It’s hard to believe that September is coming to an end. Hopefully everyone had a good summer, had fun on vacation, and, for those of us in the East, survived the wicked flurry of September hurricanes and associated weather. Many of us are working like mad, trying to tie down the last few details needed to complete abstracts, posters and talks. With all of the hurricane activity, let’s hope that New Orleans doesn’t end up under water and that we still have a place to present all that work in March.

Over the last few years the idea of sharing teaching materials among members of the ISS keeps coming up. The proposal always seems to generate enthusiasm that fades quickly, and so nothing has been formally organized or executed. I don’t know whether this is because no one can or wants to host a site where materials could be deposited and accessed, or if there are other factors. Hosting the files is no longer a problem. Debbie O’Keefe, of the SOT Headquarters staff can set up a section on the ISS page where files can be saved and accessed, either by SOT members only or by anyone visiting our page, as is the case everything currently on the ISS page. I would like input on this from individuals potentially willing to share materials and from individuals likely to at least look over what is made available. Are you willing to share lectures and graphics that you put long hours into developing? Should access be limited to SOT members, or open to the public? What conditions and limitations would you want put on the use of your materials? If lecture materials were available, would you use them and give credit to the individual who developed the material? Other questions, concerns, comments?

Several important topics were discussed on a recent conference call for specialty section officers. First of all, SOT’s revenue sharing program returns a portion of all paid registrations fees to specialty sections, based on the number of section members who pay registration. Last year that worked out to approximately $50 for each ISS member who paid registration, a nice addition to our treasury now that all specialty sections are self-funding. We also discussed the formation of a taskforce to address NIH’s new grant review structure and how toxicology grant renewals and applications fare under the new system. Fortunately, Steve Pruett has been in communication with the taskforce; please be sure to read his progress report in this newsletter, as changes in NIH funding will have an impact.
on all of us, directly or indirectly. Contemporary Topics in Toxicology (CCT) meetings were also discussed. If you have an idea for a scientific program that is too complex for a symposium or workshop session, consider organizing a CCT meeting as a satellite to the annual SOT meeting or as a completely separate event. The SOT staff will help in the planning and coordination, including site selection. More information on this type of 1 to 2 day meeting can be found on the SOT website; click on Member Services, then on Meetings.

A couple of reminders:

November 26 is the deadline to receive nominations for the Immunotox Specialty Section Career Achievement Award and Outstanding Young Immunotoxicologist Award. If you know someone who is deserving, please take the time to nominate them. It doesn’t take long to do, and the recipient will certainly enjoy the well-deserved recognition. Career Achievement nominations should be sent to me, and nominations for the Outstanding Young Immunotoxicologist go to Ken Hastings. Check the ISS web site on the SOT page for selection criteria for each award and addresses for submission, and for other award submission deadlines. Remember that nominations for Career Achievement have a 3 year lifetime. If you have nominated someone, but are not certain how long ago, check you nomination package to make certain that your nomination has not expired.

Now for the perennial reminder:

Mentors, if you have a graduate student or post doc in your lab who is not a member of the ISS, please encourage them to join. Student membership in SOT specialty sections increased dramatically last year, from 84 in 2003 to 294 this year, a positive sign for the future of SOT. For an update on student activities, please read the report in this newsletter by Beatrice Seguin, our Student Representative on the Executive Committee.

Regulatory Committee
Submitted by Lynnda Reid

In November, 2003, a workshop on "The use of in vitro systems for evaluating Immunotoxicity" was held at the European Centre for The Validation of Alternative Methods (ECVAM), in Ispra, Italy. ECVAM, under the chairmanship of Laura Gribaldo, convened a group of international scientists representing academia, national organizations, international regulatory bodies and industry to review the state-of-the-art in the field of alternative in vitro methods to characterize the immunotoxicity potential of small molecular weight chemicals. ECVAM's main goal, as defined in 1993 by its Scientific Advisory committee, is to promote the scientific and regulatory acceptance of alternative methods which are of importance to the biosciences and which may replace the use of laboratory animals. The aim of this workshop was to review the current status of potential in vitro immunotoxicity research methods, and to develop strategies towards the validation of these methods for replacement of in vivo testing for use by regulatory bodies. A proceedings paper is being drafted and should be available early next year.

Report on NIH Study Section Realignment
Submitted by Steve Pruett, Secretary/Treasurer

The SOT has formed a task force to study the problems for toxicologists associated with restructuring of the NIH Study Sections. The Chair of this group is Dr. David Eaton, University of Washington (deaton@u.washington.edu). If you have specific information that might help that group make favorable recommendations, I suggest you contact him. Also, please inform me (spruet@LSUHSC.edu) of the fate of any immunotoxicology grant applications you submit over the next year, including especially any that are revisions previously reviewed by one of the ALTX study sections. I will keep this data confidential and forward it to appropriate persons at NIH. I believe our efforts to date have at least sensitized the CSR (Center for Scientific Review) to this issue. As a result several immunotoxicology applications you submit over the next year, including especially any that are revisions previously reviewed by one of the ALTX study sections. I will keep this data confidential and forward it to appropriate persons at NIH. I believe our efforts to date have at least sensitized the CSR (Center for Scientific Review) to this issue. As a result several immunotoxicology applications were sent to one immunology study section, and the administrator for that study section worked hard to secure appropriate reviewers. However, this is still not an ideal situation, because these reviewers mostly serve on an ad hoc basis. Thus, revisions are less likely to have continuity in the review process. Therefore, it would seem appropriate to continue our efforts to secure a more permanent and equitable solution.
Call for Applications and Nominations

Call for Applications and Nominations - Student Representative for the Immunotoxicology Specialty Section.

Beatrice Seguin, who has served ably as Student Representative for the past year, will soon graduate. Congratulations and thank you, Beatrice!

Therefore, we are seeking applications or nominations immediately for a new Student Representative. The appointment will be for a term of two years, and the selection criteria are as follows:

1) Must be a graduate student or post-doctoral fellow and a student member of SOT (or must have applied for student membership);

2) Must provide a letter from your mentor indicating approval to take on this responsibility and that travel support will be provided for you to the SOT annual meeting during the time you serve (2005 and 2006 in this case).

3) Must provide a one paragraph biographical sketch.

Any students interested in this position should send the indicated items to Dr. Robert Luebke (Luebke.Robert@epamail.epa.gov). If you wish to nominate someone, please confirm that your nominee is willing to serve and send the name and contact information to Dr. Luebke, who will then contact the nominees to obtain the necessary information.

Financial Report

Immunotoxicology Section
July 2003 - June 2004

June 30, 2004

Ordinary Income/Expense

<table>
<thead>
<tr>
<th>Income</th>
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<td>Contributions</td>
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<td>Grants - Mechanisms</td>
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<td>Steno/Clerical</td>
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<td>Web Development</td>
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</table>

Excess (Deficiency) of Revenue over Expenses

Net Assets Beginning of Year

Transfers from General Fund

Net Assets Beginning of Year After Transfers

Net Assets End of Year

October 2004

3

Immunotoxicology Specialty Section
Best Presentations by a Student and by a Post-doctoral Trainee Awards

The award requirements are submission of a complete written version (including all graphs and tables) of an Immunotoxicology presentation to be made at the SOT annual meeting. This presentation is to be accompanied by a Letter of Nomination from the Student's or Post-doctoral Fellow’s advisor. Electronic submissions are strongly encouraged. No manuscripts will be accepted. Winners will receive a plaque and cash award.

The deadline for submission is February 4, 2005.

Please submit nominations to:
Dr. Ken Hastings
USFDA
CDER Office of New Drugs
HFD 024
5600 Fishers Lane
Rockville, MD 20857
Email: hastingsk@cdrf.fda.gov

Outstanding Young Immunotoxicologist Award

An engraved plaque will be awarded to a scientist who has made significant contributions to the field of Immunotoxicology. The recipient must have less than 15 years of experience since obtaining this/her highest earned degree at the time when the award is presented. The nomination should summarize the contributions of the candidate scientist and should include a curriculum vitae and a bibliography. (Exceptions to the 15 year limitation can be made if careers have been interrupted for family or health reasons, by clinical practice, etc. Reasons for the exception should be documented in the nomination). Decisions will be made by members of the awards committee and the Vice President.

The deadline for submission is January 31, 2005.

Please submit nominations to:
Dr. Jeanine Bussiere
Amgen, Inc.
Dept. of Toxicology
One Amgen Center Drive
Thousand Oaks, CA 91320-1799
Email: bussierj@amgen.com

Best Immunotoxicology Paper of the Year Award

Best Best Immunotoxicology Paper of the Year Award: An engraved plaque will be awarded to the author(s) of the best paper in the area of Immunotoxicology, published ANY peer-reviewed journal. The paper must have been published between July 1, 2002 and December 31, 2003. The nomination for this award should provide a full citation of the paper and a short discussion of the value of the research to the field of Immunotoxicology. Authors may not self-nominate their own papers. Decisions on this award will be made by members of the Awards Committee, chaired by the Senior Councilor.

The deadline for submission is November 26, 2004.

Please submit nominations to:
Dr. Jeanine Bussiere
Amgen, Inc.
Dept. of Toxicology
One Amgen Center Drive
Thousand Oaks, CA 91320-1799
Email: bussierj@amgen.com

Career Achievement Award

An engraved plaque will be awarded to a Senior Investigator whose body of work represents an outstanding achievement in immunotoxicology. The nominator should provide a discussion of the role that the individual's work has played in advancing the field of immunotoxicology. A curriculum vitae and bibliography should also be included. A second letter of recommendation from another investigator in the field would be helpful. Nominees are evaluated with respect to the following criteria: 1) Contribution to the field of immunotoxicology - depth and breadth of scientific contributions and significance of contributions for advancing the field. (weighted value = 50%); 2) Major influence in the education/training/mentorship of young scientists in the field of immunotoxicology including training in government, industry, or academia (weighted value = 20%); 3) Leadership and service to the immunotoxicology field including involvement in the Specialty Section or other meetings/organizations related to immunotoxicology (weighted value =20%); 4) Influence on regulatory and risk/safety assessment decisions related to immunotoxicology. (weighted value = 10%). Nominations of unsuccessful candidates will be considered for two additional years unless the nomination is withdrawn by the sponsor. Final decisions will be made by the Nominating Committee (President, last three Past Presidents, and Vice President-Elect) and the Vice President.

The deadline for submission is November 26, 2004.

Please submit nominations to:
Dr. Bob Luebke
USEPA
Immunotoxicology Branch
MD B143-01
Research Triangle Park, NC 27771
Email: luebke.robert@epa.gov
This announcement initially appeared in the Summer 2004 newsletter, and the results were underwhelming. Thus, we are giving all you creative folks a second chance.

The Immunotoxicology Specialty Section is looking for a logo. In order to find an interesting, exciting, stimulating, and all around COOL logo, the ISS is hosting a contest for the best logo. The logo will be used in association with the ISS website and possibly other ISS communications. A **cash prize of 50$ (US)** has been allotted for the winner.

**How the submitted logo should look:**

- Logos should adequately represent the Immunotoxicology Specialty Section.
- The name "Immunotoxicology Specialty Section" or an acronym for it (ISS, ImToxSS, ImTox, etc.) should appear somewhere in the logo.
- The logo may be used in different formats. The actual size will depend on the logo.
- Use the software of your choice to produce the logo. However, please verify that it can be seen clearly when covering no more than 1/2 page in a pdf file.
- Color images are preferred, but black and white images will also be accepted.

**Contributing your logo:**

- ISS members may submit as many logos to the contest as they want.
- Contributed logos will be posted onto the ISS website for viewing and voting.
- Logos not created by the submitter or logos with illegal, discriminating or otherwise offensive contents, can not be accepted.
- Submit logos to Peyton Myers (LMyers@cdc.gov).
- **Logos should be received by Friday, October 29, 2004.**

**Copyrights and License:**

- After submission, the author may retain copyright rights to the logo but agree to free, unrestricted use of the logo by the Immunotoxicology Specialty Section.

**Voting:**

- In the election phase (Nov. 1-Nov. 26), ISS members can go to the ISS website and vote for their favorite logo.
- One vote (via email) per person can be sent to Peyton Myers (LMyers@cdc.gov).
- The logo with the most votes wins.
- All ISS members (full, associate, post-doc, and student) can vote.
- All votes must be submitted by Friday, November 26, 2004.

**The Prize!!! • Cash, Money, Dough, Moolah, $$$$$$**

- The prize for the contest is **50$ (US dollars).**
CALL FOR PAPERS

New Taylor and Francis Journal for 2004

The Journal of Immunotoxicology is a peer-reviewed journal that provides a needed singular forum for the international community of immunotoxicologists, immunologists, and toxicologists working in academia, government, consulting, and industry to publish their original research and be made aware of the research findings of their colleagues in a timely manner. Research from many subdisciplines is presented in the journal, including the areas of molecular, developmental, pulmonary, regulatory, nutritional, mechanistic, wildlife, and environmental immunotoxicology, immunology, and toxicology. Original research articles as well as timely comprehensive reviews are published.

The first issue of Journal of Immunotoxicology appeared March 2004 and included the following articles:

“Ultraviolet Light and Resistance to Infectious Diseases” - Annemarie Sijtters, Johan Garssen, Joseph G. Vos, and Henk van Loveren

“Suppression of Immune Function and Susceptibility to Infections in Humans: Association of Immune Function with Clinical Disease” - Bob Luebke, Christine Parks, and Mike Luster

“ImmunoLogic Effectors Mechanisms in Animal Models of Occupational Asthma” - Jean F. Regal

“Pulmonary Immunotoxicology of Select Metals: Aluminum, Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel, Vanadium, and Zinc” - Mitchell D. Cohen

To Order

Journal of Immunotoxicology
Print ISSN: 1547-691X Online ISSN: 1547-6901
Institutional print subscription at US$365/£235*
Personal print subscription at US$185/£110
Special SOT member print subscription at US$165/£105*
Institutional and SOT subscriptions include free online access

Contact:
Taylor & Francis
Attn: Mary Dzabot
335 Chestnut Street
Philadelphia, PA 19106
Tel: (215) 625-8800 ext. 242
Fax: (215) 625-3940
E-mail: mary.dzabot@taylorandfrancis.com
Program Committee Report
Submitted by Mitch Cohen

It's time to begin thinking about programs for the 2006 SOT meeting in San Diego. Our Specialty Section has always put forth good program ideas, had an excellent record of acceptance for programs submitted to the SOT National Committee, and had very well-attended sessions at the annual meeting. This year's IMTOX Program Committee is continuing the tradition of soliciting symposia, workshop, roundtable discussion and continuing education course ideas from all of our members. We especially are seeking submissions from members who have not previously chaired and from new investigators, post-docs, and students.

The deadline for submission of proposals is November 30. This will allow members of this Committee time enough to go over the materials ahead of the New Orleans meeting and sufficient time for corrections/modifications to be made by each applicant ahead of the March gathering where the final rankings of all submissions will be made. That means starting now to flesh out an idea of yours that would update an area of interest/bring forward a new concept. Thanks to Communications Committee sleuthing and digging out of old meetings' programs, a complete guide to programs sponsored/co-sponsored by IMTOX since 1995 is now available (see Table on pages 8-18). This is useful as it can provide some guidance as to what subject matters really haven't had their day in the light at all, have not been touched upon or updated in a bit, or have been done to a near-numbing level.

During the process of formulating your idea for a session at the 2006 San Diego meeting, it is important to think about: the objective and rationale for the session; the timeliness of, or controversy around, the topic; who would be your co-chair; who would be interesting appropriate speakers in your program; and, the format - emphasis of/requirement for each are:

**Continuing Education Courses**
- Basic courses are intended to familiarize investigators with a defined knowledge base or to assist them in developing, implementing or learning techniques or approaches
- Advanced courses are intended to be of interest for those already working in the field

**Symposia**
Cutting-edge science, new areas for toxicologists, new concepts or approaches, new data
- 3 hours or less
- Chairperson and 4-5 speakers (30 minutes per speaker)
- Summary of symposium by last speaker

**Workshop**
Topics requiring intensive study and discussion
- 3 hours or less
- One to five speakers
- Informal, interactive presentations
- Emphasis on discussion

**Roundtable**
Controversial subject matter
- 1.5 hours
- Moderator and 2-4 speakers
- Moderator presents overview
- Each speaker makes a 3-5 minute statement (Moderator coordinates the comment)
- Balance of time for questions and discussion

Keep in mind that your program should be attractive to a broad enough segment of meeting attendees and not just to your fellow IMTOX members (i.e., so it could attract co-sponsoring by other Specialty Sections); likelihood of approval by the National Program Committee is usually higher for co-sponsored sessions. Lastly, and importantly, while a proposal dealing with the underlying biology and mechanism(s) of effect of a toxicant/class of agents would undoubtedly be of great interest to many meeting attendees, the National Committee will not likely approve it unless the focus of the session remains anchored in the toxicology of the agent(s).

Please feel free to contact me or any one of the committee members below when you have your idea(s) ready to submit or if you have any questions or complaints.

Mitch Cohen (VP-Elect/Chair)
(cohenm@env.med.nyu.edu)

Leigh Ann Burns-Naas
(leighann.burns@pfizer.com)

Dori Germolec
(germolec@niehs.nih.gov)

Ken Hastings
(hastingsk@ceder.fda.gov)

Ian Kimber
(ian.kimber@syngenta.com)

Greg Ladics
(gregory.s.ladics@usa.dupont.com)

Susan McKarns
(smckarns@niaid.nih.gov)

Peyton Myers
(lmyers@cdc.gov)

Mitzi Nagarkatti
(mnagark@hsc.vcu.edu)

Yan-li Ouyang
(ouyangy@ceder.fda.gov)

Michael Woolhiser
(mwoolhiser@dow.com)
Functional Flow Cytometry - CE
Chair: Leigh Ann Burn Naas and Nancy Kerkvliet
Speakers:
- C. Bortner – Introduction to Flow Cytometry
- Debbie Laskin – Assessment of Macrophage-Induced Tissue Injury in Liver/Lung by Flow Cytometry
- Nancy Kerkvliet – In Vivo Assessment of T-Cell Activation Using Flow Cytometry
- Scott Burchiel – Flow Cytometric Approaches to Understanding Mechanisms of Toxicant Action

Skin Sensitization and Allergic Contact Dermatitis - CE
Chair: Frank Gerberick and Ian Kimber
Speakers:
- Ian Kimber – The Basic Biology and Immunology of Skin Sensitization and Allergic Contact Dermatitis
- David Basketter – Skin Sensitization: Predictive Tests and Hazard Identification
- Frank Gerberick – Relative Potency, Exposure, and Risk Assessment
- Denise Sailstad – The Global Regulatory Environment

Systemic Drug Allergy: Frequency, Challenges, Mechanisms, and Need for Predictive Models - Workshop
Chair: Ray Pieters and Jack Dean
Speakers:
- Jack Dean and Ray Pieters – Systemic Drug Allergy: Frequency, Challenges, mechanisms, and Need for Predictive Models
- Jack Uetrecht – Mechanisms of Adverse Effects of Low Molecular Weight Chemicals
- Ray Pieters – Popliteal Lymph Node Assay and Recent Mechanistic Studies
- Jean Meade and Jim Weaver – Modification of the Local Lymph Node Assay to Evaluate the Potential for Adverse Immunologically-Mediated Drug Reactions
- Brad Gutting – The Use of the PLNA in Relation to Oral Route of Exposure to LMWCS

Histomorphology and Beyond: Correlating Non-Clinical Immune Modulation with Clinical Data - Workshop
Chair: Lynda Reid and JoAnn Schuh
Speakers:
- JoAnn Schuh and Lynda Reid – Histomorphology and Beyond: Correlating Non-Clinical Immune Modulation with Clinical Data
- C. Kuper – Immunotoxicology and the Mucosal Immune System
- Jeff Vos – Protocols and Validation Studies of Histopathology and Immune Function in Non-Clinical Studies
- D. Mellon – Regulatory Implications of Non-Clinical Immunotoxicological Findings During the Drug Development Process in the United States
- Mike Holsapple et al. – Concordance of Animal Toxicity and Safety Pharmacology Data with Human Toxicities for Therapeutic Agents: Focus on the Immune System

Gene Expression Influences on Metal Immunomodulation – Symposium
Chair: David Lawrence and Mike Lynes
Speakers:
- David Lawrence – Gene Expression Influences on Metal Immunomodulation
- Mike Lynes, Kevin Crowthers, et al. – Influence of Metallothionein Gene Expression on Stress-Mediated Immunomodulation
- A. Fontenot – MHC Genetics and Sensitivity to Beryllium
- David Lawrence and Yong Heo – Cytokine Gene Expression Modified by Lead
- Allen Rosenspire – Modulation of Protein Interactions by Mercury: Molecular Analysis of Signaling Pathways to Uncover Mechanisms of Hg Immunotoxicity
- Michael Pollard – Genetic Checkpoints in Heavy Metal-Induced Systemic Autoimmunity
Modulation of Host Defenses by Ambient and Source Particulate Air Pollutants – Symposium

Chair: Ian Gilmour and Matt Reed

Speakers:
- Matt Reed and Ian Gilmour – Modulation of Host Defenses by Air Pollutants
- Ian Gilmour and Mary Jane Selgrade – Mechanisms of Host Defense
- A. Pope – Epidemiology of Ambient Air Pollution and Pulmonary Infection
- Kevin Harrod et al. – Increased Lung Pathogenesis to Respiratory Viral Infection by Diesel Engine Combustion Components
- J. Antonini – Effect of Workplace Particulates on the Susceptibility to Bacterial Infection and the Suppression of Lung Defense Responses in Rats
- Judy Zelikoff, Mitch Cohen, et al. – Exacerbation of Pulmonary Pneumonia by Inhaled Ambient Particulate Matter and Associated Metals
- S. Kleeberger – Role of Toll-Like Receptors (TLRs) in Responses to Air Pollutants and Infections

Environmental Pollution and the Immune System: Mechanisms of Immunotoxicity - Symposium

Chair: Dori Germolec and Bob Luebke

Speakers:
- Bob Luebke and Dori Germolec – Environmental Pollution and the Immune System: Mechanism of Immunotoxicity Across Phyla
- K. Davis and R. Mulpuri – Disease Resistance and Innate Immunity in Plants
- A. Goven and L. Fitzpatrick – Chemical Toxicity and host Defense in Invertebrates: An Earthworm Model for Immunotoxicology
- L. Rollins-Smith – Environmental Chemicals and Amphibian Immunity: What Are the Risks to Amphibian Health?
- Charlie Rice – Fish as Experimental Models in Immunotoxicology: Evolutionary Mechanisms of Action

2003 Salt Lake City

Evaluation of Immunomodulation in Safety Assessment - CE

Chair: Dori Germolec and Robert House

Speakers:
- Jack Dean – Past, Present, and Future: The Evolution of Immunotoxicology Assessment in Pharmaceutical Development
- Robert House – Assessment of Immunomodulation in Rodent Models
- Jeanine Bussiere – Assessment of Immunomodulation in Non-Human Primates
- Ken Hastings – Immunotoxicology in Drug Development

Dermal Exposure Leading to Respiratory Tract Sensitization and Disease: A Trivial or Critical Link - Workshop

Chair: Al Munson

Speakers:
- Al Munson and Mike Luster – Dermal Exposure Leading to Respiratory Tract Sensitization and Disease: A Trivial or Critical Link?
- Ian Kimber and Rebecca Dearman – Influence of Dermal Exposure on the Development of Sensitization of the Respiratory Tract to Chemical Allergens
- X. Zhang et al. – Dermal Exposure to Trimellitic Anhydride (TMA) Powder Induces Airway sensitization in an Animal Model
- Jean Meade, B. Hayes, M. Howell and Mike Woolhiser – The Role of Dermal Exposure in the Development of Latex Allergy
- D. Deubner – Inclusion of Skin Exposure Reduction in a Total Hygiene Program to Reduce Exposure to Beryllium: Background and Results

Methods for the Identification and Characterization of Chemical Respiratory Allergens - Workshop

Chair: Scott Loveless and Ian Gilmour

Speakers:
- Scott Loveless and Ian Gilmour – Methods for the Identification and Characterization of Chemical Respiratory Allergens
- Norb Kaminski, A. Farraj, and J. Harkema – Airway Cytokine Gene Expression as a Biomarker of Chemical-Induced Airway Allergenicity
- L. Kobzik – Can Non-Invasive Plethysmography Predict Respiratory Allergy to Chemicals?
Rebecca Dearman and Ian Kimber – Identification and Characterization of Chemical Respiratory Allergens In Rodents
D. Deubner – Inclusion of Skin Exposure Reduction in a Total Hygiene Program to Reduce Exposure to Beryllium: Background and Results

Understanding Mechanisms of Toxicity of Immunosuppressive Drugs to Improve Their Safety Profiles and Broaden the Scope of Their Use – Symposium
Chair: Uwe Christians and Ray Novak
Speakers:
Uwe Christians – Understanding Mechanisms of Toxicity of Immunosuppressive Drugs to Improve Their Safety Profiles and Broaden the Scope of Their Use – Symposium
L. Shaw – Pharmacodynamic, Pharmacokinetic, and Pharmacogenomic Investigations of Immunosuppressants Provide the Basis for Safer and More Effective Rejection Prophylaxis
M. Oellerich et al. – Genotypic and Phenotypic Evaluations in Connection with Azathioprine Toxicity
N. Serkova and U. Christians – Magnetic Resonance Spectroscopy as Tool to Identify Mechanisms of Immunosuppressant Toxicity
D. Freitag et al. – Development of the Novel Immunosuppressive Agent ISATX247 Using a Pharmacodynamic Approach

Children’s Health Risk: What’s So Special About the Developing Immune System? – Symposium
Chair: Mike Holsapple and Leigh Ann Burns-Naas
Speakers:
Leigh Ann Burns-Naas and Mike Holsapple – Children’s Health Risk: What’s So Special About the Developing Immune System?
D. Paustenbach – Assessing the Hazard to Children of Low Level Environmental Exposures
G. Charnley – Differential Sensitivity of Children and Adults to Chemical Toxicity – Biology, Risk, and Regulation
L. West – The Developing Human Immune System: A Clinical Perspective
Mike Luster – Evolution of the Science of Developmental Immunotoxicity
Rod Dietert and J. Lee – Susceptibility of the Developing Immune System to Immunosuppressive Agents: Differential Risk Across Life Stages

Fundamentals of Protein Allergenicity: Why Are Some Proteins Allergenic? - Symposium
Chair: Ian Kimber and Kathy Sarlo
Speakers:
Kathy Sarlo and Ian Kimber – Fundamentals of Protein Allergenicity: Why Are Some Proteins Allergenic?
Ian Kimber and Rebecca Dearman – Immunobiology of Sensitization by Protein Allergens
R. Aalberse – Structural Biology of Protein Allergens
F. Harding – Fooling Mother Nature: Can Protein Allergens be Made Hypoallergenic?
Kathy Sarlo – Protein Allergenicity: Challenges for the Toxicologist

2002 Nashville

Industry Approaches to Immunotoxicology Assessment of Pharmaceuticals in Europe, Japan, and the United States – Roundtable
Chair: Jim Weaver and Ken Hastings
Speakers:
Jim Weaver and Ken Hastings – Industry Approaches to Immunotoxicology Assessment of Pharmaceuticals in Europe, Japan, and the United States
E. Putnam – EMEA Guidelines
K. Nakamura – Current Practice of Immunotoxicology Testing in Japan
Lynda Reid – Regulatory Considerations for Immunotoxicology Assessment of Investigational Drug Products in the United States
Jack Dean and B. Remandet – Timing, Data Interpretation, and Experience with the Immunotoxicity Assessment of New Drug Candidates: A Pharmaceutical Industry View
Approaches to the Assessment of Food Allergenicity - Workshop
Chair: Greg Ladics and Wumin Dong
Speakers:
- Greg Ladics and Wumin Dong – Approaches to the Assessment of Food Allergenicity
- Mike Holsapple – Allergy Assessment of Genetically-Modified (GM) Foods: What Are the Issues?
- J. Astwood et al. – Factors Relevant to the Allergy Assessment of Foods Derived from Biotech Crops
- Ian Kimber and Rebecca Dearman – Animal Models for the Identification of Protein Allergenic Potential: The Balb/c Mouse
- L. Knippels et al. – Determination of Protein Allergenicity: Studies in a Brown Norway Rat Food Allergy Model
- R. Helm – Non-Rodent Animal Models for Assessing Protein Allergenicity

Molecular Mechanisms of Smoking-Induced Immune Suppression – Symposium
Chair: Brian Freed and Kathy Rodgers
Speakers:
- Kathy Rodgers and Brian Freed – The Effects of Smoking on Human Health Broaden the Scope of Their Use – Symposium
- Brian Freed – Inhibition of G1 and S Phase T-Cell Cycle Events by Cigarette Smoke
- M. Sopori – Neuroimmune Communications in Nicotine-Induced Immunosuppression
- K. Stringer and Brian Freed – Modulation of Neutrophil Reactive Oxygen Species Production by Cigarette Smoke Extract

Altered Gene Expression and Cutaneous Toxicity – Symposium
Chair: Frank Gerberick and Ian Kimber
Speakers:
- Frank Gerberick and Ian Kimber – Altered Gene Expression and Cutaneous Toxicity
- Rebecca Dearman and Ian Kimber – Induction of Skin Sensitization: Gene Expression Profiles
- Emanuela Corsini and C. Galli – Altered Keratinocyte Gene Expression Following Treatment with Irritants
- J. McDougal – Molecular Changes in Skin Following Acute Dermal Exposures with JP-8 Jet Fuel and Solvents
- Dori Germolec – Altered Gene Expression in Keratinocytes Following Arsenic Exposure

2001 San Francisco

Food Allergy and Intolerance - CE
Chair: Ian Kimber and Lois Kotkoskie
Speakers:
- S. Teuber – Food Allergy: Clinical Aspects
- Ian Kimber – Food Allergy: Immunological Mechanisms and Toxicological Aspects
- S. Taylor – Genetically-Modified Foods and Food Allergy
- F. Satchell – Food Allergy: Regulatory Aspect

Environmental Bioindicators: Useful Tools for Assessing At-Risk Populations - CE
Chair: Judy Zelikoff and Peter Thomas
Speakers:
- Peter Thomas – Overview
- S. Adams – Exposure Assessment: Advantages and Limitations for Ecological Risk Assessment
- D. Birkholz – Exposure Assessment Through Biomonitoring
- N. Denslow – Biomarkers of Endocrine Disruption in Oviparous Vertebrates
- Judy Zelikoff – Immune Response Alterations in Fish as Biomarkers of Pollutant Exposure/Effects
- I. Wirgin – Molecular Markers for Assessing Pollutant Exposure
Unique Challenges in the Safety Assessment of Human Immunotherapeutics - Workshop
Chair: Ken Hastings and Robert House
Speakers:
  - Ken Hastings and Robert House – Unique Challenges in the Safety Assessment of Human Immunotherapeutics
  - M. Green – Special Considerations in the Safety Assessment of Immunotherapeutic Agents
  - Francois Verdier – Immunotoxicology Concerns in Human Vaccine Development
  - Janet Clarke et al. – Safety Assessment of Nerve Growth Factor: Consideration of Neuroimmune Modulators
  - F. Goodsaid – Accurate Gene Expression Results in Quantitative PCR and the Development of Methods for Efficient Determination of Drug Safety

The Developing Immune System A Sensitive Target for Perturbation by Xenobiotics – Symposium
Chair: Ralph Smialowicz and John Barnett
Speakers:
  - Ralph Smialowicz – The Developing Immune System A Sensitive Target for Perturbation by Xenobiotics
  - K. Landreth – Ontogeny of the Immune System
  - John Barnett et al. – The Effects of Organochlorine Compounds on the Developing Immune System
  - Steve Holladay – Prenatal Immunotoxicant Exposure and Increased Risk of Autoimmune Disease
  - F. Martinez – Environmental Risk Factors in Pediatric Asthma
  - C. Kimmel – Developmental Immunotoxicity Considerations in Testing and Risk Assessment for Children’s Health

Unraveling a Mystery: New Insights into the Molecular Mechanism(s) Responsible for TCDD-Induced Immunotoxicology – Symposium
Chair: Norb Kaminski and Mike Holsapple
Speakers:
  - Norb Kaminski and Mike Holsapple – Unraveling a Mystery: New Insights into the Molecular Mechanism(s) Responsible for TCDD-Induced Immunotoxicity
  - C. Bradfield – Ah Receptor Signal Transduction: An Overview
  - M. Gallo and Y. Tian – AhR and NF-κB Interactions: A Potential Mechanism for TCDD Toxicity
  - Norb Kaminski – Putative Intracellular Targets for 2,3,7,8-Tetrachlorodibenzo-p-Dioxin(TCDD)-Mediated Inhibition of Immunoglobulin Secretion by B-Cells
  - Prakash Nagarkatti, Iris Camacho, Mitzi Nagarkatti, et al. – Upregulation of FasLGene Expression and Enhanced Activation-Induced Cell Death as a Mechanism of TCDD-Induced Immunotoxicity
  - Tom Gasiewicz – Defining Cell Targets for the Actions of Dioxin and the Ah Receptor n Developing Lymphocytes

Molecular Mechanisms of Xenobiotic-Induced Autoimmunity - Symposium
Chair: Paige Lawrence and Kathy Rodgers
Speakers:
  - Kathy Rodgers and Paige Lawrence – Overview: Molecular Mechanisms of Xenobiotic-Induced Autoimmunity
  - H. McDevitt – Insulin-Dependent, Juvenile Onset, Type I Diabetes Mellitus
  - Mike McCabe and Allen Rosenspire – Attenuation of Apoptosis by Heavy Metals: Signaling Pathways Involved and Potential Importance in Autoimmunity
  - Jeff Vos – Hexachlorobenzene and Autoimmunity
  - R. Rubin, Anke Kretz-Rommel, et al. – Initiation of Drug-Induced Autoimmunity by Disruption of Central T-Cell Tolerance

Environmental Influences on the Development and Severity of Allergic Asthma - Symposium
Chair: Ian Gilmour and Terry Gordon
Speakers:
  - Ian Gilmour and Terry Gordon – Environmental Influences on the Development and Severity of Allergic Asthma
  - Ian Gilmour – Asthma in the Laboratory: Models and Manipulations
  - J. Balmes – Asthma and Air Pollution
  - Meryl Karol – The Role of Small Molecular Weight Compounds in Occupational Asthma
  - A. Saxon et al. – Xenobiotics and Allergic Inflammation
  - C. Plopper et al. – Effect of Ozone Exposure on Allergic Responses to Dust Mite in Rhesus Monkeys
2000 Philadelphia

**Pulmonary Immunotoxicology - CE**
Chair: Mitch Cohen and Judy Zelikoff
Speakers:
- R. Schlesinger – Respiratory Tract Structure and Defense: An Overview
- Meryl Karol – Adverse Effects of Altered Pulmonary Immunity
- Bob Sherwood – Immunotoxicants - Biologics
- Mark Frampton – Immunotoxicants – Ambient Gases
- Greg Finch – Immunotoxicants – Metals

**Are There Autoimmune Consequences of Toxicant Exposure in Human Populations? – Roundtable**
Chair: Kathy Rodgers and Mike Lynes
Speakers:
- Kathy Rodgers and Mike Lynes – Are There Autoimmune Consequences of Toxicant Exposure in Human Populations?
- N. Rose – Autoimmune Disease and Environmental Chemicals
- D. Ozonoff – Consequences of Occupational and Environmental Exposures in the Development of Autoimmune Diseases
- G. Cooper – Critical Issues for the Evaluation of Environmentally-Related Autoimmune Diseases

**Latex Allergy in the Workplace - Workshop**
Chair: Mark Toraason and Dori Germolec
Speakers:
- Mark Toraason and Dori Germolec – Latex Allergy in the Workplace
- G. Sussman – Latex Allergy: Clinical and Epidemiological Data
- D. Beezhold – Molecular Characterization of Latex Allergens
- Ray Biagini – Complications in Interpretation of Diagnostic Tests for Latex Allergy
- Jean Meade – Animal Models and Mechanisms of Latex Allergy

**Human Immunotoxicity: Examples and Strategies for Determining Risk - Workshop**
Chair: MaryJane Selgrade and Mike McCabe
Speakers:
- MaryJane Selgrade – Human Immunotoxicity: Examples and Strategies for Determining Risk - Introduction
- N. Weisglas-Kuperus – Immunologic Effects of Polychlorinated Biphenyl (PCB) and Dioxin Exposure in Dutch Toddlers
- R. Glaser and J. Kiecolt-Glaser – The Health Consequences of Stress-Induced Immune Modulation
- Scott Burchiel – Mechanisms of Human Immunotoxicity Induced by Polycyclic Aromatic Hydrocarbons (PAHs): Lessons from Murine In Vitro/In Vivo and Human In Vitro Studies

**Values and Limitations of Transgenic Animals in Immunotoxicology – Symposium**
Chair: Debbie Laskin and Al Silverstone
Speakers:
- Debbie Laskin and Al Silverstone – Values and Limitations of Transgenic Animals in Immunotoxicology
- Debbie Laskin – Studies on the Role of Inflammatory Mediators in Chemically-Induced Toxicity: Transgenic Models vs Pharmacologic Approaches
- Al Silverstone – Radiation Chimeras and Transgenic Knockouts as Tools to Define Immune System Targets for Dioxin Receptor and Estrogen Receptor Activation
- J. Ashwell – Using Transgenics and Other Approaches to Study Regulation of Antigen-Specific T-Cell Apoptosis by Glucocorticoid
- R. Tennant et al. – Identifying Chemical Carcinogens and Assessing Potential Risk in Short-term Bioassays Using Transgenic Mouse Models
- T. Doetschman et al. – Lessons from TGFβ1-Deficient Mice: Strain Differences and Genetic Modifiers of Responsiveness
Immunotoxicity of Ethanol: Lessons from a Structurally Simple, But Functionally Complex Immunotoxicant - Symposium

Chair: Steve Pruett

Speakers:

Steve Pruett and Tom Jerrells – Introduction

Steve Pruett – Suppression of NK Cell Activation and MHC Class II Expression on B-Cells by Acute Ethanol Exposure in Mice: Mechanisms of Action and Involvement of Endogenous Corticosterone

Tom Jerrells – The Effects of Subchronic Ethanol Feeding on Immune-Mediated Host Defenses to Intracellular Bacteria and Viruses

Mike Holsapple – Results from a Chronic Liquid Diet Model – Indirect, Time-Dependent Effects on Humoral Immune Response

G. Szabo and P. Mandrekar – Role of NF-κB in Inhibition of Inflammatory Mediator Production by Alcohol in Human Monocytes

R. Cook – Chronic Ethanol Exposure – Comparisons of Human and Experimental Data

Chemical Hypersensitivity - CE

Chair: Meryl Karol and Jacques Descotes

Speakers:

Jacques Descotes – Chemical Hypersensitivity: Introduction

Ian Kimber – Immunobiological Mechanisms of Allergic Contact Dermatitis

Henk Van Loveren – Mechanisms of Allergic Respiratory Hypersensitivity

Meryl Karol – Models of Contact and Respiratory Sensitivity and Structure-Activity Relationships

M. Lovik – Chemical Allergy: Regulatory Considerations

Meryl Karol – Conclusions/Discussion

Validation of Toxicology Test Methods: Immunotoxicology Case Studies - Workshop

Chair: Frank Gerberick and Al Munson

Speakers:

Frank Gerberick and Al Munson – Validation of Toxicology Test Methods: Immunotoxicology Case Studies

W. Stokes – Guidelines for Validation and Acceptance of Toxicology Testing Methods

H. Spielmann – In Vitro 3T3 Neutral Red Uptake Phototoxicity Test (3T3 NRU PT): A Coordinated Validation Process

Ian Kimber – Local Lymph Node Assay: An Approach to Validation and Current Regulatory Status

Peter Thomas – Validation Status and Regulatory Acceptance of Laboratory Animal-Based Testing Methods to Assess Drug and Chemically-Induced Immunosuppression

Animal Models of Cardiopulmonary Disease: Impact of Air Pollution on At Risk Populations - Workshop

Chair: Judy Zelikoff and Dan Morgan

Speakers:

Judy Zelikoff and Dan Morgan – Animal Models of Cardiopulmonary Disease: Impact of Air Pollution on At Risk Populations

R. Schlesinger – Animal Models of Cardiopulmonary Disease: Role in Air Pollution Toxicology

T. Gordon – Models of Asthma/Allergy

D. Costa – Models of Chronic Obstructive Pulmonary Disease

J. Zelikoff – Models of Respiratory Infection

U. Kodavanti – Models of Cardiac and Cardiopulmonary Vascular Disease

J. Mauderly – The Utility of Data from Animal Models of Cardiopulmonary Disease for Air Pollution Risk Assessment
The Immunotoxicology of Novel Therapeutics - Workshop
Chair: Robert House and Ken Hastings
Speakers:
- Robert House and Ken Hastings – The Immunotoxicology of Novel Therapeutics
- Jeanine Bussiere – Immunomodulating Biologics: Distinguishing Activity from Toxicity
- Jacques Descotes – Toxicity of Therapeutic Cytokines: From Animal Data to Clinical Adverse Effects
- A. Krieg – Mechanisms and Applications of CpG DNA
- Kimber White – Immunomodulation by the Protease Saquinavir
- Ken Hastings – Toxicity of Therapeutic Immunosuppressants

Drug Hypersensitivity: Mechanisms of Immune-Mediated Reactions – Symposium
Chair: Liz Sikorski and Helen Haggerty
Speakers:
- Liz Sikorski and Helen Haggerty – Drug Hypersensitivity: Mechanisms of Immune-Mediated Reactions
- L. Pohl – Metabolic Bioactivation in Drug Hypersensitivity
- W. Pilcher et al. – Involvement of T-Cells in Drug Allergy
- Herve Lebrec, Marc Pallardy, et al. – Th1/Th2 Cytokines and Regulation of Specific Immune Response to Drugs
- E. Gleichmann et al. – What Do T-Cells Recognize in Adverse Immune Reactions to Chemicals?

1998 Seattle

Cytokines as Indicators of Toxicity: The Immune System and Beyond - CE
Chair: Robert House
Speakers:
- Robert House – Cytokines – Bioinformation in the Immune System and Beyond
- Ian Kimber – Cytokines in the Induction and Elicitation of Allergic Responses
- Kevin Driscoll – The Involvement of Cytokines in Adverse Responses of the Respiratory Tract
- Larry Schook – The Role of Cytokines in Xenobiotic-Induced Inflammation
- David Lawrence – CNS Cytokines: Role in Peripheral Immune Regulation and Neurological Pathology

Chemical Contact Allergy Structure Activity Relationships (SAR) - Workshop
Chair: Frank Gerberick and Meryl Karol
Speakers:
- Frank Gerberick – Introduction to Contact Allergy and QSAR
- H. Maibach – A Quantitative Model for Contact Allergy and the Use of Clinical Report Data
- M. Barratt – Computer Prediction of Contact Allergy Using the Derek Expert System Rulebase
- K. Enslin and V. Gombar – Computational Toxicity Assessment of Dermal Sensitization in the Guinea Pig
- Meryl Karol et al. – The Case/Multicase System Model of Contact Allergy

Toxicology of Protein Allergenicity: Prediction and Characterization - Workshop
Chair: Ian Kimber and Nancy Kerkvliet
Speakers:
- Ian Kimber and Nancy Kerkvliet – Toxicology of Protein Allergenicity: Prediction and Characterization
- S. Taylor – Protein Allergenicity: Assessment of Genetically-Modified Food
- J. Astwood and R. Fuchs – Allergenicity of Bioengineered Foods: Relationship to Digestibility and Stability
- K. Sarlo, Mike Robinson et al. – Protein Respiratory Allergy Approaches to Risk Assessment
- Rebecca Dearman and Ian Kimber – Allergenicity and Immunogenicity of Proteins: An Experimental Approach
Woodsmoke: Toxicological Impacts and Human Health Risks - Workshop
Chair: Judy Zelikoff and John Morris
Speakers:
- John Morris and Judy Zelikoff – Woodsmoke: Toxicological Impacts and Human Health Risks - Introduction
- T. Larson – Woodsmoke: Emission Trends, Chemical Composition, and Ambient Variability
- M. Lipsett – Epidemiological Studies of the Human Health Impacts of Woodsmoke
- J. Koenig – Human Health Risk from Woodsmoke
- Judy Zelikoff, Y. Li, and Mitch Cohen – Woodsmoke Impairs Host Resistance Against Pulmonary Infections in an Animal Model
- N. Maykut – Regulation: A Governmental Perspective on Residential Wood Burning

Immunotoxicity: Developing Strategies to Identify Risk of Autoimmune Disease Associated With Chemical Exposures - Workshop
Chair: MaryJane Selgrade and Kimber White
Speakers:
- MaryJane Selgrade and Kimber White – Immunotoxicity: Developing Strategies to Identify Risk of Autoimmune Disease Associated With Chemical Exposures - Introduction
- N. Rose et al. – Interactions Between Genetic Factors and Environmental Agents: Autoimmune Thyroiditis and Dietary Iodine
- R. Tisch – Insulin-Dependent Diabetes Mellitus: Immune Endpoints Associated With Risk of Disease
- Kimber White – Use of Brown Norway Rat and NZBxW Mouse Models of Systemic Lupus Erythematosus to Assess Effects of Silicone Gel, Metals, and Other Xenobiotics on Autoimmune Disease

Alterations in Cytokine Receptors by Xenobiotics – Symposium
Chair: Kathy Rodgers and Mitch Cohen
Speakers:
- Kathy Rodgers – Alterations in Cytokine Receptors by Xenobiotics - Overview
- Larry Schook et al. – Tumor Necrosis Factor (TNF)α-Mediated Immunotoxicity: Differential Signaling Delineated Through TNF Receptor (TNFR) Knockout (KO)
- J. Oppenheim et al. – Interactions of Distamycin Analogues, Opioids, and HIV-1 Envelope Proteins With Chemokine Receptors
- Brian Freed – Suppression of Interleukin (IL)-2-Dependent T-Cell Proliferation by Benzene Derivatives
- Mitch Cohen – Alterations in Interferon (IFN) Receptor Binding/Post-Binding Events Induced by Xenobiotics

1997 Cincinnati

Neuroimmunology: Implications for Toxicology - CE
Chair: David Lawrence
Speakers:
- David Lawrence – Introduction to Neuroimmunology and Brain Laterality Effects on Immunity
- D. Miller – CNS Influences on Immunity
- S. Felten – Innervation of Lymphoid Organs and Neuropeptides/Neurotransmitters from the Immune System
- J. Moynihan – CNS Influences on Regulatory Helper T-Cell Subsets and Conditioning Effects

Design and Interpretation of Immunotoxicology Studies - Workshop
Chair: Peter Thomas
Speakers:
- Peter Thomas – Design and Interpretation of Immunotoxicology Studies
- MaryJane Selgrade – EPA Approaches to Immunotoxicity Testing and Risk Assessment
- Dennis Hinton – Immunotoxicity Assessment of Food Chemicals – Perspectives on the Significance of Observed Effects in Safety Evaluations
- Henk Van Loveren and Jeff Vos – Immunotoxicity Testing with OECD Guideline 407
Mike Luster – Relationship Between Immune Function and Host Resistance Tests
Al Munson – Risk Assessment in Immunotoxicology: A Practical Perspective

### Immunological Biomarkers: Measures of Exposure and Human Health Risks - Workshop

Chair: Judy Zelikoff, Nancy Kerkvliet, and Barbara Beck

Speakers:
- Judy Zelikoff – Immunological Biomarkers: Measures of Exposure and Human Health Risks
- Gerry Henningsen and Ray Biagini – Immunological Biomarkers of Human Health Risk
- Meryl Karol et al. – Xenobiotic Adducts of Asthmogens Provide Biomarkers of Exposure in Human Systems
- R. Vogt – Biomarkers of B-Cell Lymphoproliferative Disorders in Human Environmental Health Studies
- P. Bigazzi and N. Rose – Autoantibodies as markers of Xenobiotic-Induced Human Immunotoxicity

### Assessment of Immunotoxicity by Multiparameter Flow Cytometry - Workshop

Chair: Scott Burchiel and Greg Ladics

Speakers:
- Scott Burchiel and Greg Ladics – Assessment of Immunotoxicity by Multiparameter Flow Cytometry
- Greg Ladics, Liz Sikorski, Ralph Smialowicz, et al. – An Interlaboratory Evaluation of the Quantification of Rat Splenic Lymphocyte Subsets Using Immunofluorescent Staining and Flow Cytometry
- Nancy Kerkvliet and J. Oughton – Applications of Flow Cytometry to Assessment of Cytotoxic T-Lymphocyte (CTL) Function
- Frank Gerberick – Differentiating Contact Allergens from Irritants in Humans and Mice Using Flow Cytometry
- Scott Burchiel Donna Davila, Barbara Mounho, et al. – Assessment of Human Peripheral Blood Lymphocyte Activation and Apoptosis by Flow Cytometry
- David Lawrence et al. – Detection of oxidant-Induced Injury in Human Lymphocytes by Flow Cytometry

### Identification of Respiratory Allergens - Workshop

Chair: Ian Kimber and MaryJane Selgrade

Speakers:
- Ian Kimber and MaryJane Selgrade – Identification of Respiratory Allergens - Introduction
- I. Bernstein – Respiratory Allergy: The Clinical Perspective
- Meryl Karol – Structure-Activity Relationships in Sensitization
- Kathy Sarlo – Guinea Pig Models Used to Assess Respiratory Allergy to Proteins and Low Molecular Weight Compounds
- Ian Kimber – Approaches to the Identification of Chemical Respiratory Sensitizers in mice
- Mike Robinson – Mouse Intratracheal and Intranasal Models to Assess Relative Allergenicity of Proteins
- MaryJane Selgrade – Application of Data to Regulatory Needs and Risk Assessment

### Aquatic Pollution-Induced Immunotoxicity in Wildlife Species - Symposium

Chair: Bob Luebke and Judy Zelikoff

Speakers:
- Bob Luebke – Aquatic Pollution-Induced Immunotoxicity in Wildlife Species- Introduction
- M. Faisal – Pollution-Induced Immunotoxicological Alterations in Feral Fish Populations
- K. Grasman et al. – Immunological Biomarkers and Environmental Contaminants in Fish-Eating Birds of the Great Lakes
- P. Ross et al. – Contaminant-Related Immunosuppression in Harbor Seals Fed Herring from the Baltic Sea
- Judy Zelikoff – How Close Do Laboratory Immunotoxicology Studies Come to Predicting Pollutant-Induced Effects in Feral Populations?
Chair: Mary Jane Selgrade and David Lawrence
Speakers:
David Lawrence – Regulatory T-Cells and Their Modulation by Metals
S. Ullrich – Induction of a Th2-Like Immune Reaction Following Exposure to UV Radiation
Ian Gilmour – Regulation of Immune Responses to House Dust Mite Antigen in Allergic Lung Disease
M. Schuyler and D. Bice – Dysfunction of Pulmonary Immunity in Atopic Asthma: Possible Role for T-Helper Cells
Ian Kimber – Functional Maturation of Th Cell Responses and Differential Cytokine Production Following Chemical Sensitization

Immunotoxicology of Medical Devices – Symposium
Chair: Kathy Rodgers and Judy Zelikoff
Speakers:
Judy Zelikoff – Immunotoxicity of Medical Devices - Introduction
J. Jacobs et al. – Biology of Degradation Products from Orthopedic Biomaterials
Kathy Rodgers – Immunotoxicology of Devices Used in Adhesion Prevention
Kimber White and R. Klykken – Immunological investigations of Silicone Implant Materials
V. Tomazic – Hypersensitivity to Latex Proteins: Etiology, Diagnosis, and Prevention
C. Frondoza – Effect of Prosthetic Wear Debris on Macrophages, Fibroblasts, and Bone Cells

Cytokines and Growth Factors in Toxicity - CE
Chair: Robert Snyder
Speakers:
J. Laskin – Overview: Cytokines and Growth Factors
Rich Irons – Regulation of Hematopoiesis by Cytokines
Kevin Driscoll – Cytokines and Lung Inflammation and Fibrosis
Debbie Laskin – The Involvement of Cytokines and Growth Factors in Hepatic Toxicity
D. Heck – Chemical-Induced Injury to Skin

Second Messengers: Their Role in Immunotoxicity - Symposium
Chair: Norb Kaminski
Speakers:
Norb Kaminski – Second Messengers: Their Role in Immunotoxicity - Introduction
J. Putney – Introduction to Signal Transduction
J. Ledbetter and G. Schieven – Redox Regulation of Lymphocyte Activation
Mike Holsapple – Role of Calcium in 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)-Induced Suppression of B-Cell Function
Scott Burchiel – Role of Altered Calcium Homeostasis in the Immunotoxicity of Polycyclic Aromatic Hydrocarbons
Norb Kaminski – Role of Adenylate Cyclase in Cannabinoid-Mediated Immune Inhibition

Interactions Between Immune Cells and Non-Immune Cells in Immunotoxicology – Symposium
Chair: Gary Rosenthal
Speakers:
Gary Rosenthal – Interactions Between Immune Cells and Non-Immune Cells in Immunotoxicology
G. Harry – Interactions Between the Central Nervous System Neurons and Immunological Active Glial Cells
J. Laskin – Keratinocytes as Immunologically-Active Cells
R. Billings – Leukocyte-Hepatocyte Interactions
A. Baldwin – Interactions of Endothelial Cells with the Immune System: Role in Immunotoxicology
Compiled by Helen Ratajczak

ANYTIME you have a new publication to report, please send it to hratajcz@rdg.boehringer-ingelheim.com
It will be included in the next newsletter.

ASTHMA, ALLERGY AND HYPERSENSITIVITY


AUTOIMMUNITY


CYTOKINES AND CHEMOKINES


**EFFECTS: COMPOUNDS**


Vorderstrasse BA, Cundiff JA, Lawrence BP. Developmental exposure to the potent aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzop-dioxin impairs the cell-mediated immune response to infection with influenza A virus, but enhances elements of innate immunity. J Immunotox 1: 105-114, 2004.


**EFFECTS: ENVIRONMENT**


**GENETICS AND IMMUNOLOGY**


MODELS AND METHODS


Reviews


NEUROIMMUNOLOGY


GENERAL IMMUNOTOXICOLOGY


Lawrence BP, Vorderstrasse BA. Activation of the aryl hydrocarbon receptor diminishes the memory response to homotypic influenza virus infection but does not impair host resistance. Toxicol Sci 79: 304-314, 2004.


**Reviews**
