Record High Abstract Total!

The totals are in, and it looks as if 1997 will be another record year. Headquarters has received and processed 1,744 abstracts! That's the highest total ever, according to SOT records (1,704 in 1993 in New Orleans, 1,699 in 1996 in Anaheim). The Program Committee will be working hard during the month of November to put together informative and thoughtful sessions. Acceptance letters, confirming the session type and the date and time scheduled, will be mailed during the latter part of December. If you have not received a confirmation letter by January 2, 1997, please contact Nell Dillard at SOT Headquarters.

This edition of the Communiqué contains information on the SOT Annual Meeting:
- Sponsorship Opportunities
- Placement Service
- Symposia, Workshops & Roundtables
- Continuing Education Courses

See you in Cincinnati at the SOT 1997 Annual Meeting.

Long-Range Planning Activity

A Long-Range Planning Committee Meeting was held on July 26, 1996 in Pentagon City, Virginia to discuss the important task of defining the Society's activities based on the Strategic Plan and to measure continuing progress against the Plan. In attendance were your elected officers, including Council, Committee Chairs and representatives, and Shawn Lamb and Nancy Dieter from Headquarters.

Long-Range Planning participants were challenged to define their committee's mission as it related to the Plan. Two breakout groups met to identify key issues and tasks. Plenary discussion resulted in a restructuring of SOT's eight priorities to more accurately reflect the fundamental objective of SOT: The support and advancement of basic and applied research in toxicology. Thus, a new first priority was adopted, into which old priority number three, "Shrinking Research Needs," was incorporated.

Final Night Reception Scheduled for Thursday

The SOT Program Committee has scheduled four full days of cutting-edge scientific programs for the 1997 SOT Annual Meeting. The program will culminate on Thursday, March 13 with the Awards Ceremony and Final Night Reception. The Awards Ceremony, which will begin at 4:30 p.m., will honor this year's award recipients. After the ceremony, attendees will move next door to the Final Night Reception. The Reception is free to all attendees and is an enjoyable way to socialize with your colleagues while sampling a variety of delicious cuisines. Be sure to mark these two events on your calendar so that you may join in the celebration that marks the conclusion of another successful meeting.

Continued on page 12
President's Message

A few weeks ago I had the fascinating opportunity to witness (from behind a soundproofed mirrored wall) the reactions of several focus groups to a series of science-based messages. The members of the focus group were recruited from the community at-large, with the intent that such participants would offer “jury-pool” type opinions on their science beliefs. As I listened to the reactions of the focus group members, I could not help being troubled by their collective skepticism and ignorance of the ability of science, regardless of its funding source, to offer credible answers to societal questions. After enduring some pointed teasing from my non-science colleagues (some of whom were lawyers) as to the public’s belief in the credibility of scientists, I still could not escape the undeniable conclusion that “perception is reality.”

The focus group experience provided a strong reinforcement for my belief that the SOT must aggressively pursue its strategy of identifying and implementing effective means to deliver our toxicology messages to the public. In this regard, the public outreach elements of the SOT strategic plan are providing the society in two important directions. First, what are the messages we need to deliver? and second, to whom and how should we deliver the messages?

In order to get at the first question, which may indeed be the most difficult to deal with, we must first recognize that we indeed are facing a very real and potentially serious problem. The problem goes much deeper than our common complaint that the public just doesn’t appreciate “the dose makes the poison” (which nonetheless, remains true!). A few years ago, Jon Franklin, a two-time Pulitzer prize-winning journalist who has spent much of his career reporting on environmental issues, provided an ominous message in an SOT annual meeting plenary lecture. Mr. Franklin reminded us “That there might be a truth - that your laboratories might produce answers more valid than those conjured on Capitol Hill - seems increasingly dubious to increasing numbers of people. How can anyone believe the truth when the credibility of the truth-seekers has vanished? We want clean air. We want clean water. We want to rid our environment of poisons. But in our quest for material purity we must never forget for an instant that there are poisons, too, of the mind.”

The inescapable admonition from Jon Franklin is that we in toxicology must recognize that it is our very own credibility, often driven by confusing or inconsistent messages to the public (i.e., “poisons of the mind”), that is causing the public to lose confidence in our science. An important element of the SOT strategic plan is to identify mechanisms by which the SOT membership can regularly experience non-science-based perspectives on this important issue. In recent years plenary lectures by Judge Steven Breyer, Jon Franklin, Peter Sandman, and John Stossel (1997), have been intended to enhance our awareness and understanding of the public’s perceptions of science. It is my hope that vehicles such as our Annual Meeting plenary lectures can serve as a strategic tool to increase the SOT membership’s awareness of what our public threats are and what we must do about them.

The second important public outreach question facing the SOT (to whom and how do we deliver the message?) also is a foundational element of the SOT’s strategic plan. Through frustrating past experiences, the SOT leadership has recognized that the society, in order to get its messages out to the “right” audiences in a cost-effective manner, must seek every opportunity to leverage our limited resources. Thus, the SOT is working with K-12 educational groups such as CURe (publishers of BioRAP) to get important toxicology messages to this future science constituency. We have also successfully piloted the “Paracelsus Goes to High School” program as an outreach opportunity to high school science teachers. This program has already demonstrated that it can reach many thousands of students. By linking with organizations such as FACS and Capitol Associates, the SOT is leveraging additional opportunities for interactions with key media and congressional contacts.

The SOT has a proud history of a membership enthusiastically committed to promoting the science of toxicology. The challenge before us is to strategically focus that commitment such that toxicology will not become an “endangered” discipline of the future.

James S. Bus, Ph.D.
1996-97 President of the Society of Toxicology

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1996-97 President of the Society of Toxicology

November/December 1996
**Why Renew My Membership?**

By SOT President, James Bus and SOT Treasurer, Mary Davis

**So, what happens to my dues anyway?**

Your continued participation in the Society is important to achieving our vision of “being the leading organization for stimulating state-of-the-art science in toxicology; translating and communicating the results of scientific investigation to members, media, government and the public; promoting sound regulatory practice and policy; and representing the professional interest of its members.”

Of the Full and Associate Member $141 dues payment, $96 pays for your journal subscriptions for *Fundamental and Applied Toxicology* and *Toxicology and Applied Pharmacology*. The remaining $45 goes to support SOT programs and activities and the running of the Society and represents approximately 7% of SOT’s income. The remainder of the Society’s income comes from the Annual Meeting, sales of the journals, Corporate Associate dues, contributions, and miscellaneous income, such as sales of Continuing Education syllabi and rental of mailing lists.

Here are highlights of some of SOT’s recent activities that you helped support through your dues that are directed at advancing not only the science, but also the practice and impact of our discipline:

- **An annual, world-class scientific meeting.**
- **Focused scientific meetings outside of the SOT Annual Meeting.**
- **Restructuring of *Fundamental and Applied Toxicology* (FAAT).**
- **Education of young people about toxicology.**
- **Public awareness through the media.**
- **Advocacy for research funding in toxicology.**
- **Support for careers in toxicology.**
- **SOT’s home page on the World Wide Web at http://www.toxicology.org.**

These are just a few of the aggressive programs that our Society is working on to assure the future success of our discipline. As always, the SOT leadership welcomes and encourages your suggestions on how we can further serve you, the member. It is our privilege to ask for your consideration in the renewal of your annual Society dues for the calendar year 1997.

On behalf of the Society, thank you for your continued commitment and membership in the Society of Toxicology.

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**1996 Membership Dues Deadline:**

**December 15**

**Dues Waiver Policy**

**Employment:**

Any SOT member in good standing whose employment is temporarily interrupted may apply for a waiver of dues for a period of up to one year. A dues waiver may be renewed for an additional year upon reapplication.

Members should submit a written request, that includes a description of most recent employment history, to the SOT Executive Director.

Requests for dues waivers will be maintained confidentially and will be individually reviewed by the chairperson of the Membership Committee.

Members granted dues waivers will continue to receive the SOT newsletter and journals and will be permitted to submit abstracts and to register for the Annual Meeting at the membership rate.

**Retirement:**

Full and Associate members who have retired from active work in toxicology may apply for Retired Status. Retired members pay no dues but retain full membership benefits and may elect to subscribe to the Society’s journals at the discounted member rate. Requests for Retired Status are due at SOT Headquarters by December 15.
The Red Hot City -
Ten Reasons to Come to Cincinnati

When people think of Cincinnati, they see red - the Cincinnati Reds, the Cincinnati Bengals... Here are ten other reasons Cincinnati is the place to be in March of 1997:

1. More cultural, culinary, entertainment and historical attractions than any other city its size. The river walk area, and the Mount Adams and Main Street districts are thriving with bars, micro-breweries, and entertainment venues.

2. A downtown that is compact, bustling, vibrant, and safe. Cincinnati is a city that stays alive both day and night. The Convention Center is surrounded by a shopping district and award winning restaurants.

3. The "sexiest zoo" in the country, (as named by Newsweek Magazine) a leader in successfully breeding wild animals.

4. One of the 10 finest general art museums in the U.S.

5. Excellent symphony orchestra, opera and ballet companies.

6. Cincinnati has the largest "art moderne" district with its red brick buildings, depicting a time-gone-by.

7. Great restaurants - from 5-star dining to 5-way chili. Known for its fine dining, Greater Cincinnati has more stars from Mobil Guide than any other city its size. Pick up an "insider's" list of restaurants and lesser-known activities at the restaurant and tour desk in the Cincinnati Convention Center.

8. Major league sports - The Reds and Bengals. It is one of the smallest major league markets, yet the Reds are consistently among the top in attendance.

9. The beautiful, meandering Ohio River, home port of the Delta Queen and a full menu of other riverboat cruises — luncheon cruises, dinner cruises, sight-seeing cruises, dance cruises, and romantic moonlight cruises.

10. A 16-block elevated Skywalk system that enables visitors to explore major department stores, specialty shops, restaurants, hotels and even a museum, while crossing streets above traffic.

1997 Annual Meeting Sponsorship Opportunities

Deadline: April 1
Event sponsorships are available for the 1997 SOT Annual Meeting. Events to be sponsored include the student minority program and general sessions. Co-sponsoring opportunities are also available. Participating companies will be recognized in the on-site SOT Program; the Calendar and Exhibitor Directory (distributed to 4800+ attendees); the January/February and May/June SOT newsletters (mailed to 4200 members); and through signage on-site. Sponsorship of activities at the Annual Meeting contributes to SOT's ability to bring outstanding science quality at an economical price. The Society greatly appreciates the generous support received from sponsors at past SOT meetings. If your company would like to participate as a sponsor at the 1997 Annual Meeting, please contact Clarissa Russell Wilson at SOT Headquarters.

Placement Service

For the Annual Meeting, the Placement Service will be housed at the Regal Cincinnati I hotel, located across the street from the Cincinnati Convention Center. If you would like Placement Registration Forms, please contact Nell Dillard at SOT Headquarters, (703) 438-3115 or print them from our home page: http://www.toxicology.org.

Placement Service Seminar

Chairperson: J.K. Marquis

A panel of guest speakers will present their views on career development for toxicologists. Specific discussions will provide the perspective of the pharmaceutical industry, including biotechnology, contract laboratories, toxicology consulting, and academia. The unique experience of each panelist will help the seminar attendees formulate their own personal plan for a career development strategy and should be applicable to graduate students as well as established toxicologists.

SOT/EUROTOX Debate

Motion: Endocrine Disruptors Pose a Major Risk to Human Health

This year's SOT/EUROTOX debate presents two divergent views of an issue that has captured the attention of the public, regulators, and the scientific community. This highly publicized issue is affecting toxicology research and risk assessment agendas worldwide. Arguing in favor of the motion, synthetic and natural chemicals may mimic or block normal hormone action. Both humans and wildlife have been affected by such chemicals. Some synthetic chemicals, such as oral contraceptives or diethylstilbestrol, were designed as hormones, and were intended to affect the endocrine system. In the case of DES, profound and
permanent unintended effects were caused as well. Other chemicals, like DDT isomers, have hormonal or anti-hormonal activity and have caused environmental effects that were not intended or anticipated. It has been argued that humans should be considered as likely a target as any wildlife species. Responding to those arguments, the potential for effects on humans is seen as speculative. The potency of xenosterogens is much lower than natural endogenous estrogens, and exposure levels are not sufficient to cause adverse effects to humans. Arguments in support of, and against, this motion will be presented.

Discussant for the motion: James C. Lamb, IV, Jellinek, Schwartz, & Connolly, Inc.

Discussant against the motion: John Ashby, Zeneca Central Toxicology Laboratory

Issues Session

Dose-Response Characteristics of Endocrine-Mediated Toxicants
Moderator: Jim Bus

The hypothesis that toxicants acting through endocrine pathways are having widespread effects on the reproductive health of humans and wildlife has received an enormous amount of attention. Most of this attention has been concentrated on the identification of endocrine-mediated hazards; however, the nature of dose-response relationships for these kinds of agents is also becoming an issue because of claims that the dose-response curve may be non-monotonic (i.e., an inverted U-shape) at low levels of exposure, and that the responses may have no threshold. The resolution of these issues will be critical for quantitatively estimating the risk from environmental levels of endocrine-mediated toxicants, and directly addresses the plausibility of the notion that environmental exposures are producing widespread health effects. The Issues Session will evaluate the examples of non-thresholded and non-monotonic phenomena, and asks the questions: (1) How compelling is the evidence for non-monotonic, non-thresholded responses? (2) How generally applicable are these characteristics? (3) What are the implications for hazard identification and risk assessment?

Burroughs Wellcome Lecture

Organophosphorus Insecticide Toxicity: A Comparative Approach, Janice E. Chambers

Organophosphorus insecticides are heavily used world-wide and display a broad range of acute toxicity levels. To exert this toxicity, the phosphorothionate insecticides must be activated to their active metabolites (the oxons) which are potent anticholinesterases. This activation, as well as their detoxication, is mediated by cytochrome P450. Additionally, the oxons can be catalytically hydrolyzed by A-esterases or stoichiometrically destroyed by non-target esterases such as alitersases (carboxylesterases). The differences in the mammalian toxicity between highly toxic parathion and moderat erately toxic chlorpyrifos correspond to relatively more efficient activation and less efficient detoxication of parathion compared to chlorpyrifos by the P450-mediated reactions, and relatively less efficient detoxication of paraoxon compared to chlorpyrifos-oxon by esterases. The greater sensitivity of juvenile than adult mammals to the toxicity of these insecticides is probably largely the result of the lower activities of the protective esterases in the juveniles. In contrast to mammals, the acute toxicity levels of these compounds in fish appear to be more closely related to target enzyme sensitivity rather than metabolic considerations. In addition, fish not only survive but continue to grow in the presence of severe and prolonged inhibition of acetylcholinesterase resulting from repeated insecticide exposures. Therefore, the potency and persistence of oxons as anticholinesterases, as well as the metabolic activation and detoxication of parent insecticide and oxons, must be considered separately for each compound, for various ages, and for different species in order to explain or predict the human health or environmental health implications of organophosphorus insecticide exposure.

Medical Research Council (MRC)/Procter and Gamble Lecture

The Genetic and Biochemical Understanding of Cancer, J. M. Bishop, M.D.

This year’s lectureship is co-sponsored by the MRC and the Procter & Gamble Company. The sponsorship of this lecture reflects the commitment of these two organizations to the application of basic understanding in the fields of cellular and molecular biology to improving the science of toxicology. Dr. Bishop, Professor of Microbiology, Immunology, Biochemistry and Biophysics and Director, C.W. Hooper Research Foundation University of California, San Francisco will present this year’s lecture. In 1989, Dr. Bishop received the Nobel Prize in Medicine along with Dr. Harold Varmus for their discovery that normal cells contain genes capable of becoming cancer genes. Study of these genes and their products has provided tremendous insight into cellular signalling pathways that control cell replication, differentiation and death. Dr. Bishop’s lecture will address these topics.
Symposia

Perturbation of the Mitosis/Apoptosis Balance: A Fundamental Mechanism in Toxicology

Chairpersons: R. A. Roberts, Zeneca Central Toxicology Laboratory, Macclesfield, England and T. Goldsworthy, CIB, Research Triangle Park, NC
Sponsored by the Carcinogenesis Specialty Section

Speakers:
Relevance of Apoptosis to Toxicology, I. Hieckman, University of Manchester, Manchester, UK
Phthalate-Induced Alterations in Testicular Germ Cell Apoptosis, J. H. Richburg, Brown University, Providence, RI
Perturbation of Apoptosis and Mitosis in Nongenotoxic Carcinogenesis, R. A. Roberts, Zeneca CTL, Macclesfield, England
Possible Role of the Dioxin-inducible Ah/ER Gene Battery in Apoptosis, D. W. Nebert, University of Cincinnati Medical Center, Cincinnati, OH

The Molecular Biology of Metal Carcinogenesis

Chairpersons: J. R. Landolph, University of Southern California, Los Angeles, CA and M. Costa, New York University Medical Center, New York, NY
Sponsored by the Carcinogenesis and Metals Specialty Sections

Speakers:
The Involvement of Oxygen Free Radicals in Cancer, L. A. Loeb, University of Washington, Seattle, WA
Epigenetic Mechanisms of Nickel Carcinogenesis, M. Costa, New York University Medical Center, New York, NY
Molecular Biology of Chromium and Nickel-Induced Neoplastic Transformation of 10T1/2 Mouse Embryo Cells, J. R. Landolph, University of Southern California, Los Angeles, CA
Mechanisms of AP-1 Mediated Tumor and Anti-Tumor Promotion, M. Karin, University of California at San Diego, La Jolla, CA

β-Carotene: Friend or Foe?

Chairpersons: S. T. Omaye, University of Nevada, Reno, NV and W. R. Bidlack, California State Polytechnic University, Pomona, CA
Sponsored by the Food Safety Specialty Section

Speakers:
Hypothetical Health Benefits of β-Carotene (β-G) and Other Carotenoids, N. I. Krinsky, Tufts University, Boston, MA
β-Carotene: Antioxidant or Target of Oxidative Stress in Cells, V. E. Kagan, University of Pittsburgh, Pittsburgh, PA
β-Carotene and Cancer Prevention: Clinical Trials, S. T. Mayne, Yale University, New Haven, CT
Antioxidant and Prooxidant Interactions of β-Carotene With Cigarette Smoke, D. C. Lile, University of Arizona, Tucson, AZ
Future Direction and Research for β-Carotene, W. R. Bidlack, California State Polytechnic University, Pomona, CA

Toxicity of Non-Coplanar PCBs

Chairperson: L. J. Fischer, Michigan State University, East Lansing, MI
Sponsored by the Mechanisms, Risk Assessment, Regulatory and Safety Evaluation Specialty Sections

Speakers:
Insulin Release Produced by Non-Coplanar PCBs, L. J. Fischer, Michigan State University, East Lansing, MI
Neurochemical and Neuroendocrine Effects of Non-Coplanar (NCP) and Coplanar (CP) PCBs, R. F. Seegal, New York Dep. of State, Albany, NY
Mechanisms of Activation of Neutrophils by Polychlorinated Biphenyls (PCBs), P. E. Ganev, Michigan State University, East Lansing, MI
Non-Coplanar PCBs Alter Neuronal Ca++ Regulation and Neuropeptidase by a FKBP12/Ryanodine Receptor-Mediated Mechanism, I. N. Pessah, University of California, Davis, CA

Neurotransmitter Receptor Subtypes Involved in Cognition

Chairperson: A. T. Eldenfawi, University of Maryland School of Medicine, Baltimore, MD
Sponsored by the Mechanisms, Metals, and Neurotoxicology Specialty Sections

Speakers:
Neurotransmitter Receptor Subtypes Involved in Cognition, A. T. Eldenfawi, University of Maryland School of Medicine, Baltimore, MD
Lead as a Risk Factor? Alterations in Glutamatergic (GLU) and Dopaminergic (DA) Function in Mesocorticolimbic Systems, D. A. Cory-Slocha, University of Rochester Medical School, Rochester, NY
Hippocampal Nicotinic Receptor Subtypes as Targets for Lead, E. X. Albin, Penn State University, State College, PA
Interaction of Lead with Hippocampal NMDA Receptor Subunits, T. R. Guilarte, Johns Hopkins University, Baltimore, MD
Behavioral and Neurochemical Effects of Prolonged Inhibition of Cholinesterase Activity by Organophosphates: Anomalies and Hypotheses, P. J. Bushnell, U.S. EPA, Research Triangle Park, NC

Cell Signalling and Cell Injury

Chairperson: J. L. Stevens, W. Alton Jones Cell Science Center, Lake Placid, NY
Sponsored by the Mechanisms and Molecular Biology Specialty Sections

Speakers:
Stress Activated Protein Kinase Pathways, I. M. Kyriakis, Massachusetts General Hospital, Charlestown, MA
Signaling Events Induced in Response to Ionizing Radiation, S. M. Khambatta, Dana-Farber Cancer Institute, Boston, MA
Acid Sphingomyelinase Deficient Human Lymphoblasts and Mice are Defective in Radiation-Induced Apoptosis, R. Kolesnik, Memorial Sloan-Kettering Cancer Center, New York, NY
The Importance of Location in Cell Signaling and Carcinogenesis: The Protein Kinase C Pathway, S. Jaken, W. Alton Jones Cell Science Center, Lake Placid, NY

Genetic Polymorphisms in Human Drug Metabolic Enzymes

Chairpersons: M. S. Miller, Bowman Gray School of Medicine, Winston-Salem, NC and D. L. Eaton, University of Washington, Seattle, WA
Sponsored by the Mechanisms and Molecular Biology Specialty Sections

Speakers:
Alcohol Dehydrogenase: Genes, Ethanol (ETOH) Metabolism & Intracellular ETOH Exposure Risk, D. G. McCarver, Wayne State University, Detroit, MI
Genetic Risk and Cancer: Role of N-Acetyltransferase Polymorphisms (NAT1 and NAT2) in Aromatic Amine-Associated Cancers, D. A. Bell, NIEHS, Research Triangle Park, NC
Significance of Genetic Polymorphisms in the Glutathione S-Transferases, D. L. Eaton, University of Washington, Seattle, WA
The Genetic Basis of the Mephentoin and Tolbutamide Polymorphisms, J. A. Goldstein, NIEHS, Research Triangle Park, NC

Peroxisome Proliferator Activated Receptors

Chairperson: J. P. Vanden Heuvel, Purdue University, West Lafayette, IN
Sponsored by the Carcinogenesis and Molecular Biology Specialty Sections

Speakers:
Inter-Individual Differences in Human Peroxisome Proliferator-Activated Receptor Alpha Structure and Function, J. D. Tugwood, Zeneca CTL, Macclesfield, Cheshire, UK
Use of PPARα-Knockout Mice in Risk Assessment, F. J. Gonzalez, National Cancer Institute, Bethesda, MD
Regulation of Gene Expression by Peroxisome Proliferators, J. P. Vanden Heuvel, Penn State University, State College, PA
Peroxisome Proliferator-Activated Receptors (PPARs), PPAR-Interacting Proteins, and Peroxisome Proliferator Response Elements (PPREs) in Peroxisome Proliferators-Induced Fetal Trophic Responses, J. K. Reddy, Northwestern University, Chicago, IL

Additional information on symposia, workshops and roundtables is available on SOT's Home Page on the World Wide Web at http://www.toxicology.org.
Symposia

Continued from page 6

Retinoids and Teratogenesis: Molecular Mechanisms and Approaches
Chairperson: A. A. Levin, ISIS Pharmaceuticals, Carlsbad, CA
Sponsored by the Molecular Biology and Reproductive Developmental Specialty Sections

Speakers:
- Longitudinal Study of Infants Exposed to Isoretinoin (13-CIS-Retinoic Acid)
  In Utero, E. L. Lammer, Children's Hospital, Oakland, CA
- An Essential Role for Retinoid Signaling in Neural Pattern and Neuronal Differentiation, B. Blumberg, The Salk Institute for Biological Studies, San Diego, CA
- Control of Early Limb Development by Retinoids, G. Eichele, Baylor College of Medicine, Houston, TX
- The Role of Homeobox Genes in Normal and Abnormal Embryogenesis, M. Kessel, Max-Planck-Institute für biophysikalische Chemie, Göttingen, Germany

Genomic Information as a Frontier of Toxicology: Building Bridges in Biology
Chairperson: J. R. Beall, DOE, Germantown, MD
Sponsored by the Carcinogenesis, Molecular Biology and Veterinary Specialty Sections

Speakers:
- Gene Sequence Data as a Rational Basis for Understanding Biological Effects and Human Health, J.C. Venter, The Institute for Genomic Research, Rockville, MD
- Genomics and DNA Sequencing Technologies: Implications for Toxicology and Health Research in the 21st Century, A.W. Carrano, Lawrence Livermore National Laboratory, Livermore, CA
- Molecular Nuclear Medicine: From Genotype to Phenotype, H.N. Wagner, Johns Hopkins University, Baltimore, MD
- Building Genomic Bridges Across Biological Barriers in Toxicology, R.P. Woychik, Oak Ridge National Laboratory, Oak Ridge, TN

Genetic Determinants of Susceptibility to Inhaled Pollutants
Chairpersons: T. Gordon, New York University Medical Center, New York, NY and S. R. Klebeleger, Johns Hopkins University, Baltimore, MD
Sponsored by the Inhalation Specialty Section

Speakers:
- Genetic Determinants of Susceptibility to Lung Injury Induced by Air Pollutants in Mice, S.R. Klebeleger, Johns Hopkins University, Baltimore, MD
- Genetic Determinants of Lung Cancer Susceptibility, S Garte, New York University Medical Center, New York, NY
- Gene Targeting for Studies of Genes Influencing Susceptibility to Pulmonary Disease, J.A. Whislet, Children’s Hospital Medical Center, Cincinnati, OH
- Genetic Determinants of Susceptibility to Lung Toxicity and Cancer, D.W. Nebert, University of Cincinnati Medical Center, Cincinnati, OH

Intracellular Signalling Pathways and Responses to Pneumotoxic Agents
Chairpersons: K.E. Driscoll, The Procter & Gamble Company, Cincinnati, OH and H.J. Forman, University of Southern California, Los Angeles, CA
Sponsored by the Inhalation Specialty Section

Speakers:
- Activation of the Mitogen-Activated Protein Kinase (MAPK) by Asbestos and Oxidants in Rat Pleural Mesothelial Cells, B.T. Mossman, University of Vermont, Burlington, VT
- Fiber Exposure and DNA Damage-Inducible Genes, N.F. Johnson, Inhalation Toxicology Research Institute, Albuquerque, NM
- Oxidative Stress and Nuclear Factor κB: Role in Particle Activation of Chemokine Gene Expression, K.E. Driscoll, Procter & Gamble Company, Cincinnati, OH
- Signaling Pathways Underlying Nitrogen Dioxide-Induced Expression of Proteins, J.M. Patel, University of Florida, Gainesville, FL
- Signal Transduction in Apoptosis, A. Heflan, University of Texas, Houston, TX

Mechanisms of Toxicant-Induced Apoptosis: Insights from Reproduction and Development
Chairperson: R. Boekelheide, Brown University, Providence, RI
Sponsored by the Reproductive and Developmental Specialty Section

Speakers:
- Apoptosis Signals and Responsivity, M. T. Moslen, University of Texas Medical Branch, Galveston, TX
- The BCL-2 Gene Family, Apoptosis and Developmental Toxicology, P.E. Mirkes, University of Washington, Seattle, WA
- Defining the Genes of Cell Death as Potential Mediators of Toxicant-Induced Ovarian Germ Cell Destruction, J.J. Tilly, Massachusetts General Hospital/ Harvard Medical School, Boston, MA
- Paracrine Signaling of Testicular Germ Cell Apoptosis: The FAS System as an Environmental Sensor, K. Boekelheide, Brown University, Providence, RI

Chemical Modulation of Neuroreceptors and Ion Channels
Chairperson: T. Narahashi, Northwestern University Medical School, Chicago, IL
Sponsored by the Neurotoxicology Specialty Section

Speakers:
- G Protein Modulation of Calcium Channels: Mechanistic Insights and Role in Alcohol Action, S.N. Treistman, University of Massachusetts Medical Center, Worcester, MA
- Role of G Proteins and Protein Kinases in Mercury Modulation of GABA Receptor, T. Narahashi, Northwestern University Medical School, Chicago, IL
- Lead-PKC Interactions in Secretory Exocytosis, J. B. Suszkiew, University of Cincinnati, Cincinnati, OH
- Chronic Exposure to Inorganic Lead Modifies Protein Kinase C Activity and the Distribution of Some of Its Isoenzymes in the Developing Rat Hippocampus, V. Millet, University of Wisconsin, Madison, WI
- Disruption of Intracellular Calcium Stores by Methyleneurea (MeHg), W.D. Atchison, Michigan State University, East Lansing, MI

Advancing the Scientific Basis for Risk Assessment
Sponsored by the Task Force to Improve the Scientific Basis of Risk Assessment

Speakers:
- Generating Data for Scientifically-Based Risk Assessment, J.A. Swenberg, University of North Carolina, Chapel Hill, NC
- Breaking Down the Barriers Between Cancer and Noncancer Risk Assessment, J.A. Witte, US EPA, Washington, DC
- Pharmacodynamic Modeling: Identifying the Critical Steps in Pathogenesis to Aid in Low-Dose and Interspecies Extrapolations, R.B. Conolly, CIIT, Research Triangle Park, NC

Sanless Symposium: One Hundred Years of Research on Benzo(a)pyrene Toxicity
Chairpersons: R. Snyder, EOHSI-Rutgers University College of Pharmacy, Piscataway, NJ and M.T. Smith, University of California, Berkeley, CA

Speakers:
- Sanless Symposium: One Hundred Years of Research on Benzo(a)pyrene Toxicity, R. Snyder, EOHSI-Rutgers University College of Pharmacy, Piscataway, NJ
- Benzo(a)pyrene Metabolism and Pharmacokinetics, M.A. Medinsky, CIIT, Research Triangle Park, NC
- Hydroquinone (HQ), a Metabolite of Benzo(a)pyrene (BP), induces Incomplete Granulocytic Differentiation (IGD) and Inhibits Apoptosis in Myeloblasts (MB), G.F. Kalf, Thomas Jefferson University, Philadelphia, PA
- Effects of the Benzo(a)pyrene Metabolite, Hydroquinone, on Regulation of Differentiation and Proliferation of Human Hematopoietic Stem and Progenitor Cells In Vitro, R.D. Iacon, University of Colorado Health Sciences Center, Denver, CO
- Mechanistic Basis Risk Assessment for Benzo(a)pyrene-Induced Leukemia, M.T. Smith, University of California, Berkeley, CA

November/December 1996
Workshops

Use of Moderate Dietary Restriction in Safety Assessment
Chairpersons: R. Dixit, Merck Research Laboratories, West Point, PA and S. Kacew, University of Ottawa, Ontario, Canada
Sponsored by the Carcinogenesis and Food Safety Specialty Sections

Speakers:
Use of Moderate Dietary Restriction in Safety Assessment, R. Dixit, Merck Research Laboratories, West Point, PA
Influence of Caloric Intake on Aging and on the Response to Stressors, E. J. Masoro, University of Texas Health Science Center, San Antonio, TX
Molecular Mechanisms of Carcinogenesis Modulated by Caloric Intake, R. W. Hart, National Center for Toxicological Research, Jefferson, AR
The Uncontrolled Variable in Safety Assessment: Ad libitum (AL) Overfed Rats. The Need for Dietary Control, K. P. Keenan, Merck Research Laboratories, West Point, PA
The Sensitivity of the NTP Bioassay for Hazard Evaluation is Modulated by Dietary Restriction, F. W. Karl, NIEHS, Research Triangle Park, NC
FDA's Points to Consider - The Need for Dietary Control in Rodent Chronic Toxicity and Carcinogenicity Studies, W. T. Allaben, US FDA, Jefferson, AR

Immunological Biomarkers: Measures of Exposure and Human Health Risks
Chairpersons: J. Zelikoff, New York University Medical Center, Tuxedo, NY; N. Kerkvliet, Oregon State University, Corvallis, OR; and B. Beck, Gradient Corporation, Cambridge, MA
Sponsored by the Immunotoxicology and Risk Assessment Specialty Sections

Speakers:
Immunological Biomarkers of Human Health Risk, G.M. Henninger, US EPA, Denver, CO
 Xenobiotic Adducts of Asthmogens Provide Biomarkers of Exposure in Human Systems, M. H. Kanold, University of Pittsburgh, Pittsburgh, PA
 Biomarkers of B-Cell Lymphoproliferative Disorders in Human Environmental Health Studies, R. F. Vogt, Jr., Centers for Disease Control, Atlanta, GA
Autoantibodies as Markers of Xenobiotic-Induced Human Immunotoxicity, N. R. Rose, Johns Hopkins Medical Institutions, Baltimore, MD
Immunologic Endpoints: Use in Drug Safety Evaluation, G. L. Warner, Bristol-Myers Squibb Co., Syracuse, NY

Design and Interpretation of Immunotoxicology Studies
Chairperson: P. T. Thomas, Corning-Hazelton Inc., Madison, WI
Sponsored by the Immunotoxicology and Regulatory and Safety Evaluation Speciality Sections

Speakers:
EPA Approaches to Immunotoxicity Testing and Risk Assessment, M. J. Selgrade, US EPA, Research Triangle Park, NC
Immunotoxicity Assessment of Food Chemicals - Perspectives on the Significance of Observed Effects in Safety Evaluations, D. M. Hinton, US FDA, Laurel, MD
Relationship Between Immune Function and Host Resistance Tests, M. I. Luster, National Institute for Occupational Safety and Health, Morgantown, WV
Risk Assessment in Immunotoxicology: A Practical Perspective, A. E. Munson, Virginia Commonwealth University, Richmond, VA

The Discovery and Development of Neurotrophic Factors in the Treatment of Human Disease
Chairpersons: M. J. Taylor, Roche Bioscience, Palo Alto, CA and W. Stilker, Jr., National Center for Toxicological Research, FDA, Jefferson, AR
Sponsored by the Neurotoxicology and Regulatory and Safety Evaluation Specialty Sections

Speakers:
An Introduction to Neural Growth Factors, J. A. Kessler, Albert Einstein College of Medicine, Bronx, NY
Neurotrophic Factors and Animal Models of Neurodegenerative Disease, G. R. Stewart, ALZA Corporation, Palo Alto, CA
Preclinical Safety Issues with Growth Factors, P. A. Day-Lolliini, Roche Bioscience, Palo Alto, CA
Neurotrophic Factors and Gene Therapy, M. H. Tuszyński, University of California at San Diego, La Jolla, CA

Scientific and Regulatory Challenges for the Reduction, Retention and Replacement of Animals in Toxicity Testing
Chairpersons: I. F. H. Purchese, Zeneca CTL, Macclesfield, Cheshire, UK, and S. Fruzzetti, Bristol-Meyers Squibb Company, St. Louis, MO
Sponsored by the In Vitro Specialty Section

Speakers:
European Legislative Mandate, I. F. H. Purchese, Zeneca CTL, Macclesfield, Cheshire, UK
U.S. Government Initiatives to Facilitate the Validation and Acceptance of Alternative Toxicological Testing Methods, W. S. Stokes, NIEHS, Research Triangle Park, NC
New Test Development I: Practical Scientific Issues, O. P. Flint, Bristol-Myers Squibb, Syracuse, NY
The Discipline of Test Validation, L. H. Bruner, The Procter & Gamble Company, Staines, U.K.
New Test Development II: Pitfalls and Problems of Test Validation, P. A. Botham, Zeneca CTL, Macclesfield, Cheshire, U.K.

Measuring Local Doses in Portal of Entry Epithelia
Chairperson: A. R. Dahl, ITRI, Albuquerque, NM
Sponsored by the Inhalation and Risk Assessment Specialty Sections

Speakers:
Intestinal Absorption and Metabolism of Toxicants, L. S. Kaminsky, NY State Department of Health, Albany, NY
Modeling the Penetration of Toxicants Through the Skin, J. E. Riviere, North Carolina State University, Raleigh, NC
Flow-Controlled Dosimetry in the Upper Respiratory Tract, J. S. Kimbell, CIT, Research Triangle Park, NC
Blood Flow, Diffusion, Metabolism, and the Dose of Inhalated Toxicants in Airway Epithelium, P. Gerde, Inhalation Toxicology Research Institute, Albuquerque, NM

Assessment of Immunotoxicity by Multiparameter Flow Cytometry
Chairpersons: S. W. Burchiel, University of New Mexico, Albuquerque, NM and G. S. Ludics, DuPont Co., Newark, DE
Sponsored by the Immunotoxicology Specialty Section

Speakers:
An Interlaboratory Evaluation of the Quantification of Rat Splenic Lymphocyte Subtypes Using Immunofluorescent Staining and Flow Cytometry, G. Ludics, DuPont Co., Newark, DE
Applications of Flow Cytometry to the Assessment of Cytotoxic T Lymphocyte (CTL) Function, N. I. Kelsy, Oregon State University, Corvallis, OR
Differentiating Contact Allergens from Irritants in Humans and Mice Using Flow Cytometry, G. F. Gettekrick, The Procter & Gamble Company, Cincinnati, OH
Analysis of Human Peripheral Blood Lymphocyte Activation and Apoptosis by Flow Cytometry, S. W. Burchiel, University of New Mexico, Albuquerque, NM
Detection of Oxidant-Induced Injury in Human Lymphocytes by Flow Cytometry, D. A. Lawrence, New York State Dept. of Health, Albany, NY

EPA's Neurotoxicity Risk Assessment Guidelines
Chairperson: W. K. Boyes, US EPA, Research Triangle Park, NC
Sponsored by the Neurotoxicology and Risk Assessment Specialty Sections

Speakers:
Risk Assessment and the Role of Risk Assessment Guidelines, M. L. Dourson, Toxicology Excellence for Risk Assessment, Cincinnati, OH
Neurotoxicity Risk Assessment Guidelines and Their Scientific Basis, H. A. Tilson, US EPA, Research Triangle Park, NC

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Workshops

Continued from page 6

Implications of EPA's Neurotoxicity Risk Assessment Guidelines from a FIFRA Perspective, A. A. Li, Monsanto Company, St. Louis, MO
Implications of EPA's Neurotoxicity Risk Assessment Guidelines from a TSCA Perspective, J. L. O'Donoghue, Eastman Kodak Company, Rochester, NY

Working for Toxicology - The Legislative and Regulatory Process
Chairpersons: M. Ehrich, Virginia-Maryland Reg College of Veterinary Medicine, Blacksburg, VA and J. Boyd, Corning Inc., Corning, NY
Sponsored by the Regulatory Affairs and Legislative Assistance Committee

Speakers:
- Understanding the Legislative and Regulatory Processes, M. Donaghy, Capitol Associates, Washington, DC
- Testifying Before Congress - Personal Experience, J. A. Swenberg, University of North Carolina, Chapel Hill, NC
- The Legislative Process - An Insider's Viewpoint, H. Spitzer, Environmental Network, Bethesda, MD

Should Manganese Be Added to Gasoline: Making Rational Public Policy in the Face of Uncertainty
Chairperson: E. K. Silbergheld, University of Maryland, Baltimore, MD
Sponsored by the Metals and Risk Assessment Specialty Sections

Speakers:
- Inhalation Health Risk Assessment of Methylcyclopentadienyl Manganese Tricarbonyl (MMT), J. M. Davis, US EPA, Research Triangle Park, NC
- Manganese Homoeostasis in the Central Nervous System, M. Aschner, Bowman Gray School of Medicine, Winston-Salem, NC
- Transport and Control of Manganese Ions in the Central Nervous System, H. V. Apostolidis, University of Arizona, Tucson, AZ
- Clinical Perspectives on Manganese Neurotoxicity, C. W. Oalanow, Mount Sinai School of Medicine, New York, NY
- Neurotoxic Effects of Low Level Exposure to Manganese in Human Populations, D. Mergler, University du Quebec, Montreal, Quebec, Canada

Risk Characterization: A Bridge To Informed Decision Making
Sponsored by the Risk Assessment and Regulatory and Safety Evaluation Specialty Sections

Speakers:
- Risk Commission Recommendations of Special Interest to Toxicologists and Risk Assessors, G. S. Ommen, University of Washington, Seattle, WA
- New Advances in Risk Characterization, S. C. Lowit, Exxon Biomedical Sciences, New Jersey, NJ
- Making Sense of Risk, J. D. Graham, Harvard Center for Risk Analysis, Boston, MA

Use of Mode of Action Information in Cancer Risk Assessment: Implementing EPA's Proposed Cancer Guidelines

Speakers:
- Receptor-Mediated Responses and Dioxin Cancer Risk, G. W. Lucier, NIEHS, Research Triangle Park, NC
- A Micronuclei Assay for Herbicide: Mode of Action and EPA's Thyroid Cancer Policy, P. M. Hurley, US EPA, Washington, DC
- Chloroform: Exploring Non-Linear and Linear Extrapolation Models, M. E. Andersen, ICF Kaiser, Research Triangle Park, NC
- Alternative Approaches to Vinyl Acetate Risk Assessment Based on Mode of Action and Dosimetry Research, M. S. Bodgani, E.I. du Pont de Nemours and Co., Newark, DE
- Summary and Regulatory Implications, P. A. Fenner-Crisp, US EPA, Washington, DC

Roundtables

Should Carcinogenesis Data From Transgenic Animals Be Applied to Safety Assessment, If So, How?
Chairperson: R. J. Bull, Battelle Pacific NW Labs, Richland, WA
Sponsored by the Carcinogenesis and Risk Assessment Specialty Sections

Speakers:

Chromium (III) and Chromium Picolinate Supplementation: Benefits and Hazards
Chairperson: M. Costa, New York University Medical Center, New York, NY
Sponsored by the Metals Specialty Section

Speakers:
- R. A. Anderson, M. Gangas, K. Wetterhahn, and D. Stairs

Continuing Education Courses

Continuing Education courses are on both basic and advanced topics and will be offered on Sunday, March 9.

Course descriptions were included in the Preliminary Information Packet mailed to members last July and will also be included in the Preliminary Annual Meeting Program that will be mailed to members in mid-December.

- Use of the Benchmark Dose In Risk Assessment
- Endocrine Control of Reproductive Development - Normal and Abnormal Aspects
- Toxicology of Agents: Metals
- The Role of Toxicology In Assessing the Safety and Risk of New Food Technologies and Products
- Epidemiology for Toxicologists II, Methodology
- Techniques for Determining Genetic Polymorphisms
- Cell Signaling In Toxicology
- Neuroimmunology: Implications for Toxicology
- Making Sense of Antisense
- Methods for Assessing Chemical Interaction with Steroid Receptors
- Molecular Basis of Genotoxicity Assays
- Nephrotoxicity: Basic Mechanisms and Recent Advances
- Unique Problems Associated with the Use of Animals in Inhalation Toxicology

November/December 1996
FUNDING FOR RESEARCH: FY 1997 APPROPRIATIONS

Senate VA-HUD Appropriations Subcommittee Mark-up. The Senate level of funding in the VA-HUD-Independent Agencies Appropriations Subcommittee recommendations prevailed in conference with the House and have been signed into law by the President. As a result, $32 million will be made available to the Superfund Basic Research Program (SBIRP) and $21.3 million to the Worker Training Program. This compares to the House bill which passed the Senate on June 26, 1996, and only included $27 million for the SBIRP and $21.5 million for the Worker Training Program (identical to the President’s request).

National Institutes of Health. On September 30, the President signed H.R. 3610, the fiscal year 1997 Omnibus Appropriations Bill. The bill funds departments and agencies whose regular appropriations bills were not completed prior to October 1, 1996, the beginning of FY 1997. This includes the Departments of Labor, Health and Human Services, and Education which provides funding for the National Institutes of Health (NIH) and the National Institute of Environmental Health Sciences (NIEMS).

H.R. 3610 includes an $820 million or 6.9% increase for the NIH, identical to the recommendation contained in the House-passed version of the Labor-HHS bill earlier this year. The appropriation for individual Institutes and Centers is similar, but not identical, to the recommendations contained in the House bill.

The NIH received a total funding allocation of $12,878,579,000. The House had proposed $12,873,579,000 and the Senate had proposed $12,878,475,000 in their Committee deliberations. This represents a $20 million increase above the 1996 funding level for NIH. The final resolution for the NIH was interesting in view of the fact that the Senate had been supportive of more funding for Superfund in the VA, HUD and Independent Agencies appropriations bill.

What Is The Outlook for Research Programs Overall? When research and development is analyzed throughout the government, there is a mixed signal being sent regarding a comprehensive research agenda. For instance, the Environmental Protection Agency (EPA) and the NIH received a 12.3% and 6.9% increase, respectively, for FY 1997. However, when the three-year trends for these programs as well as other R&D programs are analyzed, the impact is somewhat different. When FY 1994-1997 appropriations in constant (adjusted for inflation) dollars is considered, the following picture emerges:

<table>
<thead>
<tr>
<th>Program</th>
<th>3-Year Change (Constant $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Defense</td>
<td>-0.3%</td>
</tr>
<tr>
<td>National Institutes of Health</td>
<td>+10.0%</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>+1.8%</td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>-5.0%</td>
</tr>
</tbody>
</table>

This level of funding for the NIH and the Superfund program remains high-risk with regard to fraud and abuse; the hazardous waste program has grown to $7.5 billion for non-Federal sites and to $4.0 billion for Federal facilities.

NIH REVITALIZATION

The National Institutes of Health Revitalization Act of 1996, sponsored by Senator Nancy Kassebaum, was passed by the Senate on September 26th. Unfortunately, the legislation was not considered by the House of Representatives prior to adjournment. As a result, the reauthorization process, legislation necessary to "reauthorize" the programs of the National Institutes of Health will start all over again next year. The House refused to consider the Senate legislation since they had not held hearings in the House on issues of importance to biomedical research. Further, the House felt that there was inadequate time at the end of the Session to consider the legislation as it related to research issues with regard to human embryos and fetal tissue.

It is unclear whether or not this legislation will be considered in the 105th Congress. Much will depend upon the outcome of the election and whether or not this bill is a priority for the Chairman of the Committees with jurisdiction—the House Commerce Committee and the Senate Labor and Human Resource Committee.

SUPERFUND REAUTHORIZATION

The Superfund Reauthorization, which had been considered in the House and the Senate, died with the adjournment of the 104th Congress. How this legislation will be re-configured is highly dependent upon the outcomes of the elections and the party majorities in the House and the Senate. Clearly, the re-write in the House of Representatives was not viable due to broad ideological splits on how to re-structure the program specifically with regard to retroactive liability repeal.

Other Superfund Issues. The House Government Reform and Oversight Committee reviewed a report in early October on the subject of fraud and abuse in the government. The report cites the Superfund Program as one of the 12 most wasteful and fraudulent programs in the government. In evaluating the current activities with regard to previous benchmarks, the report indicates that the level of fraud in the program now is relative to what it has been over the past several years. Highlights of the report are as follows:

- the Superfund program remains high-risk with regard to fraud and abuse;
- the hazardous waste program has grown to $7.5 billion for non-Federal sites and to $4.0 billion for Federal facilities;
- in March, 1995, EPA reported 15,723 Superfund clean-up sites of which 1,363 are considered the most hazardous;
- $30 billion has been spent on Superfund, about half of which was funded by the government from taxpayer dollars;
- clean-ups have been completed at less than 100 of the 1,400 sites listed as national priorities; and
- average time for clean up is 12 years.

PESTICIDE, FOOD SAFETY LAW

Highlights of the changes regarding pesticide regulation, PL 104-170, which was signed by the President on August 3 are summarized below.

Allowable Residues

- Pesticide residues in processed foods will no longer be regulated under the Delaney Clause, which had set a zero-tolerance.
- EPA will establish a "tolerance level" to ensure that people who eat both raw and processed foods will have a "reasonable certainty of no harm." Aggregate exposure to the residue and anticipated dietary exposure must be considered.
- "Reasonable certainty" is to be defined as no more than a one-in-a-million lifetime chance that the exposure will cause cancer.
- A pesticide may be granted an exemption if the EPA previously "recognized as safe," the pesticide's uses.
- Tolerance levels and exemptions of a parent pesticide must be applied to residues of product breakdown.

Relaxing the Standard

- The standard may be relaxed in the following circumstances:
  - if consumption of the food without a pesticide would pose a greater risk than the consumption of the food with a pesticide;
  - if using the pesticide would avoid a significant disruption in the domestic food supply;

- Standard relaxation must be reviewed every 5 years.

Pesticide Tolerance Factors

- The EPA must take the following into consideration in determining the risk:
  - estrogenic effects;
  - reliability of available data on the pesticide and its residue;
  - nature of any toxic effect cause by the pesticide;
  - patterns of dietary consumption;
  - aggregate exposure levels of consumers to the residues and related substances;
  - varying sensitivities of various consumer groups; and
  - safety factors generally recognized as appropriate for the use of animal experimentation data.
In this document, the section titled "AWARDS" discusses the Burroughs Wellcome Fund's $15 Million for Career Development of Biomedical Scientists Awarded by Burroughs Wellcome Fund. This program awards approximately $15 million annually to support more than 40 U.S. and Canadian scientists. The awards are part of the Fund's annual grant-making programs aimed at helping outstanding young scientists develop their research careers and advancing fields in the basic biomedical sciences that are under-valued or in need of particular encouragement.

The largest proportion of the funds – 19 awards, totaling nearly $8.4 million – are Career Awards in the Biomedical Sciences. Thirteen other 1996 awards, totaling $4 million, are in the area of emerging infectious diseases.

Nine other 1996 awards, totaling nearly $2.6 million, are in the basic pharmacological sciences, toxicology, and experimental therapeutics.

1997 Awards

Scala Award Nominations

Nominations are being solicited for the 1997 Robert A. Scala Award and Lectureship in Toxicology. This annual award honors the work of industry toxicologists and promotes continued outstanding scientific contributions to the field by industrial organizations. Letters of proposals can be sent to EOHSI, Attn: Scala Award, P.O. Box 1179, Piscataway, NJ 08855-1179; (908) 445-0202. The deadline for receipt of proposals is December 15, 1996.

1997-98 Wellcome Visiting Professorships

Wellcome Visiting Professorships in the Basic Medical Sciences and Microbiological Sciences are offered annually to U.S. universities, medical schools, and nonprofit scientific research institutions to enable them to bring in distinguished scientists to engage in teaching and discussion with students and faculty. The awards provide $5,000 for an institution to bring in a visiting professor for up to five days. As part of the visit, the professor will deliver a keynote Wellcome Lecture on a subject pertinent to his or her discipline.

The deadline for applying for basic medical sciences professorships is March 3, 1997. The deadline for applying for microbiological sciences professorships is May 1, 1997. Host institutions are encouraged to schedule all visits between September 15, 1997 and August 31, 1998.

For information about basic medical sciences awards, contact Rose Grimm at FASEB, (301) 530-7090, fax: (301) 530-7049. E-mail: rgrimm@execfaseb.org. For information about the microbiological sciences awards, contact the ASM, (202) 942-9226, fax: (202) 942-9380.

The Burroughs Wellcome Fund is an independent private foundation established to advance the medical sciences by supporting research and other scientific and educational activities. Additional information about BWF is available on the World Wide Web at http://www.bwfund.org/bwfund/.

President's Commission on White House Fellowships

The White House Fellowships were established in 1964 by President Lyndon B. Johnson to encourage young Americans with leadership potential to get to know their federal government first-hand. Fellows spend a year working at the highest level of government, as special assistants to cabinet secretaries and top members of the President's staff. White House Fellows also participate in an education program that includes intimate off-the-record meetings with leaders from all realms of society and travel to domestic and foreign destinations to explore policy issues in depth.

During its 32-year history, this nonpartisan Fellowship program has nurtured leaders in many fields. Alumni from the program include retired General Colin Powell, housing secretary Henry Cisneros, CNN president Tom Johnson, Tennis champion Dana Mead, and Pulitzer Prize-winning historian Doris Kearns Goodwin. The selection process is rigorous with decisions based on demonstrated leadership, character, professional contributions and community service.

The President's Commission on White House Fellowships offers up to 20 Fellowships each year. The Program is open to U.S. citizens only. There are no formal educational requirements or age restrictions. Fellowships are awarded on a strict nonpartisan basis. The Commission encourages balance and diversity in all aspects of the program. All eligible candidates are encouraged to apply.

For more information contact the President's Commission on White House Fellowships at: 712 Jackson Place, NW, Washington, DC 20503, (202) 395-4522, fax: (202) 395-6179 or http://www.whitehouse.gov/white_house/wh_fellows/html/fellows1.html.
Animals in Research Information Available in Local Public Libraries

Submitted by Vincent Castranova, Animals in Research Committee

The New Jersey Association for Biomedical Research has published a number of informational booklets and brochures concerning the use of animals in biomedical research and product testing. This information is available from the Animals in Research Committee of the SOT. It is also available in numerous public libraries throughout New Jersey. Some of the available materials are:

1) Animal Research - Fact vs. Myth - information brochure
2) Animal Research for Animal Health - information brochure
3) Animals in Research: A Resource Guide - an informational text containing articles on the following topics:
   a) Why are animals used in research?
   b) How do people and animals benefit from animal research?
   c) What is the role of animals in product safety testing?
   d) How do laws and regulations govern animal use?
   e) What ethical issues surround animal use?
   f) Are there alternatives to animal use?
   g) Animal rights vs animal research: Is there common ground?
   h) Fast facts.
   i) Additional resources.

For more information concerning the speakers bureau, publication and activities of the New Jersey Association for Biomedical Research contact: Elaine A. Murphy, Director of Programs, New Jersey Association for Biomedical Research, P. O. Box 8449, Elizabeth, New Jersey 07208, Fax: 908-355-2938, E-mail: njabr@aol.com.

Pennsylvania Biomedical Research Day

Submitted by Vincent Castranova, Animals in Research Committee

Pennsylvania Governor, Tom Ridge, proclaimed October 21, 1996, to be Biomedical Research Day.

The Pennsylvania Society of Biomedical Research, along with others, played a key role in the Governor’s proclamation. The Society of Toxicology commends such action and encourages members to support similar activities in their own states.

SOT’s Long-Range Planning Activity

Continued from page 1

Strategic Initiatives
(as revised 7/26/96)

1. Support and Advance Basic and Applied Research in Toxicology as the Fundamental Objective of SOT.
   1A. Shrinking Research Funding Sources. 1B. Training Needs.

2. Foster the Use of Sound Science to Improve Risk Assessment.

3. Better Public Understanding of Toxicology.


5. Use of Animals in Research.


7. Strengthen International Relations.

8. Need to Establish a Stable and Broad Financial Platform.

If you would like a copy of the full text of the Long-Range Plan, please call Rachel Sasse at SOT Headquarters.

Mailroom Reports Marjorie C. Hornig’s Death - They Were Wrong

In September, SOT received notification from Dr. Marjorie C. Hornig’s previous employer’s mailroom that she was deceased; this was reported in the September/October newsletter. In an attempt to confirm the report, the SOT Headquarters office spoke to Dr. Hornig, who let us know that she was indeed alive. SOT deeply apologizes to Dr. Hornig and friends for this error. Dr. Hornig can be reached at 11610 Starwood Drive, Houston, TX 77024.

Moved Recently?

Please indicate address changes on your dues renewal form. Directory changes will be inserted into future issues of the newsletter. And, coming soon, "members only" will be able to access the membership directory on SOT’s World Wide Web site using your new seven-digit membership identification number. (Make sure you complete this portion of your dues renewal form.)
Two Postdoctoral Positions

Two Postdoctoral Positions are available immediately within the Division of Neurotoxicology at the National Center for Toxicological Research/FDA. One position seeks a candidate with a background in brain anatomy, histochemistry, and pathology. Studies typically involve applying histochemical techniques to localize brain damage and to address the underlying mechanism of action of various neurotoxins. The second position seeks an individual with a broad toxicological background and a thorough working knowledge of tissue culture, pharmacokinetic and/or metabolic methods applied to the adult and developing animal. Current drugs of interest include anti-HIV therapies and associated hematotoxic therapies. Salary range: $33,460, depending on candidate's qualifications. Send vitae, cover letter with a statement of future goals, and the names of three references to Dr. Larry Schmued for the first position or to Dr. William Sliker, Jr., for the second position at the Division of Neurotoxicology, NCTR, 3900 NCTR Road, Jefferson, AR 72079.

Industrial Toxicologist

Hoffmann-LaRoche is seeking an experienced Toxicologist with knowledge of current FDA/ EPA regulations to join our team in NJ. You will review information on a wide range of products and intermediates, establish health information and exposure guidelines based on your findings, plan toxicology/toxicity studies, develop environmental assessments, and coordinate workplace exposure issues with other Roche sites.

A PhD in toxicology or its equivalent is required; preferably with a BS/MS in industrial hygiene. A minimum of 4-5 years related experience is a must along with highly specialized experience in potential toxicities and routes of exposure.

We provide a salary and benefits package that fully reflects our status as a premier healthcare organization. To be considered, forward your resume and salary requirements to: Hoffmann-LaRoche, Staffing Dept. 6LH11 JK, 340 Kingsland Street, Nutley, NJ 07110-1199. We are an equal opportunity employer.

Director of Toxicology

Springborn Laboratories, Inc., Health Sciences Group has a vacancy for a Ph.D. Toxicologist with several years of experience preferably in the mammalian contract toxicology industry to be appointed Director of Toxicology. This is a Senior Management Position reporting to the Laboratory Director. The Director of Toxicology will be responsible for all the technical activities in subchronic, chronic and reproductive toxicology including analytical chemistry, pharmacy and other support functions. The successful candidate will have at least five years of experience as a Study Director for carcinogenicity studies and a complete knowledge of GLP regulations. Springborn Laboratories, Inc., Health Sciences Group is located in Northwest Ohio. This position offers a highly competitive salary, moving expenses and excellent benefits.

Please respond to Dr. Malcolm Blair at (419) 647-4196.

Postdoctoral Research Associate - Male Reproductive Toxicology

A postdoctoral position is available to investigate fundamental molecular mechanisms by which toxicants induce testicular injury. Current projects: 1) acute injury - the role of cytoskeletal perturbation in testicular injury evaluated by injection of adenosine gene transfer vectors into the rete testis for direct in vivo testing of Sertoli cell functions, and 2) long-lasting injury - the biological basis of "irreversible" testicular atrophy focusing on the role of the "death factor," Fas, in the induction of germ cell apoptosis. Applications received by March 15, 1997, will be given full consideration and should include curriculum vitae, publications, three letters of recommendation, and statement of research goals sent to: Kim Boekelheide, M.D., Ph.D., Department of Pathology & Laboratory Medicine, Brown University, Box G-B518, Providence, RI 02912. Tel: (401) 863-1873; Fax: (401) 863-9008; kim_boekelheide @brown.edu. Brown University is an Equal Employment Opportunity/Affirmative Action Employer.

Health, Safety, Environment Manager

Koch Industries, America's second largest privately held corporation, is seeking to hire a Health, Safety, and Environment Manager for its asphalt company, Koch Materials. Koch Materials is one of the largest asphalt companies in America with over 100 operating locations. This person will provide expert understanding of our products and services to enable Koch Materials to distinguish itself as the premier "clean and safe" member of the asphalt industry.

The ideal candidate will have a Ph.D. in toxicology, health sciences, industrial hygiene or equivalent with 10 or more years of experience in an industrial product manufacturing environment. Petroleum industry and/or industry trade association experience will be beneficial. Knowledge of US and international product safety laws and regulations is desired. Experience designing and managing toxicological testing of chemicals, interpretation and application of results in a business context, preparing and presenting scientific papers to peers, governmental scientists, regulators, and legislators is preferred. Must have the ability to effectively communicate the science in layman's terms for business leaders, the media, and the public.

Please forward your resume to Marji McNellis, TOXICMC, P.O. Box 2256, Wichita, KS 67201. Phone: (800) 292-3090; Fax: (316) 828-5913; E-mail: mcnelliism@kochind.com.

Koch is an equal opportunity employer.

Request for 1998 Continuing Education Course Proposals

It's not too soon to think about submitting a proposal for a 1998 Continuing Education course, and you might have wondered what factors are considered when planning courses for the Annual Meeting. Major factors include the quality of the submitted proposal and the timeliness of the topic. The Continuing Education Committee also considers the need for certain basic topics to be presented every two to five years, and for new topics to be introduced as science advances or the membership changes. The CE Committee also considers the diverse needs of the membership and responds to suggestions of members. Recommendations from Specialty Sections are also considered.

Potential topics for continuing education courses are quite broad. Suggested topics from members include oxidative damage; statistics for toxicologists; basics of cell signaling; neurodegenerative disease; roles of cytokines in inflammation; interpretation of clinical trials; and many aspects of risk assessment, such as risk communication and risk management.

Continued on page 14.
MEMBER NEWS

Professor Norman Aldridge - Biochemical Toxicologist

Professor Norman Aldridge, OBE, one of the world’s most widely regarded toxicologists, died on June 30, 1996.

In 1946, he was the first nonmedical scientist recruited by Dr. John Barnes, the director the new Toxicology Unit of the Medical Research Council. Dr. Aldridge gained a Ph.D. in biochemistry in 1952 and continued with the Unit until his retirement in 1975. By this time, he had been head of the biochemical mechanisms section for 20 years and Deputy Director for ten. His abilities attracted several eminent scientists and research trainees to the laboratory. During his career he contributed to the understanding of processes vital to the health of liver, lung, kidney and nervous system.

His book *Mechanisms and Concepts in Toxicology*, published this year, is far removed from the descriptive compendia beloved by forensic and regulatory authorities. He believed that understanding how and why measured dose of chemicals exert their toxic effect was fundamental to safety planning as well as to an evaluation of the risks and benefits of using chemical in industry, food preservation, agriculture or medicine.

In 1975, Professor Aldridge became director of a World Health Organization collaborating laboratory. He was founder chairperson of the British Toxicology Society and secretary-general of the International Union of Toxicology. He was appointed OBE in 1977 and honored with several academic and professional awards in Europe, Asia and America. His ability lead to visiting staff appointments in several universities, not only in Britain, but also in American and Europe. He contributed greatly to the establishment of postgraduate teaching courses at the University of Surrey and at Trondheim University in Norway. He is survived by his wife, Kathleen, and by their son and two daughters.

Submitted by M. Johnson

Upcoming Election of 1997 SOT Officers

Ballots for the election of Council Officers and elected standing committees will be mailed to members on January 1, 1997. Offices to be filled include the Vice President-Elect, Secretary-Elect, two Councilors, two members each to the Membership and Education Committees, and four members to the Nominating Committee.

Completed ballots must be received at SOT Headquarters by February 1, 1997. Please return your ballot to the SOT Executive Director in the envelope provided, postmarked on or before February 1, 1997. Be sure to sign and print your name on the return envelope to validate your vote. Unsigned envelopes cannot be counted.

The results of the election will be announced at the 1997 Annual Meeting in Cincinnati.

Request for 1998 Continuing Education Course Proposals

Continued from page 13

The CE Committee can help you plan your course and select good speakers. In selecting speakers, one should bear in mind that CE courses are intended as forums for established concepts, not as forums for presentation of the latest observations.

If you have any ideas about content or speakers for any of the topics suggested above, or know of other topics that others might want to learn more about, then please consider submitting a continuing education course proposal for a 1998 continuing education course. Instructions and Proposal Forms will be included in the January/February issue of the newsletter.

Call for Nominations for 1997 Inhalation Specialty Section Awards

The Inhalation Specialty Section of SOT will present four awards at their next Business Meeting during the 1997 SOT Annual Meeting in Cincinnati. Presentation of these awards is an important activity of the Section, recognizing excellence in inhalation toxicology research. Nominations are requested for each of the four award categories described below (the nominees do not have to be members of the ISS or SOT):

- Paper of the Year Award
- Achievement Award
- Young Investigator Award
- Student Award

Please submit your nominations by December 23, 1996 to:

David Warheit
Haskel Lab
P.O. Box 50, Elkton Road
Newark, DE 19714
(302) 366-5322
F: (302) 366-5207

November/December 1996
UPCOMING CONFERENCES

- International Society of Regulatory Toxicology and Pharmacology: Assessing the Risks of Adverse Endocrine-Mediated Effects, January 13-14, 1997, Sheraton Imperial Hotel and Convention Center, Research Triangle Park, NC. Contact: C. Jelliff; (410) 992-0083, Fax: (410) 740-9181.


- Toxicology Students' Association 11th Annual Toxicology Symposium, Endocrine Modulators: Are They Stealing Our Future?, February 6, 1997. University of Guelph, Guelph, Ontario, Canada. Contact: Mike Thiessen, TP/Toxicology Students' Association, 50 Bishops House University of Guelph, Guelph Ontario, Canada W1G 2W1, Fax: (519) 824-3761, E-mail: mthiessen@uoguelph.ca.

- American Association for the Advancement of Science 22nd Annual Colloquium on Science and Technology Policy, February 13-18, 1998. Seattle Convention Center, Seattle, WA. Contact: Robin Perkins, (202) 326-6710; E-mail: perkinsr@aaas.org.

- First National Research Conference on Children's Environmental Health: Children's Environmental Health: Research, Practice, Prevention and Policy, February 21-23, 1997. Washington, DC. Contact: Carol Harris, Children's Environmental Health Network, 5900 Hollis St., Suite E, Emeryville, CA 94608; (510) 450-3918, Fax: (510) 450-3773, E-mail: charris2@h1.aphaad.gov.


- Roundtable of Toxicology Consultants, meets annually at the SOT Conference, Ray Singer, Ph.D., (505) 466-1100, Fax: (505) 466-1101 or John Briend, Ph.D., (818) 706-2410, Fax: (818) 706-2408.

- British Toxicology Society Spring Meeting, March 24-26, 1997. Warwick Hotel, Contact: Dr. J.K. Chapman, Meetings Secretary, School of Pharmacy, University of Birmingham, Edgbaston, Birmingham, B15 2TT, TelFax: (44) (0) 121 414 6865.

- Mid-American Toxicology Course, April 20-25, 1997. Kansas City, MO. Contact: Curtis Klaassen, University of Kansas Medical Center, Kansas City, KS 66160; (913) 588-7714, Fax: (913) 588-7501, E-mail: ctklaassen@kuemc.edu.


- Spinal Drug Delivery: Considerations of Anatomy Drug Kinetics and Toxicology, May 16-18, 1997. LaBarge Resort, Del Mar, CA. Contact: Professional Conferences, 7916 Convoy Court, San Diego, CA 92111; (619) 555-9921, Fax: (619) 555-9954.

- American Chemical Society 213th National Meeting, April 13-17, 1997, San Francisco, CA. Contact: Nancy Blount, (202) 872-4440, E-mail: n-blount@acs.org.

- American Society for Microbiology 97th General Meeting, May 4-8, 1997. Miami Beach, FL. Contact: Barbara Hyde, (202) 942-9206, E-mail: dhyde@asm.org.

- 6th Meeting of the International Neurotoxicology Association, June 29 - July 4, 1997. Szeged, Hungary. Contact: Prof. Ildo D'Silva, Institute for Safety Science, Szeged, H-6720 Szeged, D'silv@szeged, Hungary, Phone: 36-63-455-110, Fax: 36-62-455-120, E-mail: des@szeged.hu.


- Tenth International Conference on Cytochrome P450, Biochemistry, Biophysics and Molecular Biology, August 21-26, 1997. Marriott Hotel and Moscone Center, San Francisco, CA. Contact: Prof. John H. Dawson, Dept. of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064, (303) 777-2724, Fax: (303) 777-9521, E-mail: dawson@pasc.ucsc.edu or http://www.web.first.ucsc.edu/mtl/.

- Carcinogenesis: Carcinogen Identification and Human Risk Estimation, September 8-10, 1997. Carolina Inn, Chapel Hill, NC. Sponsored jointly by the Carcinogenesis Specialty Section and the North Carolina Regional Chapter. Contact: Thomas Kerstis, President, Carcinogenesis Specialty Section (419) 955-4712, or Hugh Tilson, President, NC Regional Chapter, (919) 541-2671.

- New In Vivo Models for Genetic and Target Organ Toxicity, September 14-16, 1997. Canterbury UK. Sponsored by the British Toxicology Society. Contact: Dr. J.K. Chapman, Meetings Secretary, School of Biochemistry, University of Birmingham, Edgbaston, Birmingham, B15 2TT, TelFax: (44) (0) 121 414 6865.

- The Fourth International Metallothionein Meeting, September 17-20, 1997. The Westin Crown Prince Hotel, Kansas City, MO. Sponsored by the Society of Toxicology and the International Union of Toxicology. Contact: Curtis Klaassen, President of MT-97, Dept. of Pharmacology and Toxicology, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160; (913) 588-7714, Fax: (913) 588-7501, E-mail: kclaassen@kuemc.edu.

- British Toxicology Society Meeting, April 20-23, 1998. Survey UK. Contact: Dr. J.K. Chapman, Meetings Secretary, School of Biochemistry, University of Birmingham, Edgbaston, Birmingham, B15 2TT, TelFax: (44) (0) 121 414 6865.


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COUNCIL HIGHLIGHTS

Following, are highlights of the September 19, 1996 Council Meeting:

1. Council endorsed the joint meeting between the Inhalation Specialty Section and the National Capital Chapter entitled Particulate Matter - Science and Regulatory Perspectives, to be held January 23, 1997 at the National Library of Medicine, Bethesda, MD.

2. Council approved the Committee on Public Communication's proposal for an SOT Media Resource Program. The purpose of the program is to facilitate the dissemination of authoritative information and improve the quality of toxicology reporting.

3. Council approved the renewed Management Agreement between ADG Inc. and SOT for its association management services.

4. Council recommended establishing member identification numbers for password protection to allow for the adding of "member only" information to SOT's Home Page on the World Wide Web. Once identification numbers have been established, Council approved adding the membership directory to SOT's Homepage.

5. Council approved the development of a benefits program that will include health, life, disability, and possible liability insurance.

6. Council approved the Nominating Committees slate of nominees for elected positions.

7. Council will propose a Bylaws revision to the membership under Article Second, Section 7: Regulatory Affairs and Legislative Assistance Committee. To clarify that SOT is concerned with developments that concern the funding of academic research in toxicology and related sciences, Council will propose that the word "academic" be deleted.

8. Council voted to allow Taylor & Francis to establish an annual $500 student award for members of SOT's Food Safety Specialty Section, with SOT adjudicating the award.

9. Council voted to provide $2,000 in travel expenses to the Mexican Society of Toxicology for a plenary lecture speaker.

Insurance Survey Responses

Thank you to all of you who sent in a response to the recent insurance survey. Your comments have been forwarded to the insurance company preparing the quote for coverage. All information will remain completely confidential. Information received will only be used in the aggregate and for no purpose other than to determine SOT's insurability. We appreciate your assistance. Watch for news in upcoming issues about SOT's new health, life and disability insurance plans.

Seasons Greetings

The SOT Council and Headquarters Staff extends its best wishes.

Administrative Update

Best wishes to Clarissa Russell who was married to Tim Wilson on July 20, 1996. Clarissa is your SOT Annual Meeting Planner and Exhibits Manager.

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