



# Communiqué

Spring Issue 2012

## SOT News

### President's Message



*President  
William Slikker Jr*

Following the very successful 51st Annual Meeting of the Society of Toxicology, it is easy to remain excited about the progress of the Society and the accomplishments of its many dedicated members. It is not easy to fathom that with the clanging of the historic cable car bells still in our ears, preparations for the 52nd Annual Meeting are in progress. So before we can all enjoy the sounds of the Mariachi and jazz bands along the River Walk in festive San Antonio, we must prepare our best work for presentation at the next Annual Meeting, March 10–14, 2013. SOT will begin accepting regular abstract submissions on August 13, 2012.

In honor of the many accomplishments associated with the Annual Meeting, I thank all those dedicated SOT members and AIM staff, under the able leadership of Past President Jon Cook, who made the San Francisco Annual Meeting a tremendous success. From the record number of abstracts presented, the outstanding Symposia, Workshops, Roundtables, and Informational Sessions to the Plenary and MRC lectures, the quality and impact of the scientific information presented was excellent. The highlights of the recently concluded Annual Meeting were substantial and global. For the second year, a Global Collaboration Coffee was held and 50 representatives, including international societies, Special Interest Groups, and award winners, attended and expressed their appreciation for this opportunity to network and seek areas of future collaboration. Plans are underway for the third Global Collaboration Coffee to be held at the 2013 SOT Annual Meeting. Moreover, this year 28 societies from around the globe participated in the Global Gallery of Toxicology in the ToxExpo Exhibit Hall. Posters showcased the formation, key accomplishments, strategic initiatives, and current and future activities of the societies. SOT and these societies aim to increase the reliance of international decision makers on the science of toxicology to advance human health and disease prevention. Now also in its second year, the Global Gallery of Toxicology will be repeated at the 52nd SOT Annual Meeting in San Antonio.

The preliminary analysis of the Annual Meeting survey indicates that over 80% of respondents reported that the overall scientific content was “outstanding/very good.” In addition, the Continuing Education courses were very highly rated, as were the many venues for scientific networking, global outreach, and mentoring. So a heartfelt thank you to the many Committees, Specialty Sections (SS), Special Interest Groups (SIG), Regional Chapters, and Task Forces that provided the leadership to actualize the many facets of the Annual Meeting.

Another group deserving thanks are fellow members who agreed to be candidates for elected office; the Society benefits from their commitment every day. We congratulate our new Nominating Committee members Martin A. Philbert, Rosonald R. Bell, James V. Bruckner, and Alison C.P. Elder. Congratulations also are in order to our new Membership Committee members Michelle J. Hooth and Tao Wang and to our Awards Committee members Samuel M. Cohen, Yvonne P. Dragan, and Mary E. Gilbert. And, finally our new Councilors Lorrene A. Buckley and Ivan Rusyn, as well as our Treasurer-Elect Denise Robinson Gravatt and Vice President-Elect Norbert E. Kaminski. Well-deserved congratulations are extended to these newly elected SOT leaders

In addition, I thank the many members who have successfully completed their immediate service to the Society as committee members, officers, or representatives. SOT is a volunteer organization and many members prove it year in and year out by serving in a multitude of ways. An important value of SOT membership is the leadership training opportunities provided by the Society. From the officers of each of the 27 Specialty Sections to the leadership of the many extremely active student groups, leadership training opportunities abound in the SOT. In each case, as the current term is completed, we also remember just how much we have learned and benefited from those who have served, and no higher praises can be sung than for Peter Goering, our outgoing Secretary, and Michael P. Holsapple, our Past President.

This year we look forward to executing SOT's new strategic plan that Council, with valuable input from many individual members and a host of component groups within SOT, has prepared. With the strategic guidelines delineated, input has been requested and received from the SS, SIGs, Committees, and others as to the best approaches to implement the plan. During the May SOT Council meeting, initial decisions and support mechanisms will be adopted so that the many good ideas can begin to be activated in support of SOT's membership. As an example, global initiatives have achieved record numbers thanks to the leadership of the Global Strategy Task Force among others. Membership dues discounts for scientists from eligible developing countries, no fee CE courses, the Global Senior Scholar Exchange Program, travel fellowships, and Global Toxicology Scholar Program are just some of the actions that are reaching scientists from developed and developing countries everywhere.

So as we look down the trail and get ready to ride into [Old San Anton](#), one of the Nation's leading recreation destinations, remember that there is much more than the Alamo. At the 52nd SOT Annual Meeting, thanks to our Scientific Program Committee under the leadership of Lois D. Lehman-McKeeman, the most recent Nobel Laureate ever to present at the SOT meetings, Dr. Bruce Beutler (recipient of the 2011 Nobel Prize in Physiology and Medicine) already is scheduled for the Plenary Lecture. So polish your boots and your research presentations and get ready to head to San Antonio for yet another great Annual Meeting.

William Slikker Jr, PhD, ATS  
SOT 2012–2013 President

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## **The Future of Toxicology Education: Outcomes of the Toxicology Educational Summit**

*Every member of SOT can be an educator, can be a mentor, and can communicate the value of toxicology.*

The statement above reflects the vision of the Education Summit Organizing Team after more than a year of effort to focus future Society of Toxicology (SOT) programs and the actions of individual members. Recognizing that new paradigms for multidisciplinary, technologically complex, and collaborative approaches in toxicological sciences require shifts in recruitment, training, and retention of scientists are required, SOT hosted fifty thought leaders at the Toxicology Educational Summit in October 2011. The goal was to assess the challenges and develop recommendations for strengthening toxicology education at undergraduate, graduate, postdoctoral, and professional levels to effectively equip toxicologists for success.

These recommendations were published in *Toxicological Sciences* [“The Toxicology Education Summit: Building the Future of Toxicology Through Education”](#) and were featured in the roundtable “The Future of Toxicology Education: Outcomes of the Toxicology Educational Summit” at the 2012 SOT Annual Meeting. Based on stimulating presentations by Jim Bus (SOT past president), Sally Rockey (NIH Deputy Director for Extramural Research), Victoria McGovern (The Burroughs Wellcome Fund), and other speakers, the preparatory work of the Education Summit Organizing Team, and in-depth discussion in break out groups, Summit participants tackled tough questions, provided insight on current realities, considered exemplary programs, and developed recommendations for further consideration. Links to all of the presentations and reports from the Education Summit are available on the [Education Summit](#) webpage.

During the roundtable, Education Summit Chair Aaron Barchowsky presented an overview of challenges faced by

toxicology, including recognition as an important integrative and viable field of endeavor. Deliberations and recommendations were grouped into five areas, and members of the Education Summit Organizing team—Gary Carlson, Mary Beth Genter, Stephen Safe, and Courtney Sulentic—provided perspectives. Insightful comments from the audience ranged from recognition of the valuable current education programs such as the undergraduate program to bring students to the meeting, Toxicology Scholar campus visits, and mentoring activities like Chat with an Expert, to concern about the impact of declining funding on graduate training, suggestions for joint training efforts by industry and academia, and encouragement that SOT continue to position itself as a global resource.

In partnership with other entities—government, professional societies, and foundations—SOT can strive to increase educational opportunities and integrate toxicology principles in diverse curricula. Quality training and mentoring can support early career toxicologists and ensure a diverse workforce.

## **Recommendations**

Noting that SOT is already heavily invested in significant education-related activities, the Education Summit Organizing Team, after considering the deliberations of the participants in the Summit, the roundtable participants, and other input, offers the following suggestions for SOT to consider in facilitating training and retraining of toxicologists at all career stages.

### **Programs Recommended for Continuation**

1. Continue and EXPAND efforts to communicate the value of toxicology in promoting a safer and healthier world
  - Including with administrators, deans, etc.
2. Continue support of successful SOT programs that recruit minority and underserved undergraduates into advanced education and careers in toxicology
3. Continue and MAKE MORE VISIBLE mentoring opportunities at all levels of education and practice
  - Including mentoring activities such as Chat with an Expert, Poster Tours, Trainee Discussion with the Plenary Speaker, MentorMatch
4. Sustain visiting scholar programs (ToxScholar Outreach Grant and Global Senior Scholar Exchange Program)
5. Continue development of undergraduate teaching resource library and consider a parallel resource for graduate education to take advantage of training opportunities in the news (breast implants, melamine); participate in national undergraduate science curriculum reform
6. Continue support of successful SOT educational programming at all levels from K–12 through continuing education
  - Including at the Regional Chapter level
7. Continue and expand webinars and online CE courses for ongoing training

### **Ideas for New Programs/Initiatives**

1. Work with other professional societies, government, and academia to promote integration of toxicology into diverse curricula including medical school, training of emergency room physicians, EMS technicians, public health professionals, engineers, chemists
2. Perform a formal needs assessment to identify gaps in training and needed curricular changes
3. Define a “Total Toxicologist” and promulgate core competency list (including “soft skills”) and mechanisms to provide the total toxicology tool set and critical impact points for career development
4. Facilitate academic, industrial, and government partnerships that provide opportunities for toxicology training and reduce skills gap for trainees seeking industry positions
  - Internship opportunities for students and postdocs
  - Sabbatical and/or short-term on-site experiences for faculty or individuals retraining
  - Platform for developing and making available case studies that apply toxicology principles to promote hands-on learning and non-routine problem solving
  - Provide opportunities for management training
    - this would probably not have to be an SOT-led initiative—good opportunity to partner with industry or non-profits

5. Create a catalog of training opportunities outside of SOT including university and industry transitions (whole animal experimentation, risk assessment, regulatory skills)
6. Assess the value of increasing meetings/professional development opportunities that include techniques and wet lab experiences
  - Additional approaches for career transitions Encourage toxicology training and career transition support globally
7. Use of endowment funds or industry support to provide small equipment grants for researchers and teachers at smaller institutions to build research capacity for students
8. Increase awareness of underutilized NIH funding mechanisms such as supplements to fund minority students or teachers
9. Develop a plan to access faculty and students at community colleges for incorporation of toxicology content
10. Consider ways to encourage toxicology training and career transition support globally
11. Initiate a focus on communication skills, particularly for graduate students and postdocs
12. Link Continuing Education (CE) to Contemporary Concepts in Toxicology (CCT) conferences and Regional Chapter meetings

## Concerns

The reduction of federal funding for toxicology research will decrease support for future graduate students and the ability of mentors to train students.

## SOT Council Funds Aspirational Proposals Aligned with SOT's Strategic Priorities

SOT Leadership announced its intention in March to provide additional funding to the Society's committees and task forces for programs and activities aligned with the [2012–2015 Strategic Priorities/Goals](#) of SOT. Of the \$100,000 allocated for this support from the Society's Emerging Initiatives Funds, \$99,640 has been approved for proposals that:

- Increase Scientific Impact
- Promote Recognition of Toxicology
- Build for the Future of Toxicology
- Enhance Member Engagement
- Strengthen Organizational Effectiveness

It should be noted that provision of these funds did not necessitate an increase in annual member dues or member registration fees at the SOT Annual Meeting. A brief overview of the funded proposals follows:

### For the SOT Board of Publications:

- Strategic review of *Toxicological Sciences*, not conducted since 2007
- Development of a mechanism to alert the SOT Communications Committee of relevant articles to promote recognition of the importance of toxicology to human health and disease prevention
- Communications initiatives to raise awareness about and appreciation for the increasing integration of the SOT and *ToxSci* websites, including the development of Widgets on Specialty Sections websites that will display articles of particular interest to each of the 27 groups.

### For the Career Resource and Development (CRAD) Committee

- Formal review of the Job Bank to determine enhancements to this already appreciated and highly utilized tool
- Refinements to Mentor Match to increase the effectiveness of this tool throughout the career of a scientist
- Targeted mentoring initiative with the Postdoctoral Assembly (PDA) and Graduate Student Leadership Committee (GSLC) under the auspices of CRAD to support an Annual Meeting Mentoring Breakfast and related

activities throughout the year

### **For the Committee on Diversity Initiatives**

- Support of four additional students and SOT mentors to participate in the Annual Meeting Undergraduate Education Program

### **For the Disease Prevention Task Force**

- Funding support for additional Non-SOT Speakers to increase recognition of the importance of toxicology to human health and disease prevention
- Funding for videotaping of additional scientific sessions for posting on the SOT website
- Contemporary Concepts in Toxicology (CCT) Webinar—Strategic planning and implementation

### **For the Education Committee**

- Student internships to engage the next generation of toxicologists
- K–12 Outreach Workshop for the 2013 SOT Annual Meeting

### **For the Postdoctoral Assembly**

- Mentoring activities in collaboration with CRAD and GSLC as described above

### **For the Professional Needs Assessment Task Force**

- Completion of the Job Outlook Survey

### **For the Scientific Liaison Coalition**

- Enhancement of participation of sister societies in the SOT Annual Meeting to strengthen partnerships
- Position papers and comment endorsement and development to increase the recognition of toxicology and related sciences to human health and disease prevention

SOT remains committed to its mission “To Create a Safer and Healthier World by Advancing the Science of Toxicology.” The support described above will help SOT to address its central challenge: “Enhance the Impact and Recognition of Toxicology.”

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## **SOT Members Need To Sustain Years of Effort Toward Establishing CSR’s SIEE SEP**

On May 7, 2012, SOT President William Slikker Jr. forwarded a message received from Seymour Garte of the Center for Scientific Review (CSR) announcing that the Special Emphasis Panel (SEP) called Systemic Injury by Environmental Exposure (SIEE) had been reinstated to review grant applications “in the fields of Environmental Health and Toxicology.” CSR is encouraging potential applicants in the fields of toxicology and environmental health sciences to consider submitting applications directed to this study section. (The referral guidelines for the reinstated SIEE Study Section have changed; please view the [new guidelines for SIEE](#).)

At this point, CSR staff has begun the process of preparation for the return of SIEE, including recruitment of reviewers, setting dates for meetings, etc. It is anticipated that the first meeting will be held in February 2013 to review applications submitted for the October/November 2012 deadlines.

SOT leadership worked with the CSR for a number of years regarding the need for a Study Section focused on toxicology. Reinstating the SIEE review panel is the next step in that process and builds on the efforts and







































## Building for Future of Toxicology

On March 15, the Issues Session “Building for the Future: Strategic Initiatives for the Endowment Fund,” provided a forum to discuss the need for “increased effort to develop and grow Endowment Fund(s) to support the strategic objectives of SOT.” This session was presented by 2012–2013 Vice President Lois D. Lehman-McKeeman, and 2012–2013 Vice President-Elect and 2011–2012 Endowment Fund Board Chair Norbert E. Kaminski.

Dr. Lehman-McKeeman explained the importance of holding an Issues Session on the SOT Endowment. Key points emphasized by Dr. Lehman-McKeeman included the use of endowment funds to enable SOT to support new initiatives and long-term activities not supported by the SOT operating budget.

During this session, Dr. Kaminski also presented important facts about the management of the Endowment Funds to session attendees that included:

- One hundred percent of each contribution goes toward supporting endowment activities. All of the Endowment administrative costs are defrayed by the SOT operating budget.
- Donations to each named fund are accounted separately.
- The goal of the Endowment is to support long-range activities, many of which are in perpetuity.
- Typically SOT operating funds are used to support activities for the entire membership; whereas, the endowment funds are often targeted toward specific subgroups within SOT.

Since the inception of the Endowment Fund(s), SOT Leadership and Endowment Fund Board members have sought input from the membership on aspirational goals that these funds could support that would generate interest and enthusiasm by SOT members. Toward this end, an Endowment Fund Survey was conducted in early 2012 and followed up with focus group meetings held during the SOT 51st Annual Meeting. Feedback indicated support for initiatives such as:

- Early and mid-career development opportunities, including career internship programs;
- Training opportunities for Undergraduate, Graduate Student, and Postdoctoral Trainees;
- Award travel scholarships for relevant meetings other than SOT, such as Junior Investigator Awards;
- Granting mechanisms to provide a bridge to independent research; and
- Training opportunities for international scientists, such as the Global Senior Scholar Exchange Program.

The SOT Endowment Fund Board will be working to develop strategies by which new opportunities can be established from a well-funded endowment. For more information on contributing to the Endowment Funds, visit the [SOT website](#).

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## Tox ShowDown Debuted at 2012 SOT Annual Meeting



*Jessica Placido, Sue Ford, Phil Wexler, Winning Team of Toni Hayes, Lou Trombetta, and Peter Goering and Marion Ehrich (judge)*

*What curious Australian egg-laying mammal is venomous? Corexit 9500 and Corexit 9527 are the names of two substances used to help in the cleanup of what recent environmental accident? The TUNEL assay is used to assess \_\_\_\_\_. To which drug was Sherlock Holmes addicted?*

If you know the answers to these questions, you could have been a prize-winning contestant at SOT's rousing *Tox ShowDown*, held on the evening of March 13 in conjunction with the 2012 SOT Annual Meeting in San Francisco. An *It's Academic* style game, inspired by the North American Congress of Clinical Toxicology's long running *Toxicology Quiz Bowl* and St. John's University's *Tox ThrowDown*, the *ShowDown* tested contestants' knowledge of a cornucopia of toxicological fact and fancy.

The event was organized by Sue Ford (recipient of SOT's 2012 Undergraduate Educator award) and Jessica Placido of St. John's, timekeeper and scorekeeper, respectively, and Phil Wexler of the National Library of Medicine, emcee. In spite of competition from other tempting social activities, the *Tox ShowDown*, aided by its mix of education, entertainment, prizes, cash bar, and just plain craziness, drew a sizeable and enthusiastic audience. Good-humored cheering and jeering students constituted about half the crowd. The contestants brought an admirable mixture of toxicology knowledge and personal panache to the game. The three teams were:

- *The Toxic Metabolites*: Brent Kerger, ChemRisk; Mark Maddaloni, US EPA; Alessandro Venosa, Rutgers University
- *The Free Radicals*: Peter Goering, US FDA (and SOT 2010–2012 Secretary); Lou Trombetta, St. John's University; Toni Hayes, Pfizer (**winning team**)
- *The Endocrine Disruptors*: John Duffus, Edinburgh Centre for Toxicology (and recipient of SOT's 2012 Education Award); Prasad Krishnan, Penn State University; Anne Pilaro, US FDA

The distinguished judge for the evening was Marion Ehrich of the Virginia-Maryland Regional College of Veterinary Medicine and past president of SOT. Dr. Ehrich wielded a spiffy gavel consisting of a crab mallet donated by SOT headquarter's staff, topped by a purple rubber squeeze toy.

In Round 1, teams were asked questions sequentially and allowed to confer. They were awarded one point for a correct answer. In Round 2, a question was posed to all teams, and the first contestant to raise a hand in reply to a question would be called upon to answer. His or her team would get one point for a correct answer, and be given a multi-part bonus question to accrue more points.

The Graduate Student Leadership Committee (GSLC) was the primary SOT affiliated sponsor for the event. Prizes donated by Elsevier (laptop bags, mouse pads, and Zagat's *America's Top Restaurants* guides) were distributed to all participating contestants, while prize books for the winning team were donated by CRC Press/Taylor and Francis Group (*Handbook of Laboratory Animal Science*, 3rd ed. Vol 1, Newman's *Fundamentals of Ectotoxicology*, 3rd ed, and *The Toxicology of Fishes* ). CRC Press also provided three door prize books (*Laboratory Mouse Procedural Techniques*, *Laboratory Rat Procedural Techniques*, and Wexler's *Chemicals, Environment, Health: A Global Management Perspective*). Finally, a crystal beer stein, elegantly engraved by Matt Geraci, a clinical toxicologist in Jacksonville, Florida, and donated by his firm, *The Blasting Furnace*, was awarded to Marion Ehrich.

And although the contestants could undoubtedly quote toxicological chapter and verse on *phthalates*, one of their biggest challenges of the evening was spelling the word itself.

Mike Gallo of Rutgers, in attendance with several of his students, commented, "The ShowDown was a great experience that brought together toxicologists, from students to seasoned practitioners. Terrific esprit de corps. Questions ranged from Shakespeare to current topics. A teachable moment for all attendees, contestants, and judges. Phil Wexler deserves special thanks. This is an event that should be continued at future SOT meetings."

*Tox ShowDown* is planned for San Antonio, and if you'd like to participate, it's not too early to express your interest; just contact [David Rossé](#).



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## PDA Career Session on Art of Negotiation Was Standing Room Only

Art of Negotiation Career Session at SOT 2012 Annual Meeting A Success!

*Submitted by Larissa Williams and Ebany Martinez-Finley, SOT PDA*



*Larissa Williams introduces speaker Ellen Kandell*

The “Art of Negotiation: A Fundamental Skill for Scientists” Education-Career Development session was held on Tuesday, March 13 at the SOT 2012 Annual Meeting in San Francisco, California. The session was chaired by Postdoctoral Assembly (PDA) board members Larissa Williams and Ebany Martinez-Finley. There was “Standing Room Only” for the event with attendance estimated at over 250 meeting participants! The session was sponsored by the PDA and endorsed by the Career Resource and Development (CRAD) Committee and the Hispanic Organization for Toxicologists and Women in Toxicology Special Interest Groups (SIGs).

The audience spanned a wide variety of ages and backgrounds, from undergraduate and graduate students, and postdocs to department chairs and project managers. Ellen Kandell of Alternative Resolutions, LLC introduced audience members to the various aspects of interest-based negotiation, the idiosyncrasies of negotiation, and walked through a negotiation-planning guide.

After the formal lecture, four panelists Jeff Wong (California US EPA), John Budroe (California US EPA), Jerry LeBlanc (North Carolina State University), and Ron Gerson (Gerson Pharma Solutions) shared their experiences in negotiation across various sectors of toxicology including pharma, academia, and government. During the remaining 45 minutes, it was open microphone time for questions from the audience. Questions ranged from advice for specific situations to general questions concerning how to identify what is negotiable.



Survey results indicate that the career session was a huge success, providing the varied toxicology community that attended with information and assistance they can use in their work.

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## SOT Is Going Green! New Options for the SOT Annual Meeting Program

The 2012–2013 SOT Council is reviewing the Annual Meeting as a strategic Mega Issue. Part of this process involves a review of all available data including input from the Annual Meeting Survey. In reviewing this information, some interesting details about the distribution and use of the Annual Meeting *Program* came to light.

The Annual Meeting *Program* is a useful resource for all members—historically it has been printed and mailed and has also been made available in PDF for download via the SOT website. In May, SOT Council discussed that the Annual Meeting *Programs* are sent to all SOT members even though they may not be attending the Annual Meeting. In addition, copies of the SOT *Program* are freely available at the Annual Meeting. The impact of this practice is that approximately 12,000 *Programs* are printed, and every member receives a copy in the mail whether they attend the meeting or not. Each year, several hundred books are printed but never used and then discarded for recycling. Additionally, some members do not use the *Program* at all, as options such as the Itinerary Planner are available to search and organize schedules for the meeting. In an effort to be more “green” and cost efficient, the following changes

are being implemented for the 2013 Annual Meeting on a trial basis:

- Individuals who register for the Annual Meeting will be asked to indicate on the registration form whether they wish to have the SOT *Program* mailed to them or choose to pick it up at the meeting. There will be a check box added to the registration form to indicate the desired option.
- For those members who do not register for the meeting, SOT *Programs* will be mailed only if requested. Members will have to contact SOT Headquarters to request the *Program*. As noted above, the Annual Meeting *Program* (i.e., Sessions, Abstracts, and Meetings) is posted on the SOT website in January for download in PDF.

We will pilot this change for the 2013 Annual Meeting and then solicit feedback after the Annual Meeting. It is our hope that this change will significantly reduce the number of unused SOT *Programs* and bring savings to the Society.

Additionally, please feel free to contact any Council member or SOT staff with your ideas to support SOT becoming a more green society!

SOT Mega Issue Team—Denise Robinson-Gravatt (Chair), Jon C. Cook, Norbert E. Kaminski, Lois D. Lehman-McKeeman, and Betty Eidemiller

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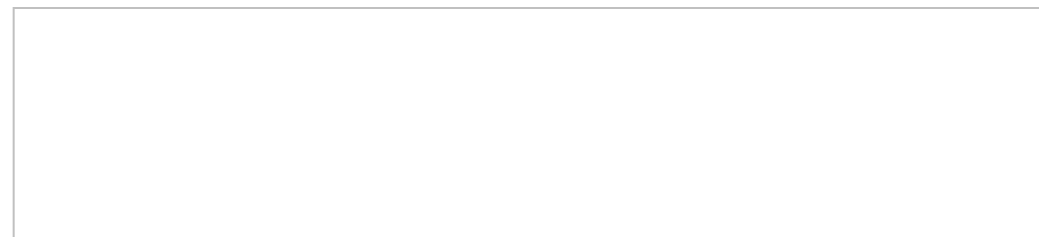
## SOT Annual Meeting Lost and Found Items—Contact SOT Headquarters

At the conclusion of the 2012 SOT Annual Meeting in San Francisco, California several items remained unclaimed in the SOT Headquarters lost and found. These items include a cell phone case, two pairs of glasses, a watch with a maroon and black band, black vinyl notebook, and a blue and black jacket. To reclaim these items, please contact [SOT Headquarters](#).

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### Science News

## ToxSci June 2012; Vol. 127, No. 2 Now Online: SOT Education Summit Summary



Dear Colleague,

The June 2012, Vol. 127, No. 2 of *Toxicological Sciences* is now available [online](#).

This issue includes [“The Toxicology Education Summit: Building the Future of Toxicology Through Education”](#) by Aaron Barchowsky, Lorrene A. Buckley, Gary P. Carlson, Vanessa A. Fitsanakis, Sue M. Ford, Mary Beth Genter, Dori R. Germolec, Teresa L. Leavens, Lois D. Lehman-McKeeman, Stephen H. Safe, Courtney E. W. Sulentic, and Betty J. Eidemiller.

The Society of Toxicology convened the [Toxicology Education Summit](#) to discuss the state of toxicology education and to strategically address educational needs and the sustained advancement of toxicology as a profession. The Summit focused on core issues of: building for the future of toxicology through educational programs; defining education and training needs; developing the “Total Toxicologist”; continued training and retraining of toxicologists to sustain their

careers; and, finally, supporting toxicology education and professional development. This report summarizes the outcomes of the Summit, presents examples of successful programs that advance toxicology education, and concludes with strategies that will insure the future of toxicology through advanced educational initiatives.

Proceeds from the publication of *Toxicological Sciences* are used by SOT to fund programs benefitting researchers in academia, industry, government, and other scientific organizations. By subscribing to *ToxSci*, submitting papers, and reviewing submissions, you make a direct contribution to the toxicology research community. Thank you.

With an increased impact factor of 5.093 (up from 4.814), *ToxSci*, the official journal of SOT, is the top original research journal in Toxicology.

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## **CSR Reinstates Special Emphasis Panel: Environmental Health and Toxicology Grant Applications**

Dear SOT Members,

I am forwarding a message received from Seymour Garte of the Center for Scientific Review (CSR) announcing that the Special Emphasis Panel (SEP) called Systemic Injury by Environmental Exposure (SIEE) has been reinstated to review grant applications “in the fields of Environmental Health and Toxicology.” SOT leadership worked with the CSR for a number of years regarding the need for a Study Section focused on toxicology. This is the next step in that process and builds on the efforts and accomplishments of many individuals. You are encouraged to submit your proposals to this SIEE and the guidelines for submission are included in Dr. Garte’s message below.



Thank you,

William Slikker Jr., PhD, ATS  
2012–2013 SOT President

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### **Systemic Injury by Environmental Exposure (SIEE)**

On January 13, 2012, an expert Working Group met in Bethesda to advise CSR on how to proceed with the review of grant applications in the fields of Environmental Health and Toxicology. That Working Group agreed on a recommendation to reconstitute the Special Emphasis Panel called Systemic Injury by Environmental Exposure as a chartered Study Section in the DKUS IRG. The Working Group also developed a set of guidelines to define the scope of the new study section.

Following the Working Group meeting, senior staff at CSR have discussed and considered these recommendations. One consideration was that new Study Sections are generally established directly after the successful conclusion of a trial SEP. Since it has been three years since the final meeting of the SIEE trial SEP, it has been decided to reconstitute SIEE as a SEP, to meet for 1 to 3 review cycles, before moving on to request permanent chartered status. This will give the scientific community time to generate and submit a sufficient number of high quality applications for review, and will give CSR and its Advisory Council sufficient data to ensure the viability of the new Study Section in the current timeframe. Meanwhile, the new SEP will function as a regular study section dedicated to review of environmental health and toxicology applications.

At this point, CSR staff has begun the process of preparation for the return of SIEE, including recruitment of reviewers, setting dates for meetings, etc. We anticipate the first meeting to be in February 2013, to review applications submitted for the October/November, 2012 deadlines.

We encourage potential applicants in the field of toxicology and environmental health sciences to consider submitting applications directed to this study section, and to view the [new guidelines for SIEE](#).

**Applicants are strongly advised to include a cover letter asking for their applications to be reviewed in the SIEE Special Emphasis Panel (SEP).** The future success of this study section will largely depend on the response from the research community in this vital discipline. Best of luck to all applicants.

Seymour Garte, PhD

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## **NIH Requests Information on Proposal to Modify Biosketch—June 29 Deadline**

Currently the Biographical Sketch (Biosketch) section of National Institutes of Health (NIH) grant, cooperative agreement, and fellowship [forms and applications](#) includes the applicant's personal statement, position and honors, peer-reviewed publications, and current and prior research support. In response to concerns that this format does not fully allow applicants to describe the nature and significance of their achievements, NIH is requesting feedback ([NOT-OD-12-115](#)) on a proposed model and welcomes other proposed changes. [Comments](#) are encouraged and accepted electronically through June 29.

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## **Calls for Interoperability to Advance Science and Address Data Intergration Needs: CCT Workshop**

*Multi-Scale Integration of Human Health and Environmental Data Is Emerging Standard of Best Practice*

*Submitted by Annie M. Jarabek and Glenn Suter, National Center for Environmental Assessment, US Environmental Protection Agency*

*Disclaimer: The views expressed in this article are those of the authors and do not necessarily represent the views or policies of the US Environmental Protection Agency.*

An SOT Contemporary Concepts in Toxicology (CCT) workshop entitled “Multi-scale Integration of Human Health and Environmental Data,” co-sponsored by the US Environmental Protection Agency (US EPA), was held at the US EPA campus in Research Triangle Park, North Carolina on May 8–11, 2012. The Society of Environmental Toxicology and Chemistry (SETAC), International Society of Exposure Science (ISES), the Society of Risk Analysis (SRA), and the International Environmental Modelling and Software Society (iEMSs) also co-sponsored the workshop along with several other governmental agencies including the US Food and Drug Administration (US FDA), USA Army Engineer Research and Developmental Center (ERDC), US Geological Survey (USGS), US Department of Agriculture (USDA), Pacific Northwest National Laboratory (PNNL), and US Nuclear Regulatory Commission; and private sector supporters including the American Chemistry Council, Environ, TERA, OpenMI, Open Geospatial Consortium, and ICF.

CCT workshops are intended as in-depth meetings of significant duration to explore cutting-edge topics. The objective of this meeting was to provide a unique opportunity to convene scientists from different sectors (government, industry,

NGO, and academia) and across the exposure-dose-response-analysis continuum for both ecological and health endpoints to discuss the timely topics of data integration, data management, and model interface needs with software developers, software engineers, database architects and administrators, and data analysts. The special aspect of including software and database experts was so these computational experts could hear the needs and then speak to the technology and design issues that transcend the scientific disciplines to ensure recommendations for a computational infrastructure to support all endeavors, especially data integration.

The workshop consisted of plenary presentations and thematic breakout sessions for five different disciplines: (1) Exposure, transport, and transformation; (2) Ecological risk, ecosystem services, and climate change; (3) Dose-response, Tox21, and risk; (4) Life-cycle/multi-criteria assessment and cost: benefit analysis; and (5) Information technology.

## **Plenary Presentations**

The first day of the workshop was devoted to plenary talks from each of the sectors and from different disciplines within each to introduce the range of issues and perspectives. Virtually all the talks emphasized the need to make data and models from diverse sources more available and more useful through interoperability. Both real-time exposure monitoring and new assays in molecular toxicology are creating huge data sets that must be integrated across exposure durations and different receptors. One speaker noted that we are in the era of a highly technical, “knowing generation” that expect data to be easily discovered electronically, asserting that if data cannot be located via Google then they essentially do not exist.

One participant felt that databases and computational tools must be maintained “live,” reflecting curation and annotation as data or models are used in various applications. Speakers also noted the need to extrapolate across steps in the development process (bench to bedside) and across scale, including the levels of organization within an organism to various locations (gene to globe). The ability to visualize and display data was considered a tool of great utility to convey content and aid inferences. Semantics was identified as a critical issue regarding interoperability for exchanging information across the disciplines. As examples, a vein is not the same in a leaf, fly, or mammal; and “species” in different modeling arenas may represent a reaction molecule or a rat.

An example of interoperability in the environmental arena was provided by Daniel Ames of Idaho State University. He described the Consortium of Universities for the Advancement of Hydrologic Science’s (CUAHSI) open Hydrologic Information System (HIS) including Hydrosolver, HydroDesktop and HIS Central. Together, they provide a complete platform for storing and organizing hydrologic and water quality data and then extracting, organizing, plotting, mapping, and linking to models. HIS achieves consistency, interoperability and transparency through standards and open licensing. It was noted that such comprehensive environmental descriptions will need to be linked to human health, toxicological, and life-cycle or benefit assessment models to achieve characterization of sustainability for environmental decision making.

The speakers from NGOs emphasized the need for openness both for their own projects and for the public. The information technology speakers described efforts to standardize data and model management in ways that enhance interoperability. The Open Modeling Interface Standard (Open MI) and Open Geospatial Consortium were presented as efforts that have achieved integrated dynamic environmental modeling via use of international standards for spatial data and interfaces. Resource description format (rdf) is a family of World Wide Web Consortium (W3C) specifications that were originally designed as a metadata data model that can be used as a general method for conceptual description or modeling of information that is implemented in web resources, using a variety of syntax formats.

## **Disciplinary Breakout Sessions and Thematic “Ambassadors”**

Experts in each of the five theme areas served as invited participants and joined other workshop attendees to grapple with articulating best practices and recommendations to facilitate data integration both within and across the disciplines. “Ambassadors” from other disciplines joined the discussions to foster cross-fertilization and stimulate development of interfaces and data integration, and feedback indicated that this was a particularly useful construct as each theme learned a great deal about the needs and challenges in the disciplines, representing some resonant and others disparate with their own. Consistent messages across the disciplines were heard with respect to the need for data discovery and modular



“plug and play” capabilities to facilitate comparisons and transparency in given derivations or decisions. The need for maintenance and curation to ensure quality assurance of databases also was a prominent recommendation.

### **Next Steps—Stay Tuned for Publications**

Participants in each session are developing state-of-the-science manuscripts that describe perspectives on best practices and summary of information technology needs to advance that discipline. A separate synthesis manuscript will articulate a set of recommendations for standards on interoperability and computational systems to support data integration across the disciplines.



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## **PPTOX III International Meeting on Role of Environmental Exposures and Nutrients: CCT Workshop**

*“Fantastic effort to bring together diverse subjects/people around the fetal programming issue.”*

*“The size of the conference was perfect and conducive to interaction.”*

*“The numerous opportunities to network and discuss with speakers and attendees were greatly appreciated.”*

*“This conference brought two separate fields together: threats from environmental chemicals and nutrition, both impacting early life development and disease risk in later life.”*

The [PPTOX III International Conference](#) held May 14–16, 2012, in Paris, France, focused on “Environmental Stressors in the Developmental Origins of Disease: Evidence and Mechanisms.” Immediately above are some of the survey comments received from conference attendees regarding this third SOT Contemporary Concepts of Toxicology conference (CCT) on Prenatal Programming and Toxicity (PPTOX). The first PPTOX conference took place in Torshavn, Faroe Islands in 2007 and the second in Miami, Florida in 2009.

This May 2012 international conference focused on the role of environmental exposures and nutrients during

development on subsequent diseases/dysfunctions in later life. The conference examined the animal and human data supporting this hypothesis (developmental basis of disease) by disease, organ system, and mechanism in order to review the current state of the literature and to identify mechanisms for the effects as well as to identify research gaps and challenges and integrate the basic and applied science.

Presentations and discussions addressed broad and diverse topics such as the following:

- New epidemiological and toxicological evidence for the contribution of developmental exposure to adult disease
- Predictive value of animal and alternative models
- Essential contribution of epigenetics to programming
- Effect of chemical or physical insults as well as nutritional imbalance on stem cells
- Long path from discovery to regulation

The Organizing Committee for PPTOX III included the following members

- Robert Barouki, Co-Chair (France)
- Peter Gluckman (New Zealand)
- Philippe Grandjean, Co-Chair (Denmark)
- Mark Hanson (United Kingdom)
- Jerrold Heindel (United States)
- Gérard Lasfargue (France)

This committee drafted a “consensus paper” on the current scientific insight in this field and the implications for future research and public health and sought the comments of conference attendees. Following a review of the comments, the organizing committee submitted this paper to the online journal, *Environmental Health* for publication. The June Issue of NIEHS *Environmental Factors* also includes an article on this conference, [“Scientists explore developmental origins of disease.”](#)

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## **Scientific Liaison Coalition Holds Fourth Successful Face-to-Face Meeting in San Francisco**

The fourth face-to-face meeting of the Scientific Liaison Coalition (SLC) was held in San Francisco, California on March 11, 2012, in conjunction with the SOT 2012 Annual Meeting. SLC Chair David G. Kaufman welcomed the society representatives and encouraged the members of this coalition to broaden the base of excellent topics and activities undertaken by this diverse group. In addition to Dr. Kaufman, who serves as one of the representatives of the American Association for Cancer Research (AACR), the meeting participants included John Benitez (American College of Medical Toxicology, ACMT), Sally Darney (Society for the Study of Reproduction, SSR), John DeSesso (Teratology Society), Patrick D. Guiney (Society of Environmental Chemistry and Toxicology, SETAC), Kenneth L. Hastings, (SOT Scientific Liaison Task Force, SLTF), Mary Jeanne Kallman (Safety Pharmacology Society, SPS), Thomas Knudsen (SLTF), Shawn Lamb (SOT Executive Director), Lois D. Lehman-McKeeman (SOT Vice President and Council Contact), Kevin McDorman (Society of Toxicologic Pathology, STP), Kenneth McMartin (American Academy of Clinical Toxicology, AACT), Donna Mendrick (SOT Disease Prevention Task Force, DPTF), Ofelia Olivero (Environmental Mutagen Society, EMS), Trevor Penning (American Chemical Society, ACS–Division of Chemical Toxicology), Sue Pitsch (STP Executive Director), Allister Vale (SOT Clinical and Translational Toxicology Specialty Section, CTTSS), Paul Watkins (SLTF, via phone), and Marcia Lawson, SLC Staff Administrator. Representatives to the SLC from the American Society for Pharmacology & Experimental Therapeutics (ASPET), The Endocrine Society (ENDO), International Society for the Study of Xenobiotics (ISSX), and the Society for Risk Analysis (SRA) were not available to attend this meeting.

The mission of the SLC was reviewed and affirmed by the meeting participants as follows:

- Improve the ability of societies to partner with other domestic and international organizations with the goal of

- increasing the impact of science to improve human and environmental health;
- Strengthen partnerships among scientific and health-based organizations to increase awareness of the impact of toxicology and related science on human health; and
- Function as a means to enhance cooperation among societies as equals with the goal of accomplishing objectives benefiting human health and disease prevention through joint and shared activities.

Significant outcomes of this meeting included the development and submission of two 2013 SOT Annual Meeting proposals and the request to endorse two proposals. Efforts are now underway to develop two Contemporary Concepts in Toxicology (CCT) conferences. All the endeavors of the SLC are related to human health and disease prevention.

The next face-to-face meeting of the SLC will be held in mid-November 2012 in the Washington, DC metro area. The SLC welcomes the participation of other societies whose missions are aligned with that of this coalition. For more information, please contact [Marcia Lawson](#), SLC Administrator.

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## Science News Alert

News Head

### SOT Sponsored and Endorsed Non-SOT Meetings

**Please see the information below and contact the organizers directly if you wish to participate.**

**You are encouraged to seek support for your meetings through the funding available for [Non-SOT Meeting support](#) and [Global Initiative Funding](#).**

#### **Teratology Society 52nd Annual Meeting—June 23–27**

The 52nd Annual Meeting of the Teratology Society will be held June 23–27, 2012, in Baltimore, Maryland. The 2012 meeting theme is “Global Perspectives in Teratology” and will highlight birth defects research and issues, which have global impact. Topics include maternal/fetal health in developing countries, impacts of nuclear disasters on reproduction and development, effects of Vitamin D deficiency on maternal and fetal health, international controversies concerning hazard- versus risk-based regulations, and novel computational approaches for assessing safety during pregnancy and development. The interdisciplinary nature of the Society provides unique opportunities to look broadly at these complex issues. For more information, visit the [Teratology Society Annual Meeting website](#).

#### **Upcoming Training Opportunities from Toxicology Excellence for Risk Assessment (TERA)**

Toxicology Excellence for Risk Assessment (TERA) has 2 upcoming Dose-Response Assessment Boot Camps. TERA’s Dose-Response Assessment Boot Camp is an intensive, hands-on training course in hazard characterization and dose-response assessment. TERA has trained over 300 people from 11 different countries in the last 5 years! Upcoming courses are a 4-day Course: July 23–26, 2012, in Sydney, Australia (following the World Congress on Risk) and a 5-Day Course: October 15–19, 2012, in Washington, DC. For more details visit the [TERA courses website](#).

TERA is also offering a webinar entitled “WEBINAR: Practitioner’s Guide to Risk Assessment for Developmental and Reproductive Toxicology (DART).” The webinar will be held on Wednesday, June 13, 2012, from 1:00 pm–5:00 pm EDT. The course is intended for health scientists and product stewardship professionals who need to consider the



potential for reproductive and developmental effects of their chemicals or products. Learning objectives of the course include: interpreting adversity and clinical relevance of DART endpoints; applying dose-response techniques; evaluating mode of action and human relevance; optimizing testing needs and strategies; and understanding key concepts in current risk assessment guidance for DART. For more details visit the [TERA webinars website](#).

For more information on any of the training offered by TERA, please contact: [Patricia Nance](#) at 513.542.7475, Ext 25.

### **Society of Toxicologic Pathology 31st Annual Symposium June 24–28**

“Mechanisms of Toxicity” is the theme of the Society of Toxicologic Pathology (STP) 31st Annual Symposium to be held June 24–28, 2012, at the Boston Marriott Copley Place. The global regulatory agencies and the general public require outstanding scientific rigor and quality in the human risk assessment of xenobiotics. To meet these demands, the toxicology and pathology professions are positioned to take advantage of key learnings captured from major advances in the molecular understanding of host defense, disease, and toxicity processes. The purpose of the 2012 Annual Symposium will be to examine the mechanism of toxicity in six general sessions covering tissue injury related to 1) host factors; 2) chemical structure; 3) xenobiotic cellular targets (on- and off-target); 4) new technologies (e.g., nanotechnology, siRNA therapy, and immunoconjugates); 5) cellular organelle specific effects; and 6) high profile environmental chemicals and consumer products. For additional information, please visit the [STP 31st Annual Symposium website](#).

### **Environmental Mutagen Society 43rd Annual Meeting September 8–12**

The 43rd Annual Meeting of the Environmental Mutagen Society (EMS), “EMS: The Next Generation,” will be held September 8–12, 2012, at the Hyatt Regency Bellevue, in Bellevue, Washington. The meeting provides a broad scientific forum for basic and applied researchers as well as students and teachers to review the latest information linking environmental conditions to adverse health outcomes. The emphasis of the meeting is to 1) present cutting-edge basic research in the areas of DNA repair, regulation of gene expression, epigenetics, systems biology, mutagenesis, inflammation cancer, and aging in eight symposia and seven keynote lectures; 2) present emerging “next generation” technologies and approaches in genomic research, genetic toxicology, and risk assessment; 3) feature the work of students, new and early stage investigators, and EMS members in six platform sessions; 4) network with students, mentors and colleagues at ten Special Interest Group (SIG) meetings, two receptions and a banquet; and finally 5) entice students and new and early stage investigators to become the “Next Generation” EMS members. This is a meeting not to be missed. For additional information, visit the [EMS 2012 Annual Meeting website](#).

### **8th Congress of Toxicology in Developing Countries—September 10–13**

The 8th Congress of Toxicology in Developing Countries (8CTDC) will be held from September 10–13, 2012, in Bangkok, Thailand. The 8CTDC will provide an opportunity to cover a wide range of topics representing the latest scientific advancements as well as toxicological problems in developing countries. Present your work by submitting an abstract by the submission deadline of April 30, 2012. Abstract submission instructions can be found on the [8CTDC website](#). Those who submit an abstract may be eligible to receive a travel award to assist in attending this world class meeting. Full information and award application can be found on the [IUTOX website](#). A scientific program is planned that will allow attendees to participate and benefit from the exchange of views and ideas from around the world. Due to its natural beauty and rich cultural heritage, Bangkok is a unique city with lots to offer its visitors. Register for 8CTDC by June 2, 2012, to receive discounted [registration rates](#). Full meeting details may be found on the [8CTDC website](#).

### **Safety Pharmacology Society, October 1–4**

The [SPS 12th Annual Meeting](#), which will be held October 1–4, 2012, in Phoenix, Arizona provides a dynamic forum for sharing the latest in safety pharmacology. The scientific program offers in-depth discussion of relevant topics to keep you “in the know.” This meeting will feature a diverse range of scientific sessions organized into two thematic tracks and covering issues specific to important therapeutic areas, new regulatory developments, and new technologies. Please consider [submitting an abstract](#) for presentation as a poster by the deadline of June 15, 2012. From these submissions, a number will be selected for short oral communications. The meeting will kick off with a full day of [Continuing Education](#) courses in a broad range of topics. In an effort to support attendance from our younger

colleagues, please note that SPS offers [Student and Junior Investigator Travel Awards](#). [Register now](#) to receive the Early Bird rate.

### **2012 Careers in Toxicology Workshop—July 18–20**

The Curriculum in Toxicology at the University of North Carolina at Chapel Hill will hold a workshop on career tracks in toxicology at the North Carolina Biotechnology Center in Research Triangle Park, North Carolina. This workshop is targeted to students enrolled in graduate training programs in toxicology. Its aim is to expose trainees to employment paths beyond traditional academic research settings, including research and regulatory careers in the private and public sectors. The program will include presentations by toxicologists in senior positions in the pharmaceutical, consumer products, energy and chemical industries, as well as government agencies and private consulting firms. Additional information will be available on the [NCbiotech website](#).

### **2nd International Conference on Environmental Pollution, Restoration, and Management: Hanoi, March 2013—Abstract Submission Open**

This international conference will be held in Hanoi, Vietnam, March 4–8, 2013. In addition to SOT, the sponsoring organizations include the Society of Environmental Toxicology and Chemistry (SETAC), Loyola University of Chicago, and Hanoi University of Science. According to the conference organizers, “this conference is important for understanding and solving environmental problems and is critical to scientists, managers, and students in developing countries.” Participants from 54 different countries attended the first conference, and this second conference is anticipated to provide great opportunities for research and education collaborations for students and scientists around the world. The [abstract submission site](#) is now open. More information can be found on the [conference website](#) or contact [Tham Hoang/Rachel Pryor](#), or [Nhan Dang](#).

### **Other Meetings of Interest**

#### **Short Course on Industrial Toxicology and Pathology July 23–27**

The 9th Biennial Short Course on Industrial Toxicology and Pathology, sponsored by the University of Illinois College of Veterinary Medicine and co-sponsored by the Society of Toxicologic Pathology, will be held July 23–27 in Champaign, Illinois.

*Session One: Toxicology & Pathology in Drug Discovery and Development* including Emerging Issue: Metabolic Syndrome. This session is designed for toxicologists, pathologists, and other professionals working in the pharmaceutical, chemical, and consumer products fields with a primary emphasis on drug discovery and development. The session also is applicable to professionals responsible for design and evaluation, safety assessment, and regulatory issues associated with product development in industry, government, and contract laboratories. The objective of the session is to address current global issues in the rapidly advancing fields of toxicology and pathology; to enhance attendees’ skills in interpreting animal safety studies; to facilitate interactions with federal regulatory agencies; and to provide networking opportunities.

*Session Two: Contemporary Concepts in Target Organ Toxicologic Pathology. Renal and Respiratory Systems:* This session is designed for pathologists, toxicologists, and other professionals working in toxicology-related fields such as the pharmaceutical, chemical, consumer, and environmental areas. The objective of the session is to provide an understanding of the basis and manifestations of target organ responses to xenobiotic injury as well as cutting-edge concepts. Further information available on the [course website](#).

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.

Mark your calendar SOT Annual Meeting [March 10–14, 2013!](#)

## **Legislative and Regulatory Update**

### **SOT Urges Hill to Increase Funding for NIH and NIEHS**

SOT and a number of scientific societies and nongovernmental organizations will be submitting a letter in early April urging leaders of both House and Senate Appropriations Subcommittees to provide an appropriation of \$32 billion for the National Institutes of Health and \$717.7 million for the National Institute of Environmental Health Sciences in FY2013. The \$32 billion represents a 4.5 percent increase over the FY2012 level of \$30.7 billion. The letters will be sent to the Chairman and Ranking Member of the House Appropriations Subcommittee on Interior, Environment and Related Agencies and to the Chairman and Ranking member of the Senate Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies. In the letters, SOT and others urge the Members of Congress to “sustain, not curtail, the innovative biomedical research pipeline into prevention, treatments, and cures for diseases affecting millions of Americans.”

In related developments, more than 150 Members of the House of Representatives sent a letter to the House Appropriations Committee leadership requesting a funding level for NIH of at least \$32 billion. The bipartisan letter signed by Reps. Edward Markey (D-MA) and Brian Bilbray (R-CA) the Member said, “We feel this level is absolutely vital in order for NIH to continue improving health through medical science breakthroughs and to maintain international leadership in science and biomedical research.”

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### **Obama Administration Releases Bioeconomy Blueprint**

The Office of Science and Technology Policy (OSTP) has released the “[National Bioeconomy Blueprint](#),” which highlights the steps the federal government could take to accelerate economic growth that comes from discoveries in biological research. The five strategic objectives that are outlined in the Blueprint include the following:

1. Support for R&D investments, including trans-disciplinary and research across federal science agencies.
2. Facilitate transition of inventions from research labs to market, including a focus on translational and regulatory sciences.
3. Develop and reform regulation to reduce barriers and streamline processes.
4. Update training programs and align academic institution incentives with student training for national workforce needs.
5. Identify and support opportunities for public-private partnerships and precompetitive collaborations.

Upon releasing the [Blueprint](#), OSTP Director John P. Holdren said, “This Administration is committed to accelerating these advances and ensuring that federal agencies and private entities work together to bring the benefits of the bioeconomy to market as quickly as possible.”

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### **International Animal Research Regulations: Impact on Neuroscience Research Workshop Summary Released**

The Institute of Medicine sponsored a workshop that brought together key stakeholders to discuss animal research regulations from a global perspective and emerging and current trends in animal regulations as they apply to neuroscience. A report, which summarizes that workshop, is now available on the [Institute of Medicine’s website](#).

To consider animal research regulations from a global perspective, the IOM Forum on Neuroscience and Nervous System Disorders, in collaboration with the National Research Council and the Institute for Laboratory Animal Research, held a workshop in Buckinghamshire, UK, July 26–27, 2011. The workshop brought together neuroscientists, legal scholars, administrators, and other key stakeholders to discuss current and emerging trends in animal regulations as they apply to the neurosciences. This [document](#) summarizes the workshop.

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## **US EPA Identifies 18 Chemicals for Review and Assessment in 2013 and 2014**

The US Environmental Protection Agency (US EPA) has identified 18 chemicals for review and assessment in 2013 and 2014 as part of the US EPA's comprehensive approach to enhance the Agency's chemical management program. Additional information about this effort, which includes the list of 18 chemicals, can be found at [US EPA Existing Chemicals](#) website (Identifying TSCA Work Plan Chemicals).

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## **NAS to Review US EPA IRIS Assessment Development Process**

The National Academy of Sciences (NAS) plans to conduct a comprehensive review of the US Environmental Protection Agency's (US EPA) Integrated Risk Information System (IRIS), which is designed to protect Americans' health and the environment. In 2011, NAS issued a series of recommendations to improve the program, and US EPA has incorporated those recommendations. NAS plans to review current methods for weight of evidence analyses and recommend approaches for weighing scientific evidence for chemical hazard identification. For more information about IRIS go to, the US EPA's [Integrated Risk Information System \(IRIS\) website](#).

### **Position Advertisement(s)**

## **Employment Position: Sally Beauty Holdings, Product Safety Scientist**

Sally Beauty Holdings, the world's largest wholesale and retail distributor of beauty supplies, is currently searching for a Product Safety Scientist. Our world headquarters is conveniently located just five minutes north of Lake Lewisville, Texas off of I35E.

The Product Safety Scientist will be responsible for providing the technical expertise for product safety assessments and ensures chemical ingredient regulatory compliance.

- Develops and maintains databases to house chemical ingredient safety and regulatory information. Interacts with vendors/raw material manufacturers and obtain all necessary technical information, including BSE certificates. Researches available literature for safety data on ingredients. Reviews and summarizes safety data from all sources.
- Works closely with Merchandizing Department on private label product development. Evaluates quantitative formulas for regulatory compliance and safety assessment of the products.
- Develops and maintains a database to house fragrance material information. Interacts with vendors to obtain IFRA compliance certificate and safety evaluation for each fragrance composition. Obtains semi-quantitative fragrance disclosure and enters in the database. Assesses product impact as per IFRA annual amendment and other regulations affecting fragrances.
- Researches and maintains up-to-date ingredient regulatory status from various US and international regulatory agencies.
- Prepares safety assessment section of PCPC Safety Information Summary for each private label product.
- Maintains a close watch on developing science/toxicology issues related to cosmetic ingredients. Responds to PCPC and other ingredient use surveys.

Provides safety testing and claim substantiation support for private label products. Selects and qualifies outside labs to perform required studies. Coordinates with outside lab on study protocol preparation, testing sample submission, etc.

**Requirements:**

- PhD in toxicology, pharmacology, biomedical sciences, chemistry, or biochemistry required.
- One to three years of industry and/or academic laboratory experience.
- Understanding of pre-clinical and clinical studies and able to summarize findings accurately. Experience in US and international regulatory issues a plus.
- Good knowledge of computer software including Microsoft Word, Excel, and database systems like Access, etc.
- Versed in various Internet literature search engines.
- Good writing ability, communication skills, and organization skills. Must be familiar with chemical names and technical terms.

To apply, visit the [Careers at Sally Beauty website](#).

We offer a competitive salary, outstanding benefits package that includes medical, dental, vision, life Insurance, paid vacation and sick days, paid holidays, merchandise discounts, tuition reimbursement, profit sharing, and 401(k) with company match.

Sally Beauty is an Equal Opportunity Employer.

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