the SOT Web site.

SOT CCT Conference PPTOX II: Role of Environmental Stressors in the Developmental Origins of Disease—a Huge Success

An international conference on “Prenatal Programming and Toxicology II (PPTOX II): Role of Environmental Stressors in the Developmental Origins of Disease” was held December 7–10, 2009, through the SOT Contemporary Concepts in Toxicology (CCT) Program. This conference followed up PPTOX I that was held in Torshavn, Faroe Islands, in 2007. Over 240 scientists, including more than 75 students and postdocs, from around the world gathered in Miami South Beach to present both animal and human data supporting the hypothesis that environmental exposures during development lead to altered programming that results in increased susceptibility to disease/dysfunction later in life.

The meeting started with overviews of the developmental origins of disease hypothesis focusing on altered nutrition and exposures to environmental chemicals in human and animal models followed by an examination of this hypothesis in the ecological developmental biology field. Overviews of animal models and epigenetics as the underlying mechanism of the altered programming concluded the first night activities. The hypothesis was then examined in more detail in sessions that focused on both the human and animal data linking developmental exposures to environmental chemicals to various cancers, reproductive diseases, immune dysfunction and diseases, metabolic syndrome, neurobehavioral deficits and abnormalities, and transgenerational effects. In addition, there were discussions on the National Children’s Studies, Clinical and Industry Perspectives, and Regulatory Challenges and Approaches. The session on regulatory challenges focused on the fact that current regulatory protocols and risk assessment methods are poorly equipped to consider latent health impacts of early exposures, especially if they cross generations. Two poster sessions highlighted over 120 abstracts including those of the 38 student travel awardees.

In addition to awarding 41 Student Travel Awards for the PPTOXII meeting, **Nicholas E. Heger, Annette M. Herman, Benjamin J. Moyes, Jessica LaRocca, and Michele La Merrill** are recipients of the PPTOXII Student Travel Awards for the SOT 2010 Annual Meeting.

It has long been known that development is a sensitive stage for exposures to environmental chemicals due to organogenesis and rapid perinatal growth and the relative lack of active metabolic capacity, DNA repair and brain and testis barriers. However, the discovery that development is the time when epigenetic marks are established that control subsequent gene expression has enhanced the potential impact of this new paradigm of disease etiology. Environmental exposures during development have been reported to increase the rate of birth defects and premature birth can also alter epigenetic markings (DNA methylation and chromatin packaging). As highlighted at the conference, alterations in the epigenetic system can lead to altered gene expression that results in tissues that appear normal but are functionally abnormal due to abnormal gene expression leading to altered signaling pathways. These functional changes then lead to disease and dysfunction over the lifespan long after the exposures are no longer apparent. At present the majority of the data supporting the role of environmental stressors in the developmental origins of disease, as delineated during the workshop, comes from animal studies. Indeed there are data in animal models showing that developmental exposures to numerous chemicals, including bisphenol A, atrazine, phthalates, dioxins, and pcbs,

flame retardants, metals, DES, genistein, can result in breast, prostate and uterine cancers, infertility, diabetes/obesity/metabolic syndrome, cognitive and learning disabilities, Parkinson's and other neurodegenerative diseases as well as cardiopulmonary diseases including asthma and atherosclerosis and hypertension. Human data is presently limited to assessment of childhood disorders including ADHD, asthma, obesity, and cognitive effects as those diseases/dysfunctions can most easily be linked to developmental exposures.

The conference identified numerous data gaps, obstacles, and challenges including the need for more collaboration between animal researchers, epidemiologists, and clinicians; the need for more mechanistic studies showing not just correlations but actual causation, improved exposure measurements in human studies and animal models; the development of banked biospecimens to link developmental exposures to diseases later in life; and the study of mixtures and multiple exposures across the lifespan.

The SOT conference had broad national/international support from a number of agencies including WHO, NIEHS, FDA/NCTR, CDC, ATSDR, NICHD, US EPA, NCI, Superfund Research Program, National Center for Environmental Studies, European Environment Agency, and IUTOX.

The presentations will be published in *Toxicological Sciences* and the manuscripts will appear in *Reproductive Toxicology* and the *Journal of Developmental Origins of Disease*.

SOT Welcomes New Affiliate: Absorption Systems

We are pleased to announce that [Absorption Systems](#) have become the newest SOT Affiliate. Absorption Systems is a pharmaceutical contract research laboratory that helps drug developers understand the absorption, distribution, metabolism, elimination, and toxicity (ADMET) of their drug candidates. Demonstrate your organization's support of the Society of Toxicology by becoming an SOT Affiliate. For additional information, visit the [SOT Web site](#) and contact [Marcia Lawson](#) at SOT Headquarters.

ToxScholar and Guest Lecturer Programs Support Campus Career Visits



Two programs provide travel support for toxicologists who make career presentations to undergraduate audiences. Knowing that many undergraduate students do not have the opportunity to learn about toxicology during their undergraduate years, the Education Committee and Committee on Diversity Initiatives (CDI) provide up to \$500 reimbursement for expenses related to travel and arranging sessions on campus attended by undergraduates. The application for funding and more information is found at [Toxicology Scholar Campus Visits and Guest Lecturer in Toxicology Program](#).

Those funded may be an individual toxicologist, a graduate student, or a team including both. Some

ToxScholar presenters have organized teams for panel discussions or a special event. [Reports](#) of activities funded in the past serve as a source of ideas for a successful visit.

Pictured above are **Amber Finley** (left) and **Christine Marie George**, from Columbia University, who visited four tribal colleges in April 2009 to encourage students to pursue graduate school and studies in environmental health. Funding for this presentation was provided by the CDI Guest Lecture Program and the Ecological Society of America SEEDS programs. In the picture on the right, they are shown addressing students at Sitting Bull College, Fort Yates, North Dakota, located on the Standing Rock Sioux Reservation.



*Sitting Bull College
Presentation*

The ToxScholar Program is coordinated by the Education Committee and is targeted to toxicologists who recognize and organize an opportunity to make career presentations at a campus. Through the Guest Lecturer Program, the CDI matches toxicologists with opportunities to make career visits to historically minority institutions and other campuses with high proportions of students from groups that are underrepresented in the sciences. For more information contact [Betty Eidemiller](#).

Member Spotlight

New Members in 2009

For 2009, the Society of Toxicology welcomed 771 new members, including 321 Full, 99 Associate, 110 Postdoctoral, and 241 Student Members. New members are part of a network of over 6,600 members from nearly 50 different countries. Members from academic institutions, industry, government, and other scientific organizations are committed to SOT's vision of "creating a safer and healthier world by advancing the science of toxicology."

[List of New Members in 2009](#)

New Pin to Recognize 45-Year Members

The Society appreciates the commitment of members to our Society. Since the early 90s, SOT has honored those members who reached the 25-year milestone with a special lapel pin. In 2008, recognition of those members who reached the 35-year milestone began with the publication of the 35-year member list in the *2008–2009 Membership Directory* and the subsequent presentation of 35-year pins. In 2009, SOT extended recognition to members who reached the 45-year milestone. Those designees will receive the newly designed 45-year pins either at the 2010 Annual Meeting or *via* mail. These lapel pins are presented in appreciation for steadfastness in helping the Society reach its objectives.

The invitation-only 25-Year (or more) Member Reception will be held on Sunday evening, March 7, at the SOT 49th Annual Meeting in Salt Lake City. Please check the final *Program* for details.

SOT 45-, 35- and 25-Year Members—45-year or more Members joined in 1964 or before; 35-year or more Members joined in 1974 or before; and 25-year or more Members joined in 1984 or before.

George Corcoran Elected to CSSP Executive Board

George Corcoran, SOT President 2007–2008, was elected to the Council of Scientific Society Presidents (CSSP) Executive Board as Member-At-Large in 2008 and 2009. He was recently elected to serve from January 2010–December 31, 2012, as Executive Board Chair-Elect, Chair, and Past Chair in 2010, 2011, and 2012, respectively.



George Corcoran

CSSP is an organization of presidents, presidents-elect, and recent past presidents of about sixty scientific federations and societies whose combined membership numbers well over 1.4 million scientists and science educators. Since 1973 CSSP has served as a strong national voice in fostering wise science policy, in support of science and science education, as the premier national science leadership development center, and as a forum for open, substantive exchanges on emerging scientific issues.

Rosalind Schoof Appointed to Washington State Science Panel

The Washington State Department of Ecology (Ecology) has appointed SOT Member **Rosalind Schoof** to the newly formed Model Toxics Control Act (MTCA) science panel for a term extending to June 2012. MTCA governs the cleanup of contaminated sites in Washington State. The role of the MTCA science panel is to provide objective scientific advice to the Director and other Ecology officials with respect to management and cleanup of hazardous substances under MTCA. Ecology is currently preparing for a five year MTCA rule revision.

Dr. Schoof is an expert in human health risk assessment. She received her Ph.D. in toxicology from the University of Cincinnati. Her particular research interests include the bioavailability of arsenic and metals present in soils and dietary exposures to arsenic and metals. She has served on numerous peer review panels for U.S. agencies and Canadian ministries, and has been a member of several U.S. National Research Council committees. For more information, contact [Dr. Rosalind Schoof](#).

In Memoriam

In Memoriam
Mary Aposhian
Ernest S. Feenstra
Joseph A. Rieger

Nobel Laureate Ferid Murad to Deliver 2010 Plenary Lecture



Ferid Murad

Nobel Laureate **Ferid Murad**, Director of the Institute of Molecular Medicine and the John S. Dunn Distinguished Chair in Physiology and Medicine at the University of Texas, will deliver the Plenary Opening Lecture, “Discovery of Nitric Oxide and Cyclic GMP Cell Signaling and Their Role in Drug Development,” on Monday, March 8 from 8:00 AM–9:00 AM in Exhibit Hall E, Salt Palace Convention Center.

His key research demonstrated that nitroglycerin and related drugs worked by releasing nitric oxide into the body, which acts as a signaling molecule in the cardiovascular system, making blood vessels dilate. Further elucidation of the signaling process resulted from the efforts of **Robert F. Furchgott** and **Louis J.**

Ignarro, with the three scientists receiving the 1998 Nobel Prize in Physiology or Medicine, and Drs. Murad and Furchgott receiving the Albert Lasker Award for Basic Medical Research in 1996. Dr. Murad will discuss the discovery of the first biological effects of nitric oxide and how the field has evolved. In addition, he will address the possible use of this signaling pathway to facilitate novel drug development and the creation of numerous projects in the pharmaceutical and biotechnology industries.

Dr. Murad received his undergraduate degree in chemistry from the pre-med program at DePauw University in 1958, and an M.D and Ph.D. in pharmacology from Case Western Reserve University in 1965. He then joined the University of Virginia, where he was made professor in 1970, before moving to Stanford University in 1981. He left his tenure at Stanford in 1988 for a position at Abbott Laboratories, where he served as a vice president until starting his own biotechnology company, the Molecular Geriatrics Corporation, in 1993. Dr. Murad joined the University of Texas in 1997 to create a new department of integrative biology, pharmacology, and physiology. He has been awarded a 2010 Honorary Membership in the Society of Toxicology.

Sir Philip Cohen to Deliver Keynote MRC Lecture



Phillip Cohen

On Wednesday, March 10, 8:00 AM–9:00 AM in Ballroom A, Salt Place Convention Center, **Professor Sir Phillip Cohen** will deliver the Keynote Medical Research Council (MRC) Lecture, “The Interplay Between Phosphorylation and Ubiquitination in Regulating the Innate Immune System.” Dr. Cohen is the founder and Co-Director of the Division of Signal Transduction Therapy (DSTT), the UK’s largest collaboration between a basic research institution and the pharmaceutical industry. DSTT is widely regarded as a model for how industry and academia should interact, for which it received a Queen’s Anniversary Award for Higher Education in 2006.

For the past 40 years, Dr. Cohen’s research has been devoted to studying the role of protein phosphorylation in cell regulation and human disease, a process that controls almost all aspects of cell life. His contributions to this area include working out over a 25-year period how calmodulin, the calcium-binding protein, is involved in the insulin-induced stimulation of glycogen metabolism in

muscle. Currently, his laboratory is working on the signaling pathways that regulate the production of pro-inflammatory cytokines and interferons during bacterial and viral infection, research that is aimed at understanding how the uncontrolled production of these substances causes chronic inflammatory diseases, such as rheumatoid arthritis, asthma, and septic shock.

He received his B.Sc. (1966) and Ph.D. (1969) from the University College London and spent two years as a postdoctoral fellow at the University of Washington (Seattle, WA) with **Edmond Fischer** the 1992 Nobel Laureate for Medicine or Physiology. In 1971, Dr. Cohen returned to the UK to become a faculty member at the University of Dundee, Scotland, where he has worked ever since. He has been a Royal Society Research Professor since 1984, Director of the MRC Protein Phosphorylation Unit since its inception in 1990, and was the Honorary President of the British Biochemical Society from 2006–2008. He was knighted in 1998. Dr. Cohen has been awarded a 2010 Honorary Membership in SOT.

Getting Organized is Easier with the SOT Annual Meeting Itinerary Planner

Can't wait to get your hands on the comprehensive Annual Meeting planning tool known as the final *Program*? Well, wait no more! SOT has organized the on-line Itinerary Planner to include the featured lectures, special programs, and social events, such as luncheons and receptions, as well as the Exhibitor Hosted Sessions.

As always, the session abstracts for symposia, workshops, and poster and platform presentations also are available to download to your personalized calendar. So what are you waiting for? Register for the meeting, plan your schedule in advance, and join your colleagues and friends at the largest toxicology meeting and expo of its kind devoted to showcasing the latest scientific achievements in research and technology.

Need to change your schedule? No worries because you can access the Itinerary Planner using your laptop in one of the Hot Zones located in the Exhibit Hall. Visit the SOT 2010 Annual Meeting Web site to get started.

Accepted Grace Period and Late Breaking Abstracts are included in the [Itinerary Planner](#).

Guide to Using the Annual Meeting *Program*

To facilitate your planning for the 2010 SOT Annual Meeting, please refer to page 2 of the final *Program* to review the publication layout, scientific session reference descriptions, and the icons used to identify the different types of sessions. The Annual Meeting always provides an exciting opportunity to highlight the advancements in the science of toxicology. We hope you will find the “How to Use this *Program*” information useful and welcome your comments at [SOT Headquarters](#).

Annual Meeting Attendees to Meet Directors from EPA, NIEHS, and FDA

The Meet the Director Sessions are special one-hour gatherings that provides an opportunity for the leaders of major federal agencies to engage in a discussion of emerging trends in toxicology research and its funding. You will have the opportunity to meet and interact with directors from the U.S. Environmental Protection Agency (U.S. EPA) National Health Environmental Effects Research Lab (NHEERL), National Institute of Environmental Health Sciences (NIEHS) and National Toxicology Program (NTP), and the Food and Drug Administration’s National Center for Toxicological Research (FDA/NCTR). All sessions will be on the afternoon of March 10 and will be held in the Salt Palace Convention Center (see chart below).

Speaker	Time and Location	Topic
Harold Zenick , Director, U.S. EPA’s NHEERL	1:15 PM–2:15 PM, Room 251 D	Priorities and research opportunities, including STAR Grant program
Linda Birnbaum , Director, NIEHS and NTP	2:30 PM–3:30 PM, Room 251 D	NIEHS and NTP plans for promoting environmental public health in U.S. and globally directed at preventing and treating disease
William Slikker, Jr. , Director, FDA/NCTR	3:45 PM–4:45 PM, Room 251 D	Efforts to foster national and international collaborations and conduct training with scientists in all sectors to improve science of regulatory decision making

Annual Meeting Attendance Helps Sharpen Your Competitive Edge

The last two years have been among the most challenging for the global economy, and it is more important than ever to be current on the most recent scientific advances, presented by thought leaders in toxicology. Below are just a few reasons that Annual Meeting attendance is important to you and your organization’s bottom line:

- Preview the cutting-edge science that has not yet made it to the literature, helping to maintain your competitive edge;
- Present your research, showcasing your organization as a scientific thought leader;
- Review your colleagues’ and competitors’ latest advances;

- Receive continuing education at rock-bottom prices; and
- Network with renowned scientists from around the globe regarding new and emerging trends.

Annual Meeting attendees return year after year for these reasons and to catch-up with old friends and mentor the next general of toxicologists. Your organization's outlay is repaid many times by the knowledge you gain and bring back as a valuable asset for sustaining and growing your initiatives. We look forward to seeing you in Salt Lake City and in the years ahead.

Attend NIH Brown Bag Lunch and Resource Room

The SOT Research Funding Committee is sponsoring the NIH Brown Bag Lunch, Tuesday, March 9 from 12:00 NOON to 1:15 PM, Room 255 B. Join staff from the NIH Center for Scientific Review (CSR) and NIEHS program officers for lunch and informal discussion about review and grant opportunities at NIEHS. There will be time for questions and discussion, and you can make arrangements to meet these representatives later in the NIH Resource Room. Bag lunches will be available for the first 75 participants.

The NIH Resource Room will be available on both Tuesday, March 9 and Wednesday, March 10 from 9:00 AM–4:30 PM, Room 254 A of the Salt Palace Convention Center. NIH program and review staff of CSR will be available for individual conversations. Attend the NIH Brown Bag Lunch on Tuesday to make an appointment, sign up at the NIEHS exhibit booth, or check the posted schedule to meet with the NIH staff member who can discuss with you aspects of scientific review or specific grant opportunities. New investigators are especially encouraged to meet with program staff. Handouts will be available.

Who Will Receive Endowment Fund Awards in 2010?



Join us in celebrating and honoring the 2010 Award Recipients. We are pleased to announce that 23 Endowment Funds are available to provide awards at the 2010 SOT Annual Meeting in Salt Lake City. Most of the awards are selected by Specialty Sections or Special Interest Groups based on the scientific merit of submitted abstracts. Typically, the awards will be presented at the Annual Meeting Reception for the Specialty Section or Special Interest Groups. Check the 2010 Annual Meeting Program for dates, times, and locations of these receptions. We encourage you to support the award process by attending the receptions and to contribute to the SOT Endowment Fund of your choice to help sponsor future awards! Make a donation to your favorite interests now OR help create a new award to assist in areas not yet addressed. Two new funds are described on page 8 of this newsletter. Several funds are still progressing toward the \$25,000 level needed to establish a fund in perpetuity, including the Angelo Furgiuele Young Investigator Award, Metals Specialty Section Award Fund,

Regulatory and Safety Evaluation Award Fund, and Robert G. Thurman Student Travel Award Fund. The [Donor Form](#) and descriptions of the awards can be found in the Endowment Fund section of the SOT Web site.

Join Us for the Announcement of 2010 Endowment Fund Award Recipients:

2010 Endowment Fund Awards	Awarded By:
Mary Amdur Student Award Fund	Inhalation and Respiratory Specialty Section
Young Soo Choi Student Scholarship Award Fund	Korean Toxicologists Association in America Special Interest Group
Laxman S. Desai ASIO Student Award Fund Harihara Mehendale ASIO Student Award Fund Dharm V. Singh ASIO Student Award Fund	Association of Scientists of Indian Origin Special Interest Group
Diversity Initiatives Fund Perry J. Gehring Diversity Student Travel Award Fund	Committee on Diversity Initiatives at the CDI Reunion
Founders Fund	Awards Committee at Awards Ceremony
Perry J. Gehring Biological Modeling Student Award Fund	Biological Modeling Specialty Section
Perry J. Gehring Risk Assessment Student Award Fund Robert J. Rubin Student Travel Award Fund	Risk Assessment Specialty Section
Health and Environmental Science Institute Immunotoxicology Young Investigator Student Award Fund	Immunotoxicology Specialty Section
Vera W. Hudson & Elizabeth K. Weisburger Scholarship Fund	Women in Toxicology Special Interest Group
Frank C. Lu Food Safety Student Award Fund	Food Safety Specialty Section
Jean Lu Student Scholarship Award Fund	American Association of Chinese in Toxicology Special Interest Group
Roger O. McClellan Student Award Fund	Comparative & Veterinary Specialty Section Toxicologic and Exploratory Pathology Specialty Section
Molecular Biology Student Award Fund	Molecular Biology Specialty Section

Emil A. Pfitzer Drug Discovery Student Award Fund	Drug Discovery Toxicology Specialty Section
Renal Toxicology Fellowship Award Fund Robert J. Rubin Student Travel Award Fund Carl C. Smith Student Mechanisms Award Fund	Mechanisms Specialty Section
Dharm V. Singh Carcinogenesis Award Fund	Carcinogenesis Specialty Section

SOT Annual Business Meeting—Make Your Voice Heard

SOT Members (Full, Associate Postdoctoral, and Student) are invited to attend the SOT Annual Business Meeting. The 49th meeting will be held on Tuesday, March 9 from 4:30 PM–6:00 PM in Ballroom A of the Salt Palace Convention Center. The agenda includes a discussion of the Council 2010 strategic planning, a financial summary, a review of the 2009–2010 activities, and plans for the future. If you have long-range planning ideas that you would like added to the agenda, please send them to SOT Executive Director [Shawn Douglas Lamb](#), at SOT Headquarters.

“Toxicology in the 21st Century“ Featured Topic at 2010 *In Vitro* Lecture for Students



Kim Boekelheide

Kim Boekelheide will be the featured speaker at the Tuesday, March 8 *In Vitro* Lecture and Luncheon for Students at the SOT Annual Meeting. In his presentation, “Toxicity Testing in the 21st Century: The Vision and Some Questions,” Dr. Boekelheide will provide an overview of the NAS report and then attendees will discuss specific questions that emerge from the study. Sponsored by Colgate-Palmolive, this lecture is open to all postdoctoral and student registrants for the meeting, with the ticket available on the registration form. Past recipients of Colgate-Palmolive sponsored awards are among the invited guests. Lunch is included in this event.

Undergraduate Students to Engage in Toxicology in Salt Lake City

An increasing number of undergraduate students are attending the SOT Annual Meeting and presenting papers, which is a positive indicator of SOT efforts to “build for the future of toxicology,”



Undergraduates have the opportunity to meet with academic program directors during the SOT meeting

an important objective in the SOT Strategic Plan. Researchers with undergraduates in their labs are encouraging abstract submission and attendance. Two awards are available to provide travel support for these students, and their posters will be marked with ribbons so you are encouraged to stop by and discuss the work of these young scientists. **Adrian Nanez**, Chair of the Committee on Diversity Initiatives and an alumna of the Undergraduate Education Program, reports that the committee has selected 45 undergraduates and 8 advisors of undergraduates to participate in the program this year. Thirty-six are students from groups who are underrepresented in the sciences, and 13 come from institutions that receive low amounts of STEM (science, technology, engineering, and math) funding. The

program for these students begins Saturday night, March 6, with introductory toxicology lectures by **José Manautou** and **Nathan Cherrington**.

Two awards are available to provide travel support for these students, and their posters will be marked with ribbons. You are encouraged to stop by and discuss work with these young scientists. The Pfizer Undergraduate Student Travel Award is presented to 5 impressive students after the Education Committee does the difficult task of selecting the top from the group of outstanding applicants. The recipients this year are **Annie L. Carlton**, Bates College; **Alisha Chitrakar**, Saint Peters College; **Megan Culbreth**, North Carolina State University; **Chang Woo Lee**, University of Texas MD Anderson Cancer Center, and **Sharon Ochs**, Wright State University.

The Perry J. Gehring Diversity Student Travel Award goes to an undergraduate or graduate student who attended SOT in the last three years as a participant in the Undergraduate Education Program for Minority Students. Nygerma Dangleben is the recipient of this Endowment Fund Award this year. She is currently a graduate student at the University of California, Berkeley, and attended the undergraduate program in 2006. Honorable mention designates are **Sherine Crawford**, an undergraduate at Medgar Evers College, and **Ebany J. Martinez**, a graduate student at the University of New Mexico.

Anyone at the meeting who has been involved in the undergraduate program at any time is invited to the networking reception at 8:00 PM, on March 6, which will include recognition of the Gehring award recipient and a memorial moment for **Mary Kanz**, who served on the program leadership team for many years.

On Sunday, any undergraduate student registered for the meeting is invited to participate in the Undergraduate Education Program. Additional toxicology presentations, information about success in graduate school, and the opportunity to meet with academic program directors are part of the schedule that day. Students who were funded by the Undergraduate Program also have sessions on Monday,



Joy Cavagnaro organized the 20th Anniversary Tox Squad from students who distinguished themselves in the opening session of the 2009 CDI Undergraduate Program.

including a special poster session in the Exhibit Hall. Many SOT members, including committee members, presenters, toxicologist mentors, and graduate student peer mentors have generously volunteered their time to encourage these students to consider a career in the biomedical sciences.

Increased Impact and Vitality of Toxicology through Enhanced Undergraduate Education

The Education Committee recently created the [Undergraduate Education Subcommittee](#) to target efforts for the [SOT Strategic Priority](#) of “building for the future of toxicology.” The subcommittee is comprised of **Aaron Barchowsky, Sue M. Ford, Wesley G.N. Gray, Sara Hegglund, Stephen B. Pruett, Mindy F. Reynolds, and Teresa G. Dodd-Butera**. Through the efforts of this group, there are several sessions on undergraduate education in which you may participate at the SOT 2010 Annual Meeting in Salt Lake City, Utah. Mark your calendar! Hear an update on initiatives for undergraduate faculty, provide your input, and network.

- **Education and Outreach Poster Session**, Tuesday, March 9, 9:00 AM–12:30 PM.
- **Undergraduate Toxicology Faculty Meeting**, Tuesday, March 9, 3:30 PM–4:30 PM. This is for all members interested in the activities of the Undergraduate Educational Subcommittee, in teaching toxicology to undergraduates, in including toxicological content in courses, and in undergraduate research opportunities.
- **Seeking Funding for Undergraduate Research**, Wednesday, March 10, 4:30 PM–5:30 PM. This session is for scientists at primarily undergraduate institutions who are looking for ways to secure research funding.

To identify needs and activities that support the strategic objectives relative to undergraduate teaching and learning, the subcommittee created a survey that was sent to approximately 900 SOT members at U.S. and international teaching institutions. Of the 197 respondents, approximately 77% are involved in toxicological-related teaching and/or research with undergraduates. Needs, such as providing shared curricular materials, links to educational materials and funding opportunities, and creation of networking for undergraduate educators, were identified. The survey results will help shape the subcommittee’s strategic planning activities with the goal of increasing SOT member impact on the pipeline of new toxicologists and the vitality of toxicology through enhancing undergraduate education in this discipline. Current efforts include developing an on-line repository of curricular resources, planning toxicology-related teaching workshops for undergraduate educators, and creating electronic networking and communication mechanisms to foster interactions among undergraduate educators.

This subcommittee needs the help of enthusiastic volunteers in their efforts to develop on-line resources and networking. We appreciate the interest shown by those of you who indicated on the survey that you are willing to assist, and we will be in contact with you. For those who did not indicate an interest in participating on the survey, please contact [Betty Eidemiller](#).

NIEHS/NTP Director and Staff to Provide Live Updates at SOT Annual Meeting

National Institute of Environmental Health Sciences (NIEHS) and National Toxicology Program (NTP) representatives, including Director **Linda Birnbaum**, Ph.D., will be providing LIVE updates throughout the upcoming SOT conference in Salt Lake City. NIEHS/NTP scientists will be sharing information and insights, primarily related to NIEHS presentations and the researching NIEHS grantees as well as other sessions that make the SOT Annual Meeting so unique.

“These live updates will showcase all the fantastic things that are happening in the field of toxicology,” said Birnbaum. “I hope we can be the eyes and ears for people who want an up close and personal look at the conference—especially if they can’t be there in person.”

The updates will be brief and are not interactive as no comments will be taken from the public.

Beginning in March the links will be live. Look for updates and pictures at www.niehs.nih.gov/LiveatSOT or follow along at www.Twitter.com/LiveatSOT.

See you in Salt Lake City!

SOT On-Site Job Bank Services Facilitate Employer and Candidate Interaction

Free Job Search for SOT Members

The SOT Annual Meeting, with more than 6,500 attendees including the best toxicologists, early career scientists, and toxicology-related employers, is the best place to make your connection, whether you are looking for a position or searching for the right candidate. The on-line SOT Job Bank is available at all times 24/7, and provides you the opportunity to take full advantages of the on-site Job Bank Center in Salt Lake City. SOT Members can conduct job searches for free. Employers recognize and appreciate that the Annual Meeting Job Bank Center provides a cost-effective and efficient way to interview a distinguished pool of candidates. For your convenience, SOT Career Resource and Development Services (CRAD) is providing six interview rooms on-site.

New this year: In advance of the Annual Meeting, employers will be able to make reservations for interview rooms, allowing better scheduling for employers and candidates.

Located in the Salt Palace Convention Center, the on-site Job Bank Center provides Annual Meeting attendees with access to the SOT Job Bank system as well as assistance in facilitating interviews at the SOT Annual Meeting. All users with current registrations at the time of the Annual Meeting will be permitted to use the service. Although you are encouraged to pre-register before entering the Job Bank Center, you can register on-site in Room 155 A&D of the Convention Center.

The Job Bank Center is available during the following hours of operation:

Sunday, March 7	10:00 AM–4:00 PM
Monday, March 8	9:00 AM–4:30 PM
Tuesday, March 9	8:30 AM–4:30 PM
Wednesday, March 10	8:30 AM–4:30 PM

For additional information, contact [Kristen Meletti](#) at SOT Headquarters.

SOT On-Line Mentors and Mentees Can Schedule Face-to-Face Meetings in Salt Lake City

SOT recognizes the valuable role mentors play in the development of the field of toxicology. To facilitate the formation of these relationships, SOT established a free career mentoring system for SOT members. Mentor Match is a networking platform in which SOT members can register as mentors and/or mentees. Mentors can register by creating a profile specifying the areas in which they feel comfortable offering advice and guidance. Mentees can then search the database for those candidates that best fit their mentoring needs. Members can register as both a mentor and a mentee and the depth of involvement is completely discretionary. Moreover, the SOT Annual Meeting provides a great opportunity for mentors and mentees to meet in person and further cultivate their relationship.

You are encouraged to visit [Mentor Match](#) on the SOT Web site and register before the SOT Annual Meeting. For those mentors and mentees who have both active and inactive registrations in the SOT On-line Job Bank system, your questionnaire will pre-populate with the information from your user account for your convenience. You will be able to easily update and refine this information, which will be saved in both the on-line Mentoring and Job Bank systems. For further information, please contact [Kristen Meletti](#).

SOT's Career Development Program Track

To help you develop your near-term and long-term career pathway, plan on attending the Education-Career Development Sessions scheduled this year that will be of special interest to you. Sessions include the following:

- Where Do I Go Now? Rational Career Development Planning for Early-Career Scientists
— Tuesday, March 9, 9:00 AM–11:45 AM, Ballroom G
 - Science Communication in 2010: A New Decade in Toxicology and Need for Better Communication— Tuesday, March 9, 12:00 NOON–1:20 PM, Ballroom F
 - Career Alternatives in Toxicology: Lessons Learned— Wednesday, March 10, 7:30 AM–8:50 AM, Ballroom B
-

Celebrating 25 Years of the Immunotoxicology Specialty Section

Submitted by Jean Regal, President, Immunotoxicology Specialty Section

At the SOT Annual Meeting in Salt Lake City, the Immunotoxicology Specialty Section will celebrate 25 years since its establishment! The field of immunotoxicology had its origins in the 1970s with the first publications describing increased susceptibility to infection after environmental exposures, including immunosuppression with TCDD exposure. Immunotoxicology encompasses all forms of chemically induced immune dysfunction including allergy, autoimmunity, inflammation, and immunosuppression.



After an assortment of meeting venues in the late 1970s and early 1980s, immunotoxicology found its home with SOT in 1985 with **Jack Dean** serving as the first President of the Immunotoxicology Specialty Section. Since its inception, this Specialty Section has grown to over 250 dedicated members who actively participate scientifically at each SOT Annual Meeting. Membership is broadly represented internationally and in academia, government, and industry.

The Health and Environmental Science Institute (HESI) Immunotoxicology Young Investigator Travel Award Endowment Fund was established for the Immunotoxicology Specialty Section in 2009, and the first award will be presented at Salt Lake City. Outreach programs of the Specialty Section include an international exchange program with the Japanese Society of Immunotoxicology as well as a Traveling Lecturers program to enhance delivery of Immunotoxicology course content in training the next generation of toxicologists. Within SOT, immunotoxicology has grown and matured to a respected discipline, globally recognized for its importance and for the contributions made to understanding the health consequences of perturbing the immune system.

Pre-Registered Attendees to Receive Badges Soon—Ribbons Should Have Arrived

Name badges and ribbons will be mailed to all attendees who pre-registered by January 22, 2010. In appreciation for serving on SOT Committees and Task Forces and as officers in the Regional Chapters, Specialty Sections, Special Interest Groups, and other SOT bodies, volunteers receive appropriate ribbon(s) to affix to their 2010 SOT Annual Meeting badges. 2009–2010 Contributors to the SOT Endowment Funds also will be mailed ribbons. If you do not receive your badge or the appropriate ribbon by mail, please check with the Registration Desk at the meeting. Look for the “Badge Only” signage to facilitate pick up.

2010 ToxExpo™ Exhibit Hall Hours

[ToxExpo™](#) is the profession's largest trade show of its kind anywhere. Attendees and exhibitors from around the globe gather to exchange ideas and debut cutting-edge products, services, and technologies. Toxicologists and industry professionals have the unparalleled opportunity to gain first-hand knowledge on the latest advances from more than 340 exhibiting companies.

The exhibit hours are as follows:

Monday, March 8	9:00 AM–4:30 PM
Tuesday, March 9	8:30 AM–4:30 PM
Wednesday, March 10	8:30 AM–4:30 PM

More than 40 [Exhibitor Hosted Sessions](#) will be held during the Annual Meeting. See *Program* and the SOT Web site for details.

2011 Annual Meeting Session Proposal Deadline—April 30

The Annual Meeting in Salt Lake City is a good time to work out the details for your session proposals for the 50th Anniversary Annual Meeting in Washington, DC March 6–10, 2011. Proposals will be submitted on-line beginning in early March with a deadline of April 30, 2010.

All proposal submissions will be reviewed for their relevance under the following themes or Continuing Education (CE) target areas for the 2010 Annual Meeting:

Thematic Approach

- Global Air Quality and Human Health
- Novel Approaches to Preclinical Safety Assessment: Bridging the Gap Between Discovery and the Clinic Through Translational Toxicology
- Environment and Disease
- Toxicity Testing: State of Science and Strategies to Improve Public Health
- Integration of Toxicological and Epidemiological Evidence to Understand Human Risk
- Emerging Global Public Health Issues

Continuing Education (CE) Target Areas

- Cardiovascular Toxicology
- Epigenetic Mechanisms
- Systems Biology

Please note that while we are actively soliciting proposals for the themes listed above, all proposal submissions will be reviewed for their timeliness and relevance to the field of toxicology.

The SOT Scientific Program and Continuing Education Committees place great value on the contributions of Specialty Sections and Special Interest Groups (SS/SIGs) in the preparation of high

quality proposals for sessions at the SOT Annual Meetings. For this reason, it should be noted that sponsorship and endorsements sought for proposals will continue to be made directly to the SS/SIG(s) by the session organizer prior to submission.

A list of session types with a brief description is posted on-line at the SOT Annual Meeting Web site. Platform and poster abstracts for the 2011 Annual Meeting are due October 3, 2010.

Thematic Approach Descriptions

Global Air Quality and Human Health: It is becoming increasingly apparent that air pollution is not just a local issue, but has international health implications. The goal of this theme is to integrate information on individual susceptibility, disease mechanisms, and levels of exposure and to demonstrate how this information can have a significant impact on the development of global air quality policies and regulations.

Novel Approaches to Preclinical Safety Assessment: Bridging the Gap between Discovery and the Clinic through Translational Toxicology: Toxicology can play a key role in identifying and implementing advances in toxicological mechanisms, safety assessment, and biomarkers when cross-disciplinary efforts are coordinated during the drug development process. The goal of this theme is to highlight advances in toxicology that improve translation from animal models to humans.

Environment and Disease: Growing evidence suggest that the environment is a significant factor in the susceptibility and progression of cardiovascular and neurodegenerative diseases and cancer. The environmental influence on disease theme has been selected to highlight recent advances in these areas as well as contrast how this knowledge is impacting regulation and policy.

Toxicity Testing: State of Science and Strategies to Improve Public Health: In order for Federal regulations to best reflect the current state of the science, toxicity testing paradigms need to adapt to the advances of science. The main challenge inherent in bringing this vision to fruition is to have testing strategies that provide sufficient context for evaluating potential risk. The goal of the toxicity testing theme is to initiate discussion on how toxicity testing could integrate state of the science methodologies and thereby reduce the uncertainties in the interpretation of toxicity-pathway data to humans.

Integration of Toxicological and Epidemiological Evidence to Understand Human Risk: As novel technologies expand the range of biomarker assessments and the NAS vision for toxicity testing begins to be implemented, the integration of mechanistic laboratory animal testing and *in vitro* systems with human epidemiological data will require new strategies to fully utilize and integrate these data for extending the range of observations and to characterize the exposure-response of human risk. The goal of this theme is to initiate discussion on how new technologies can improve assessment of the dose-response curve and thereby improve human risk assessment from environmental exposures.

Emerging Global Public Health Issues: The global economy raises challenges to protecting human health within the United States for our regulatory agencies. Ultimately, public health issues are no longer just local issues affecting a single country or specific geographic region of the world, but have

international health implications. The global public health issues theme has been selected to highlight recent advances in these areas, as well as how this knowledge is impacting regulation and policy.

Continuing Education (CE) Target Areas

Cardiovascular Toxicology: This topic provides an overview of cardiovascular function at the gross and cellular level. It includes descriptions of cellular biochemistry and the impact of toxicants on system components or functions and presents methods and techniques to measure toxicity.

Epigenetic Mechanisms: This topic describes the field of epigenetic mechanisms and reviews fundamental cellular biochemistry. Roles of epigenetic mechanisms in cellular differentiation, aging, disease, therapeutic gene regulation, and toxicity may be presented.

Systems Biology: This topic describes and demonstrates the systems biology approach to the study of chemical mode of action and toxicity. It describes the interdisciplinary nature of the field and provides examples of how a multi-faceted systems biology approach can yield powerful results that both predict and describe the relationship between chemical exposure and cellular/systemic response.

2010 Annual Meeting Sponsors Demonstrate Commitment to the Science of Toxicology

SOT appreciates the support of the 2010 Annual Meeting Sponsors. These sponsors help SOT keep registration fees low, thereby enabling scientists at every level in their career to participate in this meeting. Annual Meeting sponsorship also helps offset the cost of functions such as: Minority Student Program, Undergraduate Program, Student and Postdoctoral Scholar Events, Continuing Education Program, Refreshments, Public Outreach, and the Welcome Reception. Moreover, Annual Meeting sponsorship provides an opportunity to increase overall awareness of an organization or company to SOT members and Annual Meeting attendees. Consider becoming a sponsor for the 2011 Annual Meeting and beyond. If you are interested in SOT Sponsorship, visit the [Sponsorship Opportunities](#) section of the SOT 2010 Annual Meeting Web site and contact [SOT Headquarters](#) at (703) 438-3115.

Thank You 2010 Annual Meeting Sponsors!

Visit the SOT Pavilion: Your Resource for Services and Products

Plan to visit the SOT Resource Pavilion, Booth #1901 in the Exhibition Hall. Members of SOT Regional Chapters, Specialty Sections, and Special Interest Groups will provide guidance on how you can become involved in programs and activities of these component groups, which are essential to the success of the Society. You also will find information about Endowment Funds, toxicology-related materials for public policy decision makers and the public as well as educational materials for K-12.

A new benefit being launched at the 2010 SOT Annual Meeting is ToXchange—a member network

for expanding collaboration across the Society. On-site, you can be among the first members to update your profile, which will open the gateway to greater communications with other SOT members who are interested in the programs, activities, and strategic objectives of greatest importance to you. Once again this year, the SOT Resource Pavilion is the one-stop shop for all your questions and membership needs. To volunteer to assist in the Pavilion, send a message to [SOT Headquarters](#).

The Pavilion hours are as follows:

Monday, March 8	9:00 AM–4:30 PM
Tuesday, March 9	8:30 AM–4:30 PM
Wednesday, March 10	8:30 AM–4:30 PM

SOT Prepares for 50th Year Anniversary Celebration

2011 will mark the 50th Anniversary of the Society of Toxicology and SOT is taking steps to ensure that the 50th Anniversary is a memorable occasion for SOT members.

The 2011 Annual Meeting and ToxExpo™ will be held March 6–10, 2011, at the Walter E. Washington Convention Center. Special events for this 50th Anniversary celebration include an SOT Anniversary Book, an Anniversary Brochure, a Celebration Evening, Commemorative Posters, Exhibits, History of Toxicology Session and, as always, a comprehensive scientific program and other special activities. SOT is asking SOT Committees to think about activities and special products they might want to include for this one time event. Contact [Clarissa Wilson](#) with your ideas.

Science News

Upcoming SOT Sponsored Meetings Highlight the Importance of Toxicology

ARA Workshops Advancing Dose-Response Method to be Held March 16–18, 2010

The [Alliance for Risk Assessment \(ARA\)](#) is planning a series of public workshops to continue discussion on dose-response assessment issues set forth by the NAS's 2008 document: Science and Decisions: Advancement of Risk Assessment (the silver book). A key component of the workshops will be case studies that illustrate potentially useful dose-response assessment techniques for human health risk assessments of chemicals. Example techniques include: (1) BBDR to address human health risk for a high production volume chemical (e.g., formaldehyde); (2) human health screening approach for data-poor chemicals, as used in U.S. EPA's Sustainable futures program. We are seeking short proposals for case studies, by February 20. Late proposals may be offered in the meeting, and will also be posted on the Web prior to the meeting. See the [Web site](#) for details. Registration is now

open for the first workshop, which will be held at the Texas Commission on Environmental Quality (TCEQ), Austin, Texas, on March 16–18, 2010. The meeting can also be attended by webcast. The succeeding two workshops will be held in Fall of 2010 and Spring of 2011. This series of workshops will be highly interactive, with participation from federal, state, industry, NGO, academia, and research institutes. See the [Web site](#) for more details. In addition to SOT, the workshop series currently has 18 other sponsors, including professional societies, state environmental agencies, nonprofits, private companies and consortia (see the [Web site](#)).

14th International Workshop on QSARs—Early Bird Registration Deadline March 15, 2010.

The 14th International Workshop on Quantitative Structure-Activity Relationships (QSARs) in Environmental and Health Sciences will be held in Montréal, Canada, May 24–28, 2010. QSAR-2010 intends to bring together modelers and practitioners at various levels to share emerging research results and viewpoints on *in silico* tools relating to SARs, QSARs and QSPRs for chemicals and pharmaceuticals in the environment regarding: physicochemical properties, environmental fate, toxicokinetics, toxicodynamics, toxicity prediction, and regulatory applications. As part of QSAR-2010, a half-day training course on QSAR-PBPK (physiologically-based pharmacokinetic) modeling, focusing on both ecotoxicology and human health applications, will be offered. The Scientific Program will contain feature presentations on QSARs in the context of the new toxicity testing paradigm and emerging regulatory challenges.

The early-bird registration deadline is March 15, 2010. More details regarding deadlines, accommodation and abstract submission can be found on the [Web site](#) or by contacting the [Secretariat](#).

STP/IFSTP 2010 Joint Symposium to Address Neuropathology—June 20–25

The Society of Toxicologic Pathology (STP) in conjunction with the International Federation of Societies of Toxicologic Pathologists (IFSTP) will co-host a symposium on the fundamentals and recent innovations in the field of toxicologic neuropathology, June 20–25, 2010 at the Marriott Downtown Magnificent Mile Hotel, Chicago, Illinois. The focus of this international meeting is to correlate advances in the morphologic evaluation and interpretation of neuropathology findings with functional, cellular, and molecular knowledge in a series of plenary and poster sessions. The major goal of the meeting is to foster an open framework in which to discuss the current state of knowledge of neuropathology evaluations in conventional toxicology and specialized neurotoxicology studies. Foundational sessions will include fundamentals of neurobiology, modern pathology methods for neural investigations, and an interactive panel discussion on “best practices” for brain sampling. The meeting will also provide a unique forum to review the remarkable progress in gene expression, biomarkers, and the role of different glial cell populations in nervous system diseases. A “special problem” session will be dedicated to critical but less understood areas of neuropathology such as the blood-brain barrier, synaptic pathology, and exaggerated pharmacodynamics as a neurotoxic event. The *Preliminary Program* is available on the [STP Web site](#).

To view all upcoming SOT Sponsored meetings visit the Calendar Events section of the SOT Web site.

SOT Nominates Members to Serve On NCEH/ATSDR and SACATM/NTP Advisory Groups

Following outreach to all SOT Members, SOT submitted nominations for five highly skilled candidates to serve on the Board of Scientific Councilors, the National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ ATSDR), and seven to serve on the Scientific Advisory Committee on Alternative Toxicological Methods/National Toxicology Program (SACATM/NTP). A subcommittee of the SOT Council reviewed nominees in accordance with the criteria set forth by each Agency. Candidates for NCEH/ATSDR Board of Scientific Councilors include **Kenneth T. Bogen, Vera S. Byers, Michael Kleinman, Jerry Rice, and Arnold Schecter**. Nominees for the SACATM/NTP Committee include **Jiri Aubrecht, Joy Cavagnaro, Harvey Clewell, Lawrence Lash, James McKimm, James Trosko, and Richard Nass**. While SOT is fully aware that these Agencies are under no obligations to select any of these individuals, the Society is appreciative of the opportunity to participate in the nomination process and is confident that the selection of any of these individuals would add important expertise to these groups.

NIH Issues Request for Information on Superfund Research Program

The National Institute of Environmental Health Sciences (NIEHS) has issued a Request for Information (RFI) for the Superfund Research Program as part of its strategic planning process. The RFI is seeking comment on ways to prioritize science and enhance the impact of the Superfund Research Program to achieve the following objectives:

- Define the Program mission and vision for the next five years;
- Delineate a process for selecting science;
- Establish a framework for incorporating emerging science and tools into the Program;
- Enhance research translation, community engagement, and training; and
- Delineate NIH mechanisms for funding.

For more information about the program and the RFI, visit the [NIH Grants Web site](#).

NABR Releases of Best Practices Guide “Responding to FOIA Requests: Facts and Resources”

The National Association for Biomedical Research (NABR) is pleased to announce the release of “Responding to FOIA Requests: Facts and Resources,” a ten-point best practices guide for understanding and responding to Freedom of Information Act (FOIA) requests, particularly those from animal rights organizations. The guide includes suggestions for determining who should be

aware of and responsible for responding to FOIA requests; examples of records commonly requested from the NIH, USDA, and universities; an explanation of some of the ways animal rights activists use the FOIA; and steps that can be taken to ensure that the proper information is provided to the requestor. According to NABR, in recent years animal rights activists have increasingly used the federal FOIA and state open records laws to obtain information about biomedical research projects and identify principal investigators (PIs) using animals. In some cases this information is then posted on Internet sites that label investigators as animal “abusers” and encourage the harassment of PIs. Some sites also facilitate or suggest the use of violence against PIs. The best practices guide is the result of the combined efforts of the National Association for Biomedical Research, Society for Neuroscience (SfN), and the Federation of American Societies for Experimental Biology (FASEB). [Get a copy of “Responding to FOIA Requests: Facts and Resource.”](#)

Funding Opportunity

National Academies Graduate Science Policy Fellowship Available

The Graduate Fellowship Program of the National Academies, consisting of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council, is designed to engage its Fellows in the analytical process that informs U.S. science and technology policy. Fellows develop basic skills essential to working or participating in science policy at the federal, state, or local levels. Graduate students and postdoctoral scholars and those who have completed graduate studies or postdoctoral research in any social/behavioral science, medical/health discipline, physical or biological science, any field of engineering, law/business/public administration, or any relevant interdisciplinary field within the last five years are eligible to apply. The program takes place in Washington, D.C. and is open to all U.S. and non-U.S. citizens who meet the criteria. However, non-U.S. citizens must be currently enrolled in a U.S. university and have proof of holding a valid J-1 or F-1 status. The session dates are August 30–November 19, 2010. To apply, visit [National Academies Web site](#). For more information, contact policyfellows@nad.edu. Deadline is May 1.

For additional funding opportunities, please visit the [SOT Web site](#).

FDA Commissioner’s Fellowship Program

Touch the Lives of All Americans!

The FDA Commissioner’s Fellowship Program is a two-year training program designed to attract top-notch health professionals, food scientists, epidemiologists, engineers, pharmacists, statisticians, physicians, and veterinarians. The Fellows work minutes from the nation’s capital at FDA’s new state-of-the-art White Oak campus in Silver Spring, Maryland or at other FDA facilities. The FDA Commissioner’s Fellowship offers competitive salaries with generous funds available for travel and supplies.

Coursework & Preceptorship

The FDA Commissioner’s Fellowship program combines coursework designed to provide an in-depth understanding of science behind regulatory review with the development of a carefully designed, agency priority, regulatory science project.

Who Should Apply?

Applicants must have a Doctoral level degree to be eligible. Applicants with a Bachelor’s degree in an Engineering discipline will also be considered. Candidates must be a U.S. citizen, a non-citizen national of the U.S., or have been admitted to the U.S. for permanent residence before the program start date. For more information, or to apply, please visit the [FDA Web site](#).

Applications will be accepted from January 1, 2010–March 15, 2010.

Toxicologist, NIEHS-DE

Salary Range: 123758 to 155500 USD Per Year	Open Period: 2/8/2010 to 4/8/2010
Series & Grade: GS-0415-15/15	Position Information: Full-Time Permanent
Promotion Potential: 15	Duty Location: 1 vacancy - Montgomery County, MD

Job Summary:

The National Institute of Environmental Health Sciences (NIEHS) is seeking a Toxicologist for its office at the Bethesda, Maryland campus of the National Institutes of Health (NIH). This toxicologist will serve as a senior toxicology advisor to the Director for outreach and coordination with relevant Federal research and regulatory programs, industries, and other groups. If selected, you will serve as a liaison to external constituencies, stakeholders, and advocacy groups as well as members of the National Toxicology Program (NTP) community including CDC/NIOSH, FDA, NIH/NCI, ATSDR/NCEH, OSHA, CPSC, and EPA by providing information regarding priorities, plans, and programs at scientific meetings. If you are exceptionally talented and motivated with experience in this field, AND you want to play a significant role in a dynamic organization, then consider joining us!

Major Duties:

As a senior toxicology advisor, the incumbent communicates the goals and priorities of the Director to key officials of Federal research and regulatory agencies, represents the Director in policy and scientific decision making meetings of the Federal agencies and conferences relevant to scientific initiatives. He/she serves as a liaison to external constituencies, stakeholders, and advocacy groups as well as members of the National Toxicology Program (NTP) community by providing information at scientific meetings of the various groups. He/She provides appropriate information and input in the development of program plans, annual plans, briefing papers, and/or congressional testimony.

The incumbent also provides advice, counsel, and support to the Director related to human health risks associated with exposure to agents of public health concern central to the NIEHS mission. He/she represents the Institute on committees and in meetings responsible for reviewing and assessing information and/or making recommendations; prepares and presents scientific findings on studies associated with a wide variety of environmental contaminants linking real-world exposures to effects. He/she also critically evaluates available information, formulates hypotheses, and prepares papers, reports, and briefing documents for the Director and designated staff on key toxicology and public health issues. The incumbent also works with agencies and constituency groups toward the identification and submission of nominations of agents or issues for study by the NTP.

Currently applications are being accepted for the position of Toxicologist, GS-415-15 in the Office of the Director, NIEHS, located in Bethesda, Maryland. This vacancy is a full-time permanent position being announced under the Delegated Examining Unit (DEU) and Merit Promotion (MP) procedures. This position is not in the bargaining unit.

The Delegated Examining Unit (DEU) announcement is open to all U.S. Citizens. [View the full vacancy announcement for Delegated Examining Unit \(DEU\).](#)

UCLA Molecular Toxicology Program

Predoctoral (Ph.D.) and Postdoctoral Positions

Positions are available in the laboratories of Professors **Araujo, Bronstein, Chesselet, Godwin, Hankinson, Krantz, Merchant, Ritz, Robbins, Roth, and Schiestl**. Areas of research emphasis include genotoxicology, nanotoxicology, and the role of pesticides in the development of Parkinson's disease. Positions start July to October 2010. Competitive stipends are offered and students' fees are covered. See our [Web site](#) for further details. Applicants must be U.S. citizens, noncitizen nationals, or permanent residents of the USA. Please contact Professor [Oliver Hankinson](#) by March 30, including your *curriculum vitae*, names and contact information of three references, and a brief description of your educational and research interests.

[Visit the SOT Job Bank for Additional Positions Listings](#)