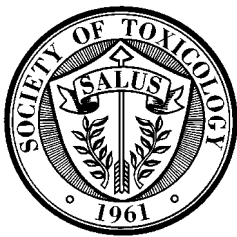


# Immunotoxicology Specialty Section Newsletter



## 2005 - 2006 Executive Committee

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Dr. Jamie DeWitt

### Student Representative

Sheung Ng

The Immunotoxicology Specialty Section Newsletter is published 3 times/year (May, August and November). If you would like to share a book review, meeting report, interesting web site or any other item of interest with members of the Specialty Section, please send it to us by the middle of the month preceding the planned publication date. All comments on, or suggestions for, the newsletter are welcome.

Helen V. Ratajczak, Ph.D., Editor  
94C Miry Brook Road  
Danbury, CT 06810  
Tel. (203) 778-6826 Fax (203) 748-6512  
hratajcz@comcast.net

Stephen B. Pruet, Ph.D., Associate Editor  
Department of Cellular Biology and Anatomy  
LSU Health Sciences Center  
1501 Kings Highway  
Shreveport, LA 71130  
Tel. (318) 675-4386 Fax (318) 675-5889  
[spruet@LSUHSC.EDU](mailto:spruet@LSUHSC.EDU)

Typesetting provided by L. Peyton Myers, Ph.D.

## President's Message

*Mitch Cohen*

As we are still in the grips of Summer heat and humidity, I figure that you would rather have some light reading instead of the usual barrage of information that comes your way. With that, I want to report on the recent meeting of the SS presidents and vice-presidents that Steve Pruet and I attended in Chicago early in August. Mike McCabe and George DeGeorge (representing their respective SSs) were also on hand to add extra voices in support of our SS when needed. Chaired once again by our own Mike Holsapple, the meeting was very interesting and focused on how to improve the SS to better serve the needs of members.

As in 2005, a major focus was on the ability to recruit and retain students and post-docs within the sections. Representatives of the Student Advisory Committee (SAC) and Post-Doctoral Association (PDA) made presentations explaining the structure and goals of these new groups and there was a lot of feedback and questioning from the attendees. I encourage all of our SS student/post-doc members to contact Sheung Ng or Jamie DeWitt to find out more information about these groups and how to join them.

Another major topic was the desire of SOT that SSs would organize Contemporary Concepts in Toxicology sessions (CCTs) as a vehicle to educate a broader population of scientists, etc. along with and beyond that of the members of our SS. In response, negotiations with National were initiated to see to it that a fair share of any moneys raised in a CCT come back to the organizing SS (as opposed to all of it going to National as has been the case). Steve has agreed to take the lead in our SS organizing a CCT for 2007; please feel free to contact him or me if you have an idea or grand topic that would potentially pull in folks from both government and industry.

A final big-ticket topic discussed was what was going on with NIH Study Sections and the problems that Toxicology-Immunotoxicology-themed grant submissions are increasingly facing during reviews. SOT President Popp promised that the SOT Council and an advisory committee trying to address this issue would update information as to what is being done to try to get NIH and its affiliated funding agencies to recognize the importance of funding researchers in these areas. It was strongly emphasized by many attendees that it should be made clear during these discussions that not only is funding important to moving science/research forward, but to assure that there will be future generations of scientists available to perform the types of studies critical to regulatory, environmental, and other government agency guideline development, and to industries that must follow these guidances in order to bring their products to the public.

## Important Deadlines

**Awards Submission**..... See page 3  
**Program Proposals**..... See page 4

I'm happy to report that over the course of the meeting it became very clear that many approaches used by our SS: communicating information, preparing sessions for the Annual Meeting, timelines for selection of SS Officers and of awardees, and the international outreach to Immunotoxicology societies were being held up as templates for other sections to emulate. Our Newsletter also became quite a topic of discussion and a copy was passed around to all the attendees to peruse. A lot of its standard content – listing of specialty-targeted job advertisements, inclusion of an organized sublisting of member recent publications, placement of upcoming meeting announcements – was lauded and several SS reps (after the meeting) asked if we would help them create/format materials for their members.

On the subject of the Newsletter, I want to be the one to express all of our members' appreciation to Brenda House for all her help these past years in getting the Newsletter into the final shape that you read. Brenda had the patience of an uber-saint many times when those supposed to submit materials found new and clever ways to procrastinate or create items that were in challenging formats, fonts, or file-forms. Her efforts are why our Newsletter is in a class of its own. Brenda is moving on to other challenges (as if this wasn't enough) and Peyton Myers has agreed to step up to the plate. If all goes accordingly, what you are looking at now is his first shot at it.

On a more somber note, I have the misfortune of having to report to you the passing of one of the true founding fathers of immunotoxicology, Dr. Jeff Vos. Jeff passed away on May 15 after a long valiant battle with cancer. The condolences of the

Executive Committee and all the Immunotoxicology Specialty Section members were sent to his family and friends through our colleagues Henk van Loveren and Raymond Pieters. In honor of his role in helping to shape the science of immunotoxicology and to inspire many who were in graduate school in the late '70s and early '80s to pursue careers in this field, the Executive Committee has decided to officially rename our IMTOX Career Achievement Award the

### **Vos Award Career Achievement in Immunotoxicology**

The first recipient of this award will be announced in Charlotte in March 2007.

Tributes to Jeff from several of his colleagues will be published in a separate special Newsletter in a few weeks. In addition, we have finally obtained permission from the copyright holders to republish the classic paper that inspired so many to become immunotoxicologists:

**Vos JG. Immune suppression as related to toxicology. *CRC Critical Reviews in Toxicology*. 5(1):67-101, 1977 May**

As a fitting tribute, this article will be reprinted in its entirety in this special Newsletter as well.

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### **Education Committee**



*Submitted by Judy  
Zelikoff*

As the Chairperson of the Immunotoxicology Specialty Section (ISS) Education Committee, I would like to thank those individuals who signed up at the March meeting to

work with me on this worthy effort. I also must add my apologies for getting off to a slow start since the National meeting.

What I would like as this Committee's legacy is to establish an ISS "Lecturers Bureau" which will aid those faculty members around the country who teach courses in immunotoxicology. As one of those individuals, I know how hard it can be to find a colleague who is not only willing to teach a graduate class, but has the right specialty for that particular lecture and is available at a pre-selected time during the semester. Thus, I would like to begin this initiative by requesting those SS members interested in teaching an undergraduate/graduate class please send me: (1) their names and contact information; (2) area of specialty (i.e., developmental immunotoxicology, pulmonary immunotoxicology, signal transduction, etc.); (3) those geographic areas for which you are willing to travel to give a lecture; (4) your preference for a spring or fall semester class; and, (5) your need, if any, for travel and/or associated expenses.

In the meantime, Dr. Cohen (SS President) is busy trying to ferret out funds for this worthy endeavor. However, even in the absence of dedicated funds, it is often possible for the requesting school to support an outside speaker. Once compiled, this list will serve as an important resource of willing and qualified instructors for needy faculty.

So, please - if you are willing and able to teach an undergraduate or graduate class in immunotoxicology at one of your colleagues' institutions send me the aforementioned information and we can move forward with another ISS "innovative and groundbreaking" initiative.

## Awards Nominations



Submitted by Greg  
Ladics

### Best Immunotoxicology Paper of the Year Award

An engraved plaque will be awarded to the authors of the best paper in the area of immunotoxicology, published in ANY peer-reviewed journal. The paper must have been published between July 1, 2004 and December 31, 2005. 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  
January 31, 2007.

### Best Presentations by a Student and by a Post-doctoral Trainee

The award requirements are submission of a complete written version (including all graphs and tables) of an immunotoxicology presentation to be made at the 2007 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. Unfortunately, we did not have enough nominations last year for the student award. For the 2007 award, please

nominate your students so that they can be recognized for their work.

The deadline for submission is  
February 3, 2007.

Please submit nominations for Awards for Best Immunotoxicology Paper of the Year and for Best Presentations by a Student and by a Post-doctoral Trainee to:

Dr. Greg Ladics  
DuPont Co.  
Experimental Station  
E400/4402  
Route 141 & Henry Clay Rd.  
Wilmington, DE 19880-0400  
Email:  
[Gregory.s.ladics@usa.dupont.com](mailto:Gregory.s.ladics@usa.dupont.com)

### Young Investigator Award

An engraved plaque will be awarded to the Young Investigator whose body of work has made significant contributions to the field of Immunotoxicology. This award is NOT LIMITED only to those in academia; investigators who have had an impact on regulatory issues or within industry will also be considered. The nominee must have less than ten years of experience since obtaining their highest degree. Exceptions to the 10 year limitation can be made if careers have been interrupted for family or health reasons, or clinical practice, etc. Reasons for the exception should be documented in the nomination letter. Nominators are required to document the contributions of the candidate and also provide a curriculum vitae and bibliography. All nominations of candidates that have not received the award will be retained and considered for an additional 2 years unless the nomi-

nation is withdrawn by the sponsor. Determination of the awardee will be by the Vice President and members of the Awards Committee.

Members should submit recommendations by November, 2006 to

Dr. Steve Pruett  
LSU Health Sciences Center  
Department of Cellular Biology and  
Anatomy  
1501 Kings Highway  
Shreveport, LA 71130  
Email: [spruet@LSUHSC.edu](mailto:spruet@LSUHSC.edu)

### Vos Award - Career Achievement in Immunotoxicology

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 re-

lated 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 22, 2006.

Please submit nominations to:

Dr. Mitch Cohen  
New York University School of  
Medicine  
Nelson Institute of Environmental  
Medicine  
57 Old Forge Road  
Tuxedo, NY 10987 USA  
Email: [cohenm@env.med.nyu.edu](mailto:cohenm@env.med.nyu.edu)

## 2006-2007 Program Committee

Jeanine Bussiere (Chair)  
Tony Arulanandam  
Robert Caldwell  
Girish Ramdas Chaudari  
Jamie DeWitt  
Dori Germolec  
Andrij Holian  
M. Firoze Khan  
Ian Kimber  
Greg Ladics  
Lynne LeSauteur  
Tina Satterwhite  
Allen Silverstone  
Petia Simeonova  
Mike Woolhiser

## Program Committee Announce- ment



*Submitted by Jeanine Bussiere*

The Immunotoxicology Specialty Section has traditionally sponsored excellent and well-attended programs at the Annual Meeting. However, we are totally dependent on our membership to keep this tradition alive. Most of us have a particular issue or area of immunotoxicology that we feel deserves more attention. Here is your chance to actually do something about it! We are now seeking program proposals for the 2008 meeting in Seattle. Please put a program proposal together and submit it to me ([bussierj@amgen.com](mailto:bussierj@amgen.com)) by November 31, 2006. Please follow the guidelines that you will find online (<http://www.toxicology.org/ai/fa/formsapps.asp>; ignore the date, which is for last year's deadline). See the May 2005 Immunotoxicology Specialty Section Newsletter (available at [www.toxicology.org](http://www.toxicology.org) and select specialty sections and immunotoxicology) for a list of previous programs sponsored by our specialty section. Thanks for your help and support!

During the process of formulating your idea for a session at the 2008 Seattle 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 IM-TOX members (i.e., so it could at-

tract 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.

## Regulatory Committee Report



*Submitted by Peter Thomas*

### **Adverse clinical reactions to humanized anti CD28 agonist prompt European regulatory review.**

A joint task force set up by the BioIndustry Association (BIA) and the Association of the British Pharmaceutical Industry (ABPI) recently released its recommendations to the expert working group set up to learn from the adverse events noted in a UK clinical trial of TGN1412. TGN1412 is an agonistic anti-CD28 monoclonal antibody developed as a therapeutic for various diseases in which T-cells are involved in the pathogenesis of chronic inflammation or in hematological disease. TGN1412 bypasses the requirements for T-cell receptor triggering and activates T-cells nonspecifically.

Development of this molecule fol-

lowed the normal regulatory pathway of other monoclonal antibodies including several studies to characterize the expected immunopharmacology (and potential immunotoxicity) of the compound. Dose selection for the Phase 1 clinical trials was based upon the NOAEL in nonhuman primates and took into account several safety factors. However, when TGN1412 was administered to normal healthy volunteers, significant adverse effects consistent with a massive release of proinflammatory cytokines (a cytokine storm) took place. In other trials, cancer patients receiving anti-CTLA-4 antibody respond positively to treatment but in some cases, present with significant immune mediated adverse effects.

These recent events have prompted both US and EU regulatory review of procedures to ensure safety (and necessity) of first-in-man studies of agents that have stimulatory effects on the immune system. Stay tuned for more developments.

## Student Representative Report



*Submitted by Sheung Ng and Jamie DeWitt*

Greeting students and post-docs! As mentioned in the previous newsletters, ISS now has two student/post-doc representatives serving two-year terms with a one-year overlap. These staggered terms provide continuity between the two representatives; guidance from our senior representative, Jamie DeWitt, is essential for a junior representative like myself to work efficiently during my term. Ja-

mie is going to step down from this position when her term ends in 2007 and another representative will be appointed at that time. So, please let one of us know if you are interested in serving in this capacity.

I would like to remind all our student / postdoctoral members that SOT provides plenty of useful information through the Student Advisory Council (SAC) and the Post-Doctoral Assembly (PDA). SAC aims at addressing the needs of students in the Society and to promote student participation and membership. Graduate students please visit the SAC website at: <http://www.toxicology.org/ai/spd/studentservices.asp>. You can now find the spring edition of the SOT student e-Letter! This newsletter contains highlights from the 2006 SOT Annual Meeting, important Regional Chapter updates, and other important news for student members. Postdoctoral members can also find great resources for scientific growth, networking, and career advancement from the PDA (<http://www.toxicology.org/ai/spd/PD.asp>). The results of the 2006 survey of the post-doctoral experience have recently been released.

Please be reminded that ISS committees are open to all students and post-docs. Please contact the committee chairs (<http://www.toxicology.org/ISOT/SS/immunotox/Committee.html>) if you are interested in joining any of the Specialty Section Committees (Awards, Communications, Education, Membership, Program, and Regulatory).

If you have any questions or suggestions about how ISS can best serve the students / post-docs of immunotox, please do not hesitate to contact me at [ng@env.med.nyu.edu](mailto:ng@env.med.nyu.edu). I look forward to seeing more of you at next year's mixer in Charlotte.

## ATTENTION MENTORS AND ADVISORS!

The ISS is one of the largest and most active specialty sections of SOT. We are also one of the only specialty sections with a student representative AND a post-doctoral representative. We are in need of a **new post-doctoral representative to serve a two-year term (2007-2009)**. Why my post-doc, you ask? Where else can your post-doc interact closely with experts in your field? Where else can s/he hear about cutting-edge research before it hits the journals? There really isn't a better way for you to foster your post-doc's career development. Submit your post-doc's nomination **TODAY!**

**How:** Submit a letter to the ISS president that includes: **a)** your nomination **b)** verification that your post-doc has at least two years of training remaining, and **c)** assurances that you have travel support for your post-doc to attend the national SOT meeting during his/her tenure as the post-doctoral representative.

**When:** NOW! Nominations will be reviewed by the ISS Executive committee in the spring of 2007 and a new representative will be announced in time for the new representative to begin serving at the 2007 national SOT meeting.

For more information, please contact the current post-doctoral representative, Jamie, DeWitt ([dewitt.jamie@epa.gov](mailto:dewitt.jamie@epa.gov)).

## Financial Report

Immunotoxicology Specialty Section  
July 2005—June 2006

*Submitted by  
Helen V. Ratajczak  
Secretary/Treasurer*



Ordinary Income/Expense		Amount \$
Income	Contributions	500
	Dues - '06	4,005
	Grants - Food Safety	—
	Grants - Mechanisms	—
	Misc. Income	—
	Registration	4,305
	Interest	747
<b>Total Income</b>		<b>9,557</b>

Expense	Awards - Sections	—
	Plaques	727
	Ballot	—
	Exec. Meetings	641
	Miscellaneous	—
	Newsletter	200
	Reception	3,699
	Steno/Clerical	—
	Symposia	1,801
	Web Development	—
<b>Total Expense</b>		<b>7,068</b>

Excess (Deficiency) of Revenue over Expenses	2,489
Net Assets Beginning of Year	13,193
Transfers from General Fund	—
Net Assets Beginning of Year after Transfers	13,193
<b>Net Assets End of Year</b>	<b>15,682</b>

**Notice:**

The financial report for the August, 2005 Newsletter was incomplete. Please see the report to the right for complete information.

**IMMUNOTOXICOLOGY**

The Immunotoxicology Specialty Section is a branch of the Society of Toxicology whose members include scientists with training in immunology, toxicology and risk assessment. Our purpose is to promote immunotoxicology as a discipline by: (1) increasing our understanding of the impact that xenobiotics have on the immune system (2) advocating research into the mechanisms of immunomodulation, and (3) encourage the development of new methods and techniques to improve risk assessment. At the national meeting, the Section sponsors symposia, continuing education courses, workshops and roundtable discussions. Annual meetings are held at the national meeting to discuss specialty section business and program topics for the following year. Pre- and postdoctoral students are encouraged to participate in the scientific program at the Annual Meeting by presentation of an award for best poster session in the field of immunotoxicology. Student input into the Section is also encouraged, and facilitated by an appointed Student Representative that attends Section Officer's meetings as a full voting member.

**Financial Report**

**Immunotoxicology Specialty Section  
July 2004—June 2005**

*Submitted by  
Helen V. Ratajczak  
Secretary/Treasurer*



<b>Ordinary Income/Expense</b>		<b>Amount \$</b>
Income	Contributions	—
	Dues - '05	4,650
	Grants - Food Safety	—
	Grants - Mechanisms	—
	Misc. Income	—
	Registration	4,296
	Interest	628
<b>Total Income</b>		<b>9,574</b>

Expense	Awards - Sections	350
	Plaques	541
	Ballot	—
	Exec. Meetings	—
	Miscellaneous	55
	Newsletter	450
	Reception	4,123
	Steno/Clerical	—
	Symposia	—
	Web Development	—
<b>Total Expense</b>		<b>5,520</b>

Excess (Deficiency) of Revenue over Expenses	4,055
Net Assets Beginning of Year	9,139
Transfers from General Fund	—
Net Assets Beginning of Year after Transfers	9,139
<b>Net Assets End of Year</b>	<b>13,193</b>

Compiled by Haley Neff-LaFord.

**ANYTIME you have a new publication to report, please sent it to the new coordinator, Haley Neff-LaFord: [hneff@mail.wsu.edu](mailto:hneff@mail.wsu.edu).**

### Asthma, Allergy & Hypersensitivity

English K, Brady C, Corcoran P, Cassidy JP and Mahon BP. Inflammation of the respiratory tract is associated with CCL28 and CCR10 expression in a murine model of allergic asthma. *Immunol Lett* 103:92-100, 2006.

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Nouri-Shirazi M and Guinet E. A possible mechanism linking cigarette smoke to higher incidence of respiratory infection and asthma. *Immunol Lett* 103:167-176, 2006.

### Cytokines & Chemokines

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Park J, Chung SW, Kim SH and Kim TS. Up-regulation of interleukin-4 production via NF-AT/AP-1 activation in T cells by biochanin A, a phytoestrogen and its metabolites. *TAAP* 212:188-199, 2006.

Pruett SB, Fan R and Zheng Q. Involvement of three mechanisms in the alteration of cytokine responses by sodium methylthiocarbamate. *TAAP* 213:172-178, 2006.

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Redente EF and Massengale RD. A systematic analysis of the effect of corn, wheat, and poultry dusts on interleukin-8 production by human respiratory epithelial cells. 2006. *J Immunotoxicol* 3:31-37.



Schwarz A, Maeda A, Ständer S, van Steeg H and Schwarz T. IL-18 Reduces Ultraviolet Radiation-Induced DNA Damage and Thereby Affects Photoimmunosuppression. *J Immunol* 176: 2896-2901, 2006.

## Effects: Compounds

Cohen MD, Prophete C, Sisco M, Chen LC, Zelikoff JT, Smee JJ, Holder AA and Crans DC. Pulmonary immunotoxic potentials of metals are governed by select physicochemical properties: Chromium agents. *J Immunotoxicol* 3:69-81, 2006.

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Poppe D, Tiede I, Fritz G, Becker C, Bartsch B, Wirtz S, Strand D, Tanaka S, Galle PR, Bustelo XR and Neurath MF. Azathioprine Suppresses Ezrin-Radixin-Moesin-Dependent T Cell-APC Conjugation through Inhibition of Vav Guanosine Exchange Activity on Rac Proteins. *J Immunol* 176:640-651, 2006.

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## Models & Methods

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