The Society of Toxicology is, by all measures, the largest and most influential professional society of toxicological scientists worldwide. Yet we are not content to idle ourselves in our success—there is just too much energy and commitment by our members. Instead, the Society is continuously seeking to improve the efficiency and impact of existing activities along with exploring new opportunities to serve both the membership and society in general. The activities of the Society are directed year-round by a strategic vision as inscribed in the long-range plan (LRP) and accompanying strategic goals and objectives, one of which is to “Continually improve organizational effectiveness.” With a society as large as SOT measured both in terms of members and financial resources, it is imperative to maintain our sights on the LRP as a guiding directive to avoid diffusing ourselves and our energies along tangential activities.

Each year, SOT Council revisits and reviews the LRP to insure its timeliness in best serving the evolving needs and goals of the Society. Once affirmed, the LRP then serves as guidance for creating and resourcing various committees and task forces to achieve specific objectives within the strategic plan. Again, it is essential to conduct periodic reviews to insure close alignment of ongoing activities and resources with the LRP. This year, SOT Council has allotted time at each bimonthly meeting to review and consider the manner in which we organize ourselves to accomplish the strategic goals of the Society. The tactical plan is to first align the committee structure to mirror the strategic goals of the LRP and then to engage the committees in strategic and tactical thinking to accomplish each goal.

The process began last January when the Education Committee, under the leadership of Judy Zelikoff, was encouraged to develop a strategic plan to address the educational goals of the Society. The committee responded with vigor in returning a robust and ambitious plan to assume a greater role in strategic planning and coordination amongst other standing committees to develop new initiatives to broaden the scope and better accomplish the education goals of the Society. The first tangible result of the committee’s strategy proposal was the recent establishment of the K–12 Committee and the Subcommittee on Minority Initiatives (SCMI) as separate free-standing committees rather than subcommittees of the Education Committee. The allure of strategic thinking was captured by the SCMI, which reorganized itself to cover a much broader scope of Society concerns and renamed itself to better reflect the broadened vision of the committee (Committee on Diversity Initiatives; CDI).

SOT Council continues to examine and reconsider the organizational infrastructure of the Society in terms of alignment with the LRP. Rather than attacking this as a wholesale reorganization, Council is referencing carefully researched and comprehensive reports from recent task forces as guidance in our strategic thinking. For example, the report by the Recruitment and Retention Task Force, chaired by Dan Acosta and published on the SOT Web site, offers fresh vision and planning for the Membership Committee. It is apparent from the report that there are many untapped opportunities to expand our
membership, and SOT Council will soon be working with the Membership Committee, chaired by Bill Slikker, to implement many of the recommended initiatives.

Another major area in which SOT Council is beginning to focus attention is the report by the Communications Task Force, chaired by Steve Cohen and published on the SOT Web site. Most often our frustration as a society is not with the science but with our limited ability to effectively communicate our findings and informed opinions to the intended audiences. Without an effective communications strategy, we speak with a muted voice in professing to be a valued resource to society. SOT Council realizes the critical need for a communications strategy and has contracted a special strategic planning session to address this issue. The goal is to identify the different potential audiences (legislators, media, public, other scientists, etc.) and the communications resources available to the Society (registry of experts, publications, position papers, congressional briefings, educational materials and workshops, etc.), and then to devise strategies to most effectively reach the respective audience, knowing that distinct communications strategies are required for the different targeted audiences. Of course the Board of Publications, chaired by Brian Day, and Lois Lehman-McKeeman, Editor of Toxicological Sciences, plays a key role in this strategic plan. Gary Carlson, Council Secretary, has accepted a lead role in facilitating these discussions.

Most recently, both the Regional Chapters and Specialty Sections were charged with taking a fresh, broadened and more strategic look at how they can better support the LRP of the Society. Officers from both groups were convened in mid-August in Chicago for strategy discussions facilitated by their respective Council Liaisons, Janice Chambers and Michael Holsapple. Among other things, the Regional Chapters discussed how they could more effectively bring the resources of the Society to the local communities and how they can serve as a vital voice of the Society to regional concerns. The Specialty Sections discussed strategies by which they can better leverage the expertise of the membership to enhance the overall scientific impact of the Society, not only in the Annual Meeting program, but also through increased offerings of Contemporary Concepts in Toxicology Meetings as well as other new and creative formats throughout the year. I, for one, left both sessions energized with anticipation of the new and exciting initiatives that will hopefully emerge from these initial strategic planning sessions.

In closing, I would like to thank all SOT members, officers, and councilors who have responded to the challenge by giving their time and creative energies to these strategic and tactical planning sessions. We’ve made important progress but are yet in the early stages of completing the overall plan. With such an invigorating start I can’t help but be anxious and optimistic that SOT will emerge from this exercise as a more vibrant and stronger member-driven organization having great influence and respect by fellow scientists and society as a whole—which is in direct line with the core vision of the Society.

Kendall B. Wallace, Ph.D., D.A.B.T.
2005–2006 SOT President

Login for Members Access on the Web

Your login for SOT Members Only access on the SOT Web site will be changing in response to database upgrades that are being made on the site. You will notice that the look of many of the Membership-related pages will change. Your full e-mail address (instead of your last name) will be required to gain member access, which include the On-Line Directory, Dues Renewal, and Membership Profile. The e-mail address should be the same e-mail address that was used to send you the notice about this newsletter. Your Member ID password will remain the same. SOT welcomes your feedback on the upgrades, please send your comments to SOTHQ@toxicology.org.

SOT and Non-Profit Foundation Reach Out to Africa

SOT members in collaboration with The Africa Education Initiative, a non-profit organization in the U.S., recently traveled to Africa to reach out to students and schools in Nigeria, a West African country. They had one mission in mind: to help advance science in Africa. The team, which included Jose Manautou, past SOT Councilor, and Chudy Nduaka, SOT Member and president of the Foundation, participated in an annual lecture series in toxicology and pathology organized by the African branch of the foundation. The team also traveled to Jos, a northern Nigerian city, where they launched the 3rd Annual Toxicology Internship Program. This is a three-month paid internship in which students are taught how to plan, design, conduct, and interpret toxicological studies. The importance of toxicology in drug development is also emphasized. The group also donated books, journals, computers, and other educational materials to the local schools. The trip was partially funded by the Society of Toxicology and U.S. pharmaceutical companies.
Over time, the Foundation has worked with several African countries, including Nigeria, Ghana, and Liberia, to assist educational institutions and schools by enhancing libraries (books, journals) and technology (computers, laboratory equipment), and providing scholarships and internship programs. The group has also launched an HIV/AIDS prevention program in hospitals in Liberia and Nigeria.

An overview of the organization’s activities is available on their Web site www.nef3.org.

Submit Award Nominations by October 9

SOT presents several prestigious awards each year in recognition of distinguished toxicologists and students. In addition to receiving the specific award, a plaque and generous stipend, recipients are honored at the Awards Ceremony at the SOT Annual Meeting, and their names are listed in SOT publications. The Awards Committee reviews applications and selects the winners for most SOT Awards and Sponsored Awards.

The on-line nomination process, which is available for SOT Sponsored Awards, is easy and takes less than 15 minutes to submit your nomination. Refer to the award descriptions to learn if the award nomination can be submitted through the Awards Nomination On-Line system.

Nominations for most of these awards must be submitted by a sponsor and a seconder who are full members of SOT. The supporting documentation must indicate the candidate's achievements in toxicology and is critical in the review of each candidate. See the award descriptions for the additional requirements for some of the awards, including the Sponsored Awards. The Best Paper Awards are reviewed by the Board of Publications, and the Education Committee reviews student award applications.

Most student award applications are still paper-based, but all forms can be printed from the SOT Web site. The exception is the Graduate Student Travel Award application, which can be completed on-line. For more information and applications, please visit the Awards and Fellowships section.

NIH Offers Education Loan Repayment Program

Biomedical researchers with doctoral degrees may be eligible for NIH assistance in repaying educational debts. NIH offers to repay up to $35,000 annually of the qualified educational debt of health professionals pursuing careers in biomedical and behavioral research. The programs also provide coverage for federal and state tax liabilities.

To qualify, applicants must possess a doctoral-level degree, devote 50% or more of their time (20 hours per week based on a 40-hour work week) to research funded by a domestic non-profit organization or government entity (Federal, state, or local), and have educational loan debt equal to or exceeding 20% of their institutional base salary. Applicants must also be U.S. citizens, permanent residents, or U.S. nationals to be eligible.

The five loan repayment programs (LRP) are the Clinical Research LRP, Clinical Research LRP for Individuals from Disadvantaged Backgrounds, Contraception and Infertility Research LRP, Health Disparities LRP, and Pediatric Research LRP.

For an on-line application, program information, or other assistance, visit the LRP Web site, telephone the Help line at (866) 849-4047, or send e-mail inquiries to lrp@nih.gov. All applications for 2006 awards must be submitted on-line by 8:00 PM EST, December 1, 2005.

SOT Responds to NIEHS Request for Comments for 2006

The Society submitted answers in response to questions posed by the Director of NIEHS, Dr. David A Schwartz, which were posted in the Federal Register and on the NIEHS Web site. NIEHS will use information obtained from researchers and the community to help define a new strategic plan, which
will determine the most effective ways to study environmental toxins and human health. The strategy is expected to focus on four elements: basic research, human health and disease, global environmental health, and training.

“Having these four areas serve as our backbone will allow us to strategically focus on funding the best science that will have the greatest impact on human health,” said Dr. Schwartz. “Having a transparent, inclusive and candid process will allow us to work together to identify new opportunities, establish research priorities, determine the best ways to translate our findings to the field and the public.”

Council also sent a separate letter to Dr. Schwartz about how SOT can be a resource for NIEHS and provided knowledge about toxicology. Dr. Schwartz has accepted an invitation to attend the November Council meeting.

NIEHS Requests Comments on Potential Privatization of Environmental Health Perspectives

The NIEHS Director, Dr. David Schwartz, is considering discontinuation of NIEHS sponsorship of Environmental Health Perspectives. To assist NIEHS in making this decision, a “Request for Comment” has been published in the Federal Register. If you would like to provide your input to NIEHS, the deadline for comment is October 28.

Federal Register Notice: 19 September 2005 (Volume 70, Number 180 pages 54951-54952)

SOT Updates Code of Ethics

Thank you to everyone who submitted comments in response to the draft revision of the SOT Code of Ethics. Suggestions from more than 70 members were incorporated into the final document, which was approved by the Council with 10 of 11 voting in favor. Members will be asked to agree to the new Code of Ethics on the 2006 Membership Dues On-Line Renewal form in November.

NLM ToxTutor Modules Becomes ToxLearn: Authors Wanted

The National Library of Medicine (NLM) and the Society of Toxicology are working together to update the ToxTutor modules. These modules were originally produced as a basic tutorial for those using the NLM toxicology databases.

With advances in toxicology and in Web-based learning technologies, the ToxTutor modules needed review for improved content and supplementation with additional material on topics such as genomics. The new version is called ToxLearn to reflect the emphasis on active learning and effective use of graphics and the web format to address the needs of a variety of learners. The content will be directed to the educated general public and undergraduate students.

The modules are:

1. Introduction
2. Dose-Effect and Dose-Response
3. Types of Toxicity
4. Factors Affecting Toxicity
5. Toxicokinetics and Toxicodynamics
6. Toxicity Assessment – Human
7. Toxicity Assessment – Ecological
8. Applied Toxicology

The first three modules and Web template are in draft. The ToxLearn Steering Team is looking for authors to develop additional sections of the site. Authors will receive a stipend. Contact Betty Eidemiller at SOT Headquarters if you are interested in contributing text, and indicate the module(s) of interest.

The current Steering Team includes Philip Wexler, chair; John Duffus, Tammy Dugas, Sue Ford, Jane Huggins, Michael Kamrin, and Paul Wright, members; and Paige Lawrence, Education Committee Liaison. Others who served on the Steering Team at the beginning of the revision include Craig Marcus, Greg Moller, Norbert Page, and Rosita Proteau.

Attention Academic Programs: New SOT Academic and Career Resource Guide Debuts

The Society of Toxicology is releasing the new Resource Guide to Careers in Toxicology Web site this fall. For the first time since 1999, SOT is asking that academic programs subscribe so that your
up-to-date curriculum description is included in this easy-access Web site. Apart from including basic description information and a link to your individual program Web site, you may submit photos representative of your program, which is a new feature. Students can choose geographic or topic parameters to search the listings.

If you are currently in the on-line listing you will be able to update your program upon subscribing. Programs not currently listed will be able to enroll easily by providing all the requested information electronically.

The process for updating and maintaining the listing of academic programs in toxicology will be all-electronic. The subscription charge will defray the cost for SOT to maintain this listing, direct traffic to it, and publicize the availability of this resource for students looking for information about further training in toxicology. The subscription charges for three year access are as follows: $500 for Ph.D. and post-doctoral programs, $250 for programs conferring a master's as a highest degree, and $100 for programs with undergraduate degrees or certificates only.

To subscribe or to investigate information about careers in toxicology, follow the navigation structure on the SOT home page. Expansion of the career information is in the works, with the planned addition of interviews with students and other multi-media aspects to demonstrate the exciting and diverse field of toxicology. Suggestions or questions can be directed to Betty Eidemiller at SOT Headquarters.

American Board of Toxicology (ABT) Requests SOT Member Participation in Survey

At a recent strategic planning session of the Board of Directors of the American Board of Toxicology, a key objective identified was continued responsiveness to the ABT Diplomates and potential Diplomates. To help achieve this objective, the ABT is undertaking an initiative to measure the professional value of ABT certification.

In order for this initiative to be successful, ABT requests that members of SOT respond to the survey. To take this survey, please visit the ABT Web site and follow the on-line instructions.

With this survey ABT will measure how individuals view the certifying examination, whether changes in the examination structure and content need to be undertaken, the role of membership in different professional societies (including SOT) in pursuing certification, and whether additional certifications are desired, (e.g., risk assessment).

The survey should take about 15 minutes to complete. Your individual responses are completely confidential. ABT is equally interested in the responses of non-Diplomates and Diplomates in academia, government, and industry. Please assist the ABT by completing this survey by the end of November. Thank you for your help and participation.

The American Board of Toxicology

Special Membership Upgrade is Offered to Student Members

SOT is offering a special membership upgrade to Graduate Student/Post-Doctoral members (who have belonged to SOT for one year or more). Graduate Student/Post-Doctoral members who qualify for Associate or Full Membership, can apply and, if accepted, will continue to pay dues at the student rate of $20 for one year. They will also receive a free Specialty Section membership for that year.

Increased opportunities for Associate Members include:

- Access to an electronic version of Toxicological Sciences and reduced rates for a print subscription;
- Eligibility for participation on many SOT appointed committees and as a regional chapter officer;
- Ability to sponsor non-member colleague abstracts at the Annual Meeting; and
- Eligibility for many of SOT’s distinguished awards.

And benefits added to these for Full Members include:

- Voting privileges at the Annual Meeting, special meetings, election of officers of the Society, and for other matters;
- Eligibility to be an SOT officer; and
- Eligibility for elected Committees.

Criteria for membership at the Associate Member level include demonstrated professional scientific activities in toxicology, evidence of continuing professional involvement in the discipline, and
sponsorship by two Full Members of the Society. Candidates for Full Members also provide evidence of accomplishment either in peer-reviewed publications or by weight of professional experience. The process to apply for Associate or Full Membership is quick and easy using the on-line application. Deadlines for application review cycles are January 1, May 1, and September 1. More information is available under Membership or by contacting Rosibel Alvarenga, at Rosibel@toxicology.org or (703) 438-3115 ext. 1432.

SETAC Offers Free Trial Subscription to SOT Members

From now until October 31, 2005, access your free trial subscription to the Society of Environmental Toxicology and Chemistry (SETAC) Journals Environmental Toxicology & Chemistry (ET&C) and Integrated Environmental Assessment and Management (IEAM). Follow the steps below to claim your free trial subscription:

1. Go to www.setac.net
2. Click "Not Already a Customer? Click here"
3. Enter the requested information

Once you complete the information form you will automatically be logged-in and receive an e-mail with your username and password. Follow the instructions in the e-mail to access the full text articles of the journal.

Annual Meeting Highlights

Animals in Research Workshop at Annual Meeting Again Draws Large Crowd

The Animals in Research Committee sponsored a workshop during the Annual Meeting on Wednesday, March 9, "Toxicological Research and Testing: Best Practices and Opportunities for Laboratory Animal Refinement, Reduction, and Replacement," which by all indicators was a huge success. Co-Chairs Stephen M. Lasley, Ph.D., and William S. Stokes, D.V.M., developed an interesting and valuable session with recognized leaders in this field giving excellent presentations. The size of the audience was standing room only (200–250) throughout the program, frequently making it difficult to get through the door into the room.

The workshop was organized around the concept that in the performance of toxicology studies—whether for purposes of product safety testing or identifying mechanisms of toxicant action—it has become increasingly important to adopt practices and approaches that refine, reduce, and replace the numbers of laboratory animals utilized. Incorporation of these best practices into studies ensures that animals are used in the most humane and judicious manner consistent with successful attainment of the research or testing objectives. Adoption of these practices is of timely importance because of continually increasing regulatory oversight of animal care and use. Consideration of these issues from different viewpoints was of broad interest to toxicologists.

These factors were first addressed by William S. Stokes, D.V.M., who described best practices for regulatory testing that include careful consideration and appropriate incorporation of in vitro methods, humane endpoints, and tiered testing strategies. He explained the weight-of-evidence evaluation made at the completion of each stage of testing to ascertain whether sufficient information was present for determination of hazard, or if additional data were needed. In an interesting presentation, Marilyn Brown, D.V.M., reviewed principles underlying current best practices for housing and providing environmental enrichment that should be consistently utilized across species. These are factors that may potentially influence study outcomes, and that should be employed to improve animal well-being in a manner that is consistent with testing objectives.

James F. McCormack, Ph.D., discussed Good Laboratory Practices (GLP) requirements for pre-clinical safety studies, stating that these are important factors to address and that optimal animal welfare practices consistent with compliance must be ensured. The objectives of GLP regulations were reviewed, and the use of the GLP quality management system in balancing adequate veterinary care with the need to acquire critical product safety information was described. The application of toxicogenomics to pre-clinical safety studies involving animals is an emerging issue, and potential opportunities to employ these methodologies and refine, reduce, and replace animal use were proposed by Leonard M. Schechtman, Ph.D. He emphasized that regulatory acceptance of these technologies for decision-making purposes will necessitate standardization, validation, and demonstration of biological relevance.

The final presentation by John C. Donovan, D.V.M., provided an update of the evolution of European Union animal welfare laws and their potential impact on harmonization of animal care programs and toxicological research, a relevant concern to multinational companies. He summarized the progress of
appointed European working groups in addressing the scope of legislation under consideration, how experimentation should be authorized, the function of ethical review committees, and pain categorization.

Future programs are being developed by the Animals in Research Committee with the intent to provide these sessions at the Annual Meeting on a regular basis.

2006 Scientific Program Overview

The SOT 45th Annual Meeting, to be held at the San Diego Convention Center in San Diego, California, promises to provide the latest in toxicology research across all disciplinary areas. This five-day program includes a Continuing Education (CE) program, a Plenary Lecture, other Special Sessions, Symposia, Workshops, Roundtable Discussions, and Platform and Poster Presentations, as well as three days of the largest toxicology exhibit, ToxExpo™.

A large number of excellent scientific sessions and CE courses were submitted for the meeting. This year the Program Committee has accepted 30 Symposia, 17 Workshops, 7 Roundtables, and 1 Historical Highlights session. The CE Committee is offering 11 regular courses, two of which will be offered in the morning and repeated in the afternoon, and one sunrise course.

SOT appreciates the time and effort from all who have submitted proposals and everyone involved in making the 2006 Annual Meeting a success.

**Symposia**

- New Concepts in the Neurotoxicology of Lead
- Gene Nutrient Environment Interactions as Risk Factors for Birth Defects: Fumonislin, Folate, Genetic Variation and Neural Tube Defects
- The Role of MAP Kinases in Metal Toxicity
- Indirect Mechanisms of Toxicity: Advancing Our Understanding of Neuroendocrine-Immune Interactions
- Models and Mechanisms of Occupational/Environmental Asthma
- The Bases for Inter-Individual Differences In Susceptibility to Allergic Disease
- Obesity as a Modulator of Chemical Toxicity
- Lipidomics of Cell Death
- Role of the Kupffer Cell in Mediating Hepatic Toxicity and Carcinogenesis
- Application of Genomics to Evaluating Mechanisms of Genotoxicity and Carcinogenicity
- Risk Assessment Implications of Direct Nose-To Brain Transport of Inhaled Xenobiotics
- The War on Ozone in the 3rd Millennium: Toxicology and Health Effects Update
- Historical Perspective on Inhalation of Low-Solubility Particles and Lung Tumor Formation
- Air Pollution: Vanguard Toxicological Approaches Considering Atmospheric Aging
- Using Structure-Based Approaches for Hazard Identification and Risk Assessment
- Mode of Action Associated with Induction of Endothelial Cell Tumors - Hemangiosarcoma
- Metabonomics: Moving Beyond the Profile
- Role of Epigenetics in the Fetal Basis of Adult Disease
- Obesity: Developmental Origins and Environmental Influences
- The Path for Assessing Human Relevance and Advancing New Safety Biomarkers for Drug Induced Vascular Injury
- Advancing Toxicology by Improving Linkage of Traditional Toxicity and Pathology Endpoints with Toxicogenomics
- New Insights into Mechanisms of Cell Death and Survival
- Regulation of Phase II Xenobiotic Metabolizing Enzymes: Implications for Health and Disease
- Role of Mitochondria in Toxic Oxidative Stress
- Alternative Model Organisms for the Analysis of Developmental and Molecular Toxicology
- The Biological Matrix of In Vitro Systems and Their Use in Toxicology
- Determinants of Manganese Neurotoxicity: From Worms to Man
- Development of Safety Qualification Thresholds and Their Use in Drug Product Evaluation
- Risk Assessment and Regulatory Implications of Convulsive Neurotoxicity
- Idiosyncratic Hepatotoxicity: Non-Clinical Predictive Toxicology for Liver Injury Potential

**Workshops**

- Does the Methylation of Inorganic Arsenic Affect its Toxicity and Mode(s) of Action? A Critical Discussion
- New Food Ingredients Do Not Need New Food Regulations
- Regulatory Application of the Mouse LLNA: New Challenges and Opportunities
- Dendritic Cells and Skin Sensitization: Biological Roles and Uses in Hazard Identification
• Immunotoxicity Evaluation by Immune Function Tests
• Comprehensive Responses of Lipids Classes to Toxicants and Involvement in Diseases
• Genomics in Risk Assessment: Utility for the Characterization of Mode of Action
• Screening Methods for Assessing Skin Toxicity of Nanomaterials
• Advanced Technologies and Approaches for Quantitative Biological Monitoring and Modeling for Chemical Exposures
• Advances in Asbestos Toxicology and Exposure Assessment
• Pharmaceuticals in the Environment: Leveraging Mammalian Data in Determining Human Pharmaceutical Responses in Aquatic Vertebrate
• Hormesis: A Challenge to the Linear Dose-Response Model, and Its Implications in Risk Assessment, Regulatory Policy, and Biomedical Research
• Integrating Biomonitoring into Epidemiology and Toxicology Research
• Potential Human Health Risk from Estrogenic Food and Consumer Product Additives: How Much is Real and How Much is Hype?
• Towards the Virtual Human: Adding More Physiological Detail to Biologically-Based Models.
• Thermoregulation and Its Influence on Toxicity Assessment
• Discovery Toxicology: Strategies in the New Drug Discovery Paradigm

Roundtables
• Research and Development of Child Specific Protection in California
• Toxicology in the Courtroom: Establishing Causation - A Roundtable Discussion
• U.S. EPA 2005 Cancer Guidelines
• Food Safety and Security: Regulatory and Industry Safeguards
• The Precautionary Principle - Implications and Applications
• The Complexities of Air Pollution Regulation: The Need for an Integrated Research and Regulatory Perspective
• Distance Learning in Toxicology: Effective Teaching through Technology

Historical Highlights
• Historical Highlights: Organophosphates from Nerve Gas to Insecticide

Continuing Education Courses
• Assessing Airway Injury and Remodeling Induced By Inhaled Pollutants Using Magnetic Resonance Imaging, Microscopy and Modeling
• Comparative Endocrine Toxicology
• Targeted Therapeutic Approach to Anti-Cancer Drug Development (Presented in AM and PM)
• Predictive Power of Novel Technologies (Cells to ‘Omics’): Promises, Pitfalls and Potential Applications
• Functional Analysis of Gene and Protein Expression: From Experimental Design to Data Analysis
• Practical Strategies for Evaluation of Immunosuppression in Pharmaceutical Development
• Essentials of Metal Toxicology
• Neuropathology for the Toxicologist
• Xenobiotic Transporters
• Reproductive Toxicity Testing: Study Designs, Evaluation, Interpretation and Risk Assessment (Presented in AM and PM)
• Use of Genome Databases for Toxicology

Visit the Annual Meeting section of the SOT Web site for up-to-date details and additional information.

2006 Call for Abstracts Deadline Extended for Gulf Coast Region

Abstract submission deadline for Platform and Poster presentations at the 2006 SOT Annual Meeting will be extended to October 13, 2005, for those displaced or impacted by the recent natural disasters. Follow the instructions for the Abstract Extension.

The Society of Toxicology 45th Annual Meeting will be held March 5-9, 2006, in San Diego, California. If you have questions or need further assistance to submit your abstract, please contact Nichelle Sankey at SOT Headquarters.

SOT Post-Docs!

The SOT Post-Doctoral Task Force is now the SOT Post-Doctoral Assembly (PDA). The primary focus of the PDA is to meet the growing needs of the Society’s Post-Doctoral membership. As part of its mission
in the Society, the PDA recognizes the importance of networking with other post-docs, as well as providing an outlet for post-docs to express their interests and to get involved in the Society. To this end, we would like to invite all post-docs to the first annual Post-Doctoral Assembly Event at SOT 2006! Come join your post-doc colleagues after the Student/Post-Doctoral Fellow Mixer from 8:00 to 9:00 PM in the San Diego Convention Center. Take this opportunity to network with each other, discuss issues of importance to you, plan activities, and get to know the nominees for PDA Board positions for 2005–06. Light appetizers and a cash bar will be available.

SOT Seeks Hosts and Academic Program Directors for the 2006 Minority Student Program

Do you want to help recruit excellent students to research careers in toxicology?

If the answer is yes, SOT needs you to serve as a Host for a group of minority undergraduate students and their advisors at the 2006 Annual Meeting in San Diego. We also invite directors of academic toxicology programs and research experience sponsors to staff an information table about their programs on Sunday afternoon, March 5.

The Committee for Diversity Initiatives (CDI) is planning the Undergraduate Program for 2006. The success of the program depends not only on the excellent speakers, but also the Hosts and graduate student Peer Mentors who participate with the students. The Hosts and Peer Mentors arrive Saturday, March 4, 2006, and meet their groups during the evening reception. Each group includes one or more toxicologist Hosts, a Peer Mentor (who has participated previously in the program or is in graduate school), an advisor from an undergraduate institution, and four or five students. During the two-day program, the groups will investigate the field of toxicology, interact with poster presenters, learn about toxicology as a career, and explore options for graduate school. Hosts meet at various times with students from Saturday evening through 1 PM Monday to put the students at ease, discuss what a career as a scientist is like, answer questions, help students find the rooms for their sessions, review posters, and visit the exhibit hall and scientific sessions together. This is a rewarding opportunity to mentor students.

Research internship sponsors and academic toxicology directors showcase their programs in an open session Sunday afternoon. We provide the table. You display your program materials and are at hand to answer questions about graduate school, research opportunities at your institution, and other concerns of these bright potential graduate students.

To volunteer as a host or peer mentor, please contact CDI member Vicente Santa Cruz or Betty Eidemiller at SOT Headquarters. Contact Alice Villalobos or Betty Eidemiller to arrange for space during the Program Director session.

SOT’s funding for the Undergraduate Education Program for Minority students is supplemented by support from NIH-MARC grant 2 T36 GM08397, Pfizer, Eli Lilly, Johnson and Johnson Pharmaceutical Research and Development, and Covance. We appreciate all the SOT members and other supporters who make this program possible.

Record Number of Exhibitors to Participate in ToxExpo in San Diego

For the past 45 years, the Society of Toxicology Annual Meeting has provided a venue for toxicologists to gather and share ideas, discuss cutting-edge research, and network with their peers. In March 2006, scientists from across the globe will once again gather to exchange the latest discoveries pertaining to the science of toxicology. ToxExpo™ is the trade show held in conjunction with the Annual Meeting. The 2006 show is gearing up to be the biggest exposition on record. Over 177 companies have already committed to exhibiting in San Diego.

ToxExpo 2006 will be the place attendees can see cutting-edge technology and services available on the market today, as well as attend the SOT Annual Meeting where they can participate in sessions on the latest scientific developments.

But ToxExpo is not only a trade show; it is a 24-7, 365 days per year resource on-line for toxicologists worldwide. In fact, ToxExpo adds up to an uncommonly rich resource for the working scientist, the toxicologist, the decision maker, the educator, the student—anyone looking for the best products and
services that toxicology has to offer. Visit ToxExpo on-line for all your toxicology related science information. 
ToxExpo—the premiere forum for the toxicologist!

### Regular Features

#### Member News:

**SOT Establishes Disaster Response Web Site**

The Society of Toxicology wishes to express our sympathies to all whose lives were disrupted by recent natural disasters in the Gulf Coast region. As a resource for the scientific community who may have been affected by the recent events, an SOT disaster response Web site has been established. In addition to SOT deadline submission extensions, the site includes a bulletin board for exchange of information on resources for students and scientists, and links to national and local recovery resources.

The site will be updated as new information becomes available.

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**The Committee on Diversity Initiatives: New Name and a Greater Vision**

*By Peter Thomas*

Increasing diversity by attracting a broad base of scientific talent will ensure the long-term viability of the SOT as the premier toxicology organization in the world. Education of future toxicologists, particularly underrepresented minorities, is an important way to accomplish this task.

The SOT Council has recognized this and has developed a set of long-range objectives that address these issues. Two of these objectives are:

1. To increase diversity and inclusiveness of the organization
2. To increase student awareness of toxicology, participation in SOT, and pursuit of careers in toxicology.

In response to this challenge, the Education Committee has been reorganized. What was the Subcommittee on Minority Initiatives (or SCMI as it was more commonly known), is now a stand-alone Committee on Diversity Initiatives (or CDI).

Although the name of our Committee suggests a broader focus (more on this below), our primary focus is still producing and managing the Undergraduate Education Program for Minority Students at the annual national meeting.

This program has been a substantial and sustained initiative of SOT since the early 1990s. Its primary goal is to encourage students from groups under-represented in the sciences to pursue graduate training in biomedical science, and especially in toxicology. By bringing talented undergraduates to the SOT Annual Meeting and providing them exposure to the exciting diversity within toxicology, students learn about career possibilities to which they otherwise are unlikely to be exposed.

Entry into this program is extremely competitive. The students who attend the meeting are all at the top of their class academically and very motivated to continue their graduate education. Many of them have already developed research ideas during their undergraduate studies and plan to develop and refine these ideas as the basis for future NIH Graduate Fellowship applications.

The speakers and organizers generously donate their time to this program. Funds obtained from an NIH MARC grant, the SOT and donations from private industry help cover meeting costs, including student travel (approximately $75,000 in 2005). Thanks to the efforts of many people, most notably Myrtle Davis, Jose Manautou, Betty Eidemiller, and Marion Ehrich (originator of the program), the NIH funding for this program was just renewed for another five years. This brings total NIH support for this program to twenty years, a remarkable achievement by any standard! If your organization is interested in supporting our efforts, please contact Betty Eidemiller at the SOT office.

In addition to running the Program at the annual meeting, through our interactions with the SOT Education and K–12 Education Committees, the CDI is considering new initiatives to increase awareness of toxicology among underrepresented students. These include:

1. Participation in the Venture Scholars Program (VSP). This organization identifies underrepresented and first-generation college bound students interested in pursuing science-based careers. It is a central source of information and resources to learn about science careers and help students pursue their goals. The VSP site now includes a description of SOT
and a link to the SOT Web page. SOT provides information for biweekly newsletters and sends targeted messages to the VSP students, both high school and undergraduate, as well as their counselors and parents.

2. Providing travel support to past student participants to present their research at a professional meeting.

3. Providing travel support for a toxicologist (minority or not) to visit target schools to present lectures and career opportunities.

4. Increasing involvement with the regional chapters who are engaged in education initiatives.

5. Exhibiting at recruitment meetings like the Association of Minority Health Professions Schools (AMPHS).

6. Supporting previous minority program participants (SOT members or not) to participate in the upcoming program as a speaker or host mentor.

7. Establishing an on-line database of past minority undergraduate program participants to increase networking opportunities.

8. Working with other SOT-affiliated groups that are interested in diversity within the Society, such as the Hispanic Organization of Toxicologists, Association of Scientists of Indian Origin, American Association of Chinese in Toxicology, the African Society of Toxicological Scientists, and Women in Toxicology.

The SOT membership can look forward to new activities in the coming years as the Committee on Diversity Initiatives continues its efforts to attract underrepresented minorities to careers in toxicology.

SOT Post-Doctoral Assembly Visits the National Post-Doctoral Association

SOT Post-Doctoral Fellows, at the direction of SOT Council, are organizing and have chosen to call their group the SOT Post-Doctoral Assembly (PDA). Jim Luyendyk, the Chair of the group, attended the meeting of the National Post-Doctoral Association (NPA) last March. The PDA would like post-docs and mentors alike to know about the rich resources available on the NPA Web site. One of the resources is a detailed listing of Recommended Post-Doctoral Policies. The following review outlines these recommendations.

An important step towards becoming an independent investigator usually includes spending time as a post-doctoral researcher. During this transitional period between graduate school and a permanent position, it is important to make sure the specific needs of these individuals are met. To assure that the issues and needs unique to post-docs are addressed, the NPA has developed a list of policy recommendations. The recommendations provided by the NPA are based on feedback from the Committee for Science, Engineering, and Public Policy (COSEPUP) of the National Academy of Sciences and data collected from more than sixty institutions. The impact of the recommendations is maximized by detailing the responsibilities of the institution, mentor, and trainee in the training process.

The following are examples of policies that should be defined:

1. **Utilize a centralized appointment process.** A formal appointment process could benefit both the institution and the individual. This process should include a letter detailing conditions of employment (i.e., verification of funding and conditions for re-appointment, as well as stipend and benefits information). By having a standardized process, institutions will be able to accurately track post-docs.

2. **Establish a curriculum for post-doctoral training.** Institutions should develop guidelines for determining when a post-doc is sufficiently trained for an independent career. These should address the responsibilities of the institution, mentor, and trainee. The guidelines can be used to provide a framework for setting goals and timelines as well as for monitoring progress.

3. **Provide equal access to benefits regardless of funding source.** The same benefits should be extended to all post-docs, without consideration of the source of funding.

4. **Establish time frame for post-doctoral transition to independence.** Taking into account previous post-doctoral experience, institutions should set a time limit defining the maximum length of a post-doctoral appointment. Extensions should be permitted if beneficial to the post-doc.

5. **Establish a minimum baseline stipend, plus a stipend scale.** The NIH NRSA pay scale should be adopted by departments funded through the NIH. Furthermore, there should be a regional cost of living adjustment.

6. **Conduct an entry/exit interview.** Post-Docs should be interviewed by an administrative body representative within three months of arriving at an institution and again prior to leaving. This will provide data on the initial expectations of post-docs and will confirm that these expectations were actually met. The information can be used to determine the effectiveness of a program, help make improvements in future training, and provide a means for an alumni network.

7. **Allow matched contributions to a retirement program.** Because of the age of post-docs and/or the duration of tenure, employer-matched retirement savings are an important...
8. **Extend family-friendly benefits to all post-docs.** Benefits packages should take into account the importance of family life. The benefits offered to post-docs may include adherence to the family and medical leave act for non-employees, maternity/paternity leave, access to institutional child care and/or subsidies, health insurance coverage for dependents, and support programs for foreign spouses.

Additional considerations:

1. **Establish a post-doctoral office that actively engages post-doctoral scholars.** An opportunity for communicating with and offering input to the administration could be best provided by having two groups dedicated to post-doctoral affairs. This would include both a post-doctoral office staffed by the institution and a post-doctoral association staffed by post-docs. The NPA Web site provides a toolkit for starting a post-doctoral association.

2. **Facilitate effective mentoring and personal responsibility through an individual development plan (IDP) with annual review.** This could be used as a guide for the entrance and exit interviews previously described and will foster effective communication between mentor and post-doc. It should identify expectations, define success, underline the importance of training and service, and allow for the pursuit of additional opportunities as they become available. By reviewing the plan annually, the post-doc and mentor will have the opportunity to assure progress and to modify the training plan as needed.

3. **Maintain an office for international scholar services.** International post-docs face additional issues that are not encountered by citizens. An office should be available for these individuals to address their needs. The NPA provides a survival guide for international post-docs on their Web site (access requires membership).

4. **Create and disseminate a post-doctoral handbook.** This book should be a combined effort of the Post-Doctoral Association, Post-Doctoral Office, and the International Scholar Office. It should contain complete policy information and important contact information.

5. **Offer career development/transition services.** To assure that post-docs can fully develop in all aspects of their training, development services should be provided by the institution. This could include instruction in mentoring, managing a laboratory, teaching, and grant writing, as well as providing access to relevant web-based resources and offering career-enhancement awards.

Implementation of these recommendations would provide a framework to improve the post-doctoral experience. It would assure that institutions and mentors will be able to provide a flexible, productive training environment for post-docs, who in turn, will be able to focus on their research and training. The ultimate result is that individuals will be better prepared for their future roles as independent investigators.

**Eye on CDI Success**

Name: Dr. Antonio T. Baines  
Current Position: SPIRE Post-doctoral Fellow at the University of North Carolina at Chapel Hill

**SCMI Undergraduate Education Program for Minority Students Honoree: 1993**

Education:  
1995 B.S. in Biology, Norfolk State University  
2001 Ph.D. in Pharmacology and Toxicology, University of Arizona  
2001-present Post-Doctoral Fellowship, University of North Carolina at Chapel Hill

Science was always one area of study that Antonio Baines enjoyed and excelled in throughout high school. It was this love for science that led him to major in biology as an honors student at Norfolk State University in 1991. Ultimately, this path would lead him to pursue an education that focused on toxicology. Dr. Baines’ first experience with toxicology occurred in his sophomore year of college. One day a senior biology professor asked him if he would be interested in attending an Annual Society of Toxicology (SOT) Meeting in New Orleans, Louisiana. Dr. Baines accepted the invitation and successfully applied for a Minority Travel Award from SOT. Two important events occurred at this meeting that significantly influenced Dr. Baines’ decision to work towards a scientific career. First, he was paired with Ed Sargent, an experienced toxicologist who worked for the pharmaceutical company Merck. Dr. Sargent was responsible for taking Dr. Baines “under his wing” at the conference. He
demonstrated how to evaluate posters and ask the right types of questions to researchers. This was an eye-opening experience for Dr. Baines that has stayed with him even to this day. Secondly, he was awarded the opportunity to meet Dwayne Hill, one of the minority speakers of the Educational Program at SOT who spoke about his research. At this time, Dr. Hill was a senior-level graduate student at the University of Arizona (U of AZ) and worked in the laboratory of I. Glenn Sipes, a former department chair of pharmacology and toxicology and a former President of SOT. This meeting resulted in the opportunity to conduct research in toxicology for 2 summers in Dr. Sipes’ lab as an undergraduate student. These two summer research experiences led to an authorship on two publications and a research poster that Dr. Baines presented at the 1995 SOT meeting in Baltimore, Maryland. In the fall of 1995, Dr. Baines entered the graduate program in pharmacology and toxicology at the U of AZ and worked in the laboratory of Dr. Mark A. Nelson. His dissertation research focusing on the mechanism of action of the anticancer effects of selenomethionine (organic derivative of selenium) was presented at several national SOT meetings and a regional Mountain West SOT meeting. While in graduate school, Dr. Baines participated in different capacities for SOT as a guest speaker for the Undergraduate Education program and as a peer mentor. After receiving his Ph.D. in May 2001, becoming the second African-American to graduate with a doctorate from the pharmacology and toxicology graduate program at the U of AZ, Dr. Baines entered a teaching/research post-doctoral fellowship program at the University of North Carolina at Chapel Hill in the Departments of Pharmacology and Radiation Oncology. Currently, his research focuses on trying to find novel molecular targets for potential treatments of pancreatic cancer. Dr. Baines continues to work with the Educational program of SOT from time to time. Recently, Dr. Baines served as a guest speaker at the 2005 SOT meeting where he discussed “Mentoring Diverse Undergraduates” with professors and administrators. His career goal is to become a faculty member at an undergraduate institution where he can teach and get students involved and excited about cancer research.

Regional Chapter/Specialty Section News:

Speaker Bureau

Did you know that SOT has a Regional Chapter Speaker Bureau? The Speaker Bureau is made up of SOT Councilors, Toxicology Specialists, and SOT members who have been instructors of Continuing Education courses (CE). CE speakers have been nominated by the Continuing Education Committee based upon course evaluations, and these selected speakers have agreed to participate.

SOT encourages the Regional Chapters to take advantage of the Speaker Bureau. Any Regional Chapter may request a presenter for chapter meetings from the list on the SOT Web site. SOT will provide funding for one speaker per regional chapter per year. Since limited funds are available and allocated as requests are received, it is important to put your request in early to Rita Rose at SOT Headquarters.

Congratulations to the new members of the Speaker Bureau: J. Frank Nash, Nancy Everds and James Ferguson.

Ray Tennant Receives George Scott Award

SOT Member Dr. Raymond W. Tennant received the George Scott Award from Dr. David Longfellow, President of the Toxicology Forum, at the Annual Meeting of the
Toxicology Forum, in July in Aspen, Colorado.

In Memoriam

Karl Friedrich Benitz
George J. Levinskas
Richard E. Ouelette
Rob McCutcheon
Herbert Rosendranz
Twintillia Murphy Tate

Career Resource and Development Services:
Placement Ads

**QUANTITATIVE SCIENTIST**

Excellent opportunity for person with versatile intellect to collaborate with health scientists in developing rigorous and defensible human health risk assessments. Often requires the novel application of a wide variety of statistical and quantitative modeling techniques. Impeccable oral and written skills required. Knowledge of environmental regulation, toxicology, statistical/simulation computing environments (Mat Lab, S Plus, ACSL, etc.) a plus. Position requires at least an M.S. in quantitative field such as statistics, math, or physics. Prior consulting experience desirable.

Resume and letter of interest may be sent to Laura Hanson: Gradient Corporation, 20 University Road, Cambridge, MA 02138, (617) 395-5001 FAX.

All qualified applicants will receive consideration for employment without regard to age, race, color, disability, religion, sex, sexual orientation, veteran status, or national origin.

**TOXICOLOGIST**

Assist colleagues and clients by applying knowledge of toxicology to promote, defend, and negotiate a variety of complex environmental issues. Project work involves interesting science-based litigation support, and site-specific human health risk assessment. Must have the ability to manage several projects concurrently. Strong oral and written skills required. Must possess solid technical skills and be capable of designing, writing, and coordinating reports on all size projects. Position requires M.S./PhD in toxicology. Knowledge of environmental regulations, statistics, and prior consulting experience a plus.

Resume and letter of interest may be sent to Laura Hanson: Gradient Corporation, 20 University Road, Cambridge, MA 02138, (617) 395-5001 FAX.

All qualified applicants will receive consideration for employment without regard to age, race, color, disability, religion, sex, sexual orientation, veteran status, or national origin.

**SCIOS, INC.**

**Senior/Staff Scientist – Toxicology**

Scios Inc., headquartered in Fremont, California, is changing the way heart failure is treated, and is developing new and exciting therapeutics for cardiovascular disease, inflammatory disease and cancer. Scios' winning combination of integrated research, clinical experience, and passionate commitment to
patients with unmet medical needs is making a difference in the management of disease. Innovation, collaboration and education are the cornerstones of Scios’ culture.

In this position, design, implement, monitor, analyze, and summarize preclinical toxicology studies to evaluate safety of drug candidates and represent Toxicology on drug development teams. Requires PhD in Toxicology or related science, and 3-7 years experience in safety testing of pharmaceuticals.

Please forward resumes to lucas@sciosinc.com or apply on-line at www.jnj.com, referencing job R05-102. www.sciosinc.com. EOE

The U.S. Environmental Protection Agency (EPA) - is seeking qualified candidates to fill the position of Supervisory Biologist/Toxicologist/Environmental Scientist, GS-0401/0415/1301-14/15.

This vacancy is for the Chief of the Ecotoxicology Analysis Research Branch at the National Health and Environmental Effects Research Laboratory’s Mid-Continent Ecology Division in Duluth, Minnesota. The branch chief provides scientific and administrative leadership for the branch, which is engaged in environmental toxicological research. Research foci include biologically-based toxicokinetic and toxicodynamic modeling, species and dose extrapolation, chemical bioavailability, mixtures and multiple stressors, avian toxicology, population response, contaminated sediments, and other issues relevant to the interpreting and predicting the environmental effects of toxic chemicals. This branch is a focal point for delivery of ecotoxicology databases and toxicological modeling approaches to EPA and to the States, Tribes, and other partners, and is heavily engaged in providing technical consultation to these same entities.

This is a supervisory position with line responsibility for a staff of approximately 15, including senior scientists, bench scientists, and technicians working on collaborative and interdisciplinary research. The branch chief is a member of the Division management team, which collectively oversees a multi-million dollar research budget and state of the art research facility.

Ideal candidates will have strong quantitative/analytic skills in biology, toxicology, natural resources, environmental sciences or a closely related field, and have demonstrated leadership skills in a research context. The successful candidate will be expected to conduct research to address national environmental issues and present results at national and international forums and publish in the peer-reviewed literature.

This is a permanent, full-time position. U.S. citizenship is required. Candidates must meet U.S. Office of Personnel Management (OPM) qualifications as described in the announcements referenced below. Salary ranges from $85,123 to $130,173. The selected candidates will be eligible for a full benefits package, including relocation expenses.

HOW TO APPLY: Application instructions are now posted on the OPM Web site and on the EPA Web site under the following titles and announcement numbers: Supervisory Biologist/Toxicologist/Environmental Scientist - RTP-DE-2005-0150 and RTP-MP-2005-0264. The application deadline is October 15, 2005. For further information, contact EPA Human Resources at (800) 433-9633.

The U.S. EPA is an Equal Opportunity Employer

Tenure Track Faculty Positions in Environmental, Ecological, or Toxicological Sciences
Indiana University, Bloomington

Indiana University invites applications for two new tenure-track faculty positions in environmental, ecological, or toxicological science as part of a comprehensive new program in Interdisciplinary Environmental Sciences. The focus of this program is on forest ecology; the biogeochemical cycling of oxygen, carbon, nitrogen, or water; the energy balance of linked forest watershed systems; or the toxic effects of anthropogenic contaminants on ecosystems, including people. It is anticipated that one position will be in the School of Public and Environmental Affairs and the other in the Department of Biology.

Successful candidates are expected to help lead the development of this Interdisciplinary Environmental Sciences program, including the selection of future new faculty hires and the utilization and implementation of the Indiana University Research and Teaching Preserve. Successful candidates are expected to develop an extramurally-funded research program and participate in undergraduate and graduate teaching.

The applicant's expertise is expected to complement and strengthen existing faculty research and teaching in ecology, the atmospheric sciences, biogeochemistry, hydrology, environmental chemistry, or toxicology in the School of Public and Environmental Affairs or in the Department of Biology.
Applicants should hold a Ph.D. in a suitable field. Information on the Research and Teaching Preserve can be found on-line. The appointments are expected to be at the Assistant Professor level, but more a senior appointment is possible for an exceptionally qualified candidate. Bloomington is located in the heavily forested hills of South-Central Indiana and is renowned for its attractive quality of life, cultural activities, and modest cost-of-living. Indiana University offers a comprehensive benefits program.

Review of applications will begin on November 1, 2005, and continue until the position is filled. Applications should include a curriculum vitae, a statement of research and teaching interests, and full contact information for three potential referees. Please submit application materials to:

Dr. Clinton V. Oster, Professor and Associate Dean of Bloomington Programs
SPEA, Room 300
1315 E. 10th Street
Indiana University
Bloomington, IN, 47405-1701

For more information see the School of Public and Environmental Affairs Web site. Indiana University is an Equal Opportunity, Affirmative Action Employer, Educator and Contractor, M/F/D and strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disabilities, and members of other underrepresented groups.

Job Bank: Career Resource and Development Service On-Line