



Immunotoxicology Specialty Section Newsletter

**2013-2014
Executive Committee**

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Dr. Gary Bureson**

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Dr. Danuta Herzyk**

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Dr. Gregory Ladics**

**Senior Councilor
Dr. Peyton Myers**

**Junior Councilor
Dr. Jamie Dewitt**

**Postdoc Representative
Dr. Kinta Serve**

**Student Representative
Position to be filled***

The ImTox SS Newsletter is published 3 times/year (Summer, Fall, and Winter). If you would like to share an item of interest with members of the ImTox SS, please send it to the Communications Committee Chairs. All comments on, or suggestions to, the newsletter are welcome.

Ashwini Phadnis-Moghe
phadnisa@msu.edu

Outgoing President's Message

Gregory S. Ladics, PhD, DABT, ATS



Dr. Greg Ladics
President, ImTox SS
2012-2013

I would like to thank the Executive Committee, our Committee Chairs, our volunteer committee members and additional specialty section members for your support and for the outstanding progress that was made this past year. It has been a wonderful opportunity and tremendous honor to serve as the 2012-2013 Immunotoxicology Specialty Section President.

Hopefully, together with the rest of the Executive Committee, we have had a positive impact on the Specialty Section this year. We had a very successful SOT meeting in San Antonio with several high-quality sponsored sessions presented at a time when the acceptance rate for proposals continues to be very competitive. We continued the International Exchange with the Japanese Society of Immunotoxicology (JSIT); Henk van Loveren and Emanuela Corsini presented at the 2012 JSIT meeting. We also were successful at obtaining Global Matching Funds from SOT for this effort. Our Endowment Fund which supports the HESI Immunotoxicology Young Investigator Travel Award grew this year and currently has permanently restricted assets of \$42,403 (April 2013) up \$3300 from the previous year. I encourage each of you to consider making a donation to this fund to help it grow and provide increased funding for young investigators to attend the SOT meeting (<http://www.toxicology.org/ai/csot/contribute.asp>).

Congratulations to our incoming officers Rafael Ponce (VP-Elect), Haley Neff-LaFord (Secretary-Treasurer) and Jamie DeWitt (Junior Councilor).

President's Message.....	1
Outgoing President's Message.....	2
Student Postdoctoral Report	3
Awards Committee Report.....	5
ImTox SS Reception Pictures.....	8
ImTox SS Committee Lists.....	11
Recent Immunotoxicology Publications.....	12

For 2013, I'm committed to seeing the Specialty Section move forward with a Contemporary Concepts in Toxicology (CCT) proposal that could help generate revenue for our section. A core group of specialty section members are working on a draft proposal, which we hope to submit to SOT this summer. Finally, I look forward to continued service in the role of Past President on the Executive Committee and to the upcoming year with Gary Burleson as our SS President. I hope to see each of you at next year's SOT Meeting in Phoenix!

Gregory S. Ladics, Ph.D., DABT, ATS
Out-going President, Immunotoxicology Specialty Section

Incoming President's Message

It is with great pride, honor, and trepidation that I begin my term as President of the Immunotoxicology Specialty Section (ITSS). I follow many who have held this office with honor and will continue to uphold these high standards. I especially thank Greg Ladics, Past President, for his leadership. I am looking forward to working with an excellent Executive Committee during the 2013-2014 year: Danuta Herzyk (Vice President), Rafael Ponce (Vice President-elect), Haley Neff-LaFord (Secretary/Treasurer), Greg Ladics (Past President), Peyton Myers (Senior Councilor), Jamie DeWitt (Junior Councilor) and Kinta Serve (Postdoctoral Representative).



Dr. Gary Burleson
President, ImTox SS
2013-2014

The Executive Committee will discuss issues of interest to the ITSS at monthly teleconferences on the 2nd Wednesday of every month. We will be formulating the Immunotoxicology Specialty Section Goals for 2013-2014 and submit them for publication in the next newsletter.

The ITSS is a strong and vital Specialty Section. We had a total of 17 submissions for topics to be presented at the 2013 meeting in San Antonio. This was 7 more than any other Specialty Section. Another tangible measure of the increased interest in immunotoxicology is reflected in the number of ITSS members listed in the 2012-2013 Membership Directory. While I remember the pride I felt as Membership Chairman when we reached 200 members, ITSS now has 374 members and is in the top 5 of all 27 Specialty Sections. This rapid growth has occurred in a relatively short period of time compared to the other Toxicology Specialty areas.

Immunotoxicology was born in the late 1970's and early 1980's and has matured as a field in the past 30 years. The field is now well established and still growing, but it is time to take stock and define who we are, where we are going, and what we need to do to get there. I would like to challenge our membership and task the Executive Committee in 2013-2014 with these issues, in order to develop or confirm a path forward for continued growth of the ITSS.

Gary Burleson
Incoming President, Immunotoxicology Specialty Section

Student & Postdoctoral Report



Hi students and postdoctoral members of Immunotoxicology specialty section. I hope you are having a wonderful (and productive) summer.

There are a few changes in leadership I want to make you aware of. First, I will be moving from the student representative to the postdoctoral representative position for the upcoming year (2013-2014). This means that there is an opening for a new graduate student representative. If you are interested in filling this position (2013-2015 appointment), please check your email for the official announcement or contact me directly for the information (servkint@isu.edu). Lastly, I would like to thank our out-going postdoctoral representative, Teri Girtsman, for a job well done these past two years!

I would also like to thank everyone who made it to the big Student/Postdoc mixer during the 52nd SOT meeting in San Antonio. We had a wonderful turn out and lots of fun. Additionally, we had an ImmunoTox SS mixer at the Hilton lounge just prior to the annual ImmunoTox reception and award ceremony. Although the turnout was small, we had a great time and some good discussion of ways for students and postdocs to get more involved in the specialty section. If you would like to join us this year and participate in organizing/planning any events or if you have any questions, please feel free to contact me at servkint@isu.edu. We would love to have everyone's involvement!

Past-Postdoctoral Representative

Teri Alyn Girtsman Ph.D.

teri.girtsman@umontana.edu

Postdoctoral Representative

Kinta Serve Ph.D.

[servekint@isu.edu](mailto:servkint@isu.edu)

ATTENTION GRAD STUDENTS!

Nominations are invited for the position of a new student representative. If you are interested in this applying for this position please talk to your mentors and email your nomination package to Dr. Gary Burleson (gburleson@brt-labs.com). Nomination packages should include your name, University name, a letter from the applicant stating their interest in this position, and a letter of support from your thesis advisor. Student representatives receive travel support for the Annual Meeting, \$350 from SOT and \$350 from the Specialty Section. If elected, the new student representative will serve for two full terms starting this year. For more information about the responsibilities please contact Kinta Serve at servkint@isu.edu

Member Spotlight – Dr. Scott Burchiel



The University of New Mexico Research Policy Committee selected Scott Burchiel as the 58th Annual Research Lecturer earlier this year. According to *UNM Today* the Annual Research Lecturer award is one of the highest honors the University of New Mexico can bestow on a faculty member. Dr. Burchiel was nominated by his peers for this award. He is the Nunzio and Sherolyn DeSantis Endowed Chair of Pharmacogenomics and Professor of Pharmacology and Toxicology in the Department of Pharmaceutical Sciences. He also serves as the Associate Dean for Research in the College of Pharmacy in addition to many other positions.



Congratulations Dr. Burchiel on this outstanding achievement!

JOB OPPORTUNITIES



We are starting a new section to benefit anyone who is looking for a new job or a career transition. If you are aware of a job opening in the specific area of Immunotoxicology that you would like to see posted here, please email the details to Ashwini Phadnis-Moghe at phadnisa@msu.edu. We will update this section in the upcoming newsletters and also post them online on our website.

Employers who have job openings in Immunotoxicology and related sub-disciplines and would like to advertise them in our newsletter can send the information to us in this format.

Position Available:

Institution or Company: Bottles R Us

Description: Chief Bottlewasher

Contact: Dr. Serve





2013 Awards Committee Report

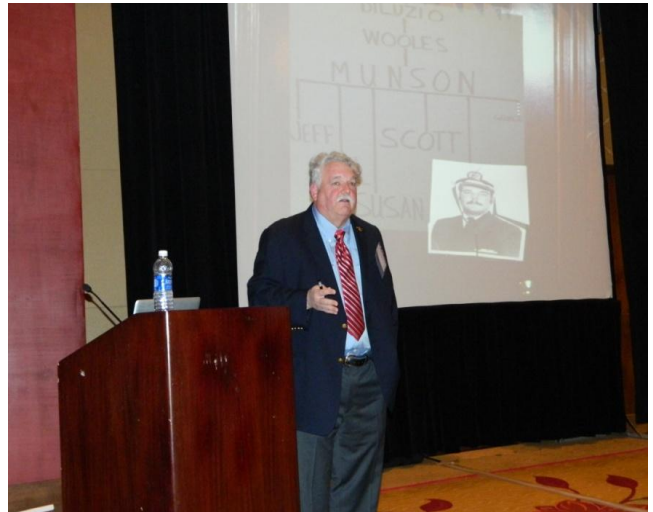
Submitted by: Jean C. Pfau, Ph.D.

Recognizing the scientific contributions of our students and colleagues is, in my opinion, one of the most important things we do. It not only recognizes their efforts, but also publicizes the accomplishments of our Specialty Section toward the mission of SOT. The ISS Awards Committee was proud to award this year's winners at the reception during the SOT Annual Meeting in San Antonio, Texas. The scientific quality of the submissions was excellent, and the decisions were, as always, very challenging! We want to thank everyone who submitted nominations, bringing forward the best papers, best presentations, and some of our finest researchers. Please plan ahead for nominations for next year. We did not receive any nominations this year for Best Postdoctoral Trainee, so I especially encourage you to nominate for next year a special postdoctoral researcher that you feel deserves recognition. Watch for emails soliciting those nominations next fall. I would like to thank the Awards Committee for their efforts, and especially Peyton Myers who not only helped me a tremendous amount with the process, but also was our esteemed photographer! Most of all, congratulations to the winners of these distinguished awards!

2013 Awards

Vos Award—Career Achievement in Immunotoxicology

Kimber White, Jr., Ph.D.





Outstanding Young Investigator Award

Jamie C. DeWitt, Ph.D.



Best Presentation by a Postdoctoral Trainee Award

None (no nominees)

Best Presentation by a Student Award

First Place of Best Presentation by a Student Award

Xiao Pan

Quantitative phosphoproteomic analysis of the dynamic signaling network mediating proinflammatory response in the spleen of mice under deoxynivalenol-induced ribotoxic stress





2013 Awards (continued)

Second Place of Best Presentation by a Student Award

Lori S. Ahrenhoerster

Developmental Aryl Hydrocarbon Receptor (AHR) Activation Attenuates Hematopoietic Stem Cell Capacity to Undergo Lymphocyte Differentiation



Best paper of the Year Award

Vivek S. Patel¹, Ravikumar A. Sitapara¹, Ashwini Gore¹, Binh Phan¹, Lokesh Sharma¹, Vaishali Sampat¹, Jian Hua Li², Huan Yang², Sangeeta S. Chavan², Haichao Wang², Kevin J. Tracey², and Lin L. Mantell^{1,2,3}

High Mobility Group Box-1 Mediates Hyperoxia-Induced Impairment of *Pseudomonas aeruginosa* Clearance and Inflammatory Lung Injury in Mice
American Journal of Respiratory Cell and Molecular Biology (October 18, 2012)

¹Division of Cardiopulmonary Toxicology, Department of Pharmaceutical Sciences, St. John's University, Queens, New York ²Center for Inflammation and Immunology, Feinstein Institute for Medical Research, Manhasset, New York ³Center for Heart and Lung Research, Feinstein Institute for Medical Research, Manhasset, New York



Immunotoxicology SS Reception – SOT 2013



Immunotoxicology SS Reception – SOT 2013



Immunotoxicology SS Reception – SOT 2013



Immunotoxicology Specialty Section Committee Lists – 2013/2014

Awards Committee

Peyton Myers (Sr. Councilor/Chair)

Gary Burleson (President)
M. Firoze Khan
Berran Yucesoy
Pegah Mehrpouya
Michael Laiosa
Rodney Prell
Vic Johnson
Jean Regal

Program Committee

Rafael Ponce (Vice President/Chair)

M. Firoze Khan
Narendra Singh
Scott Manetz
David Lawrence
Michael Lynes
Sunil Tomar
Alhaji Njai
Tony Arulanandam
Vic Johnson

Communications Committee

Ashwini Phadnis-Moghe (Chair)

Haley Neff-LaFord
Winnie Ng
Michael Laiosa
Sunil Tomar
Jennifer Nyland

Regulatory Committee

Peter Thomas (Chair)

Rodney Prell
Gaurav Kaushik

Membership Committee

George DeGeorge (Chair)

Jessica Sido

If you would like to join a committee, there are still openings on the Regulatory, Communications, Education and Awards Committees.

Please contact the ImTox SS Secretary-Treasurer or the Chairperson of the committee(s) if you are interested in joining.

Compiled by Haley Neff-LaFord

Anytime you have a new fully-published or electronically-available article to report, please send the citation at any time to the coordinator, Haley Neff-LaFord: hnlaford@seagen.com

Asthma, Allergy, Autoimmunity & Hypersensitivity

Anderson SE, Franko J, Anderson KL, Munson AE, Lukomska E and Meade BJ. Immunotoxicity and allergic potential induced by topical application of dimethyl carbonate (DMC) in a murine model. *J Immunotoxicol* 10:59-66, 2013.

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Lee EG, Mickle-Kawar BM and Gallucci RM. IL-6 deficiency exacerbates skin inflammation in a murine model of irritant dermatitis. *J Immunotoxicol* 10:192-200, 2013.

Rouse M, Nagarkatti M and Nagarkatti PS. The role of IL-2 in the activation and expansion of regulatory T-cells and the development of experimental autoimmune encephalomyelitis. *Immunobiology* 218:674-682, 2013.

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Nygaard UC, Hansen JS, Groeng EC, Melkild I and Lovik M. Suppression of allergen-specific IgE in offspring after pre-conceptional immunisation: maternal, paternal and genetic influences. *Scand J Immunol* 77:92-103, 2013.

Singh AK, Parashar A, Singh AK and Singh R. Pre-natal/juvenile chlorpyrifos exposure associated with immunotoxicity in adulthood in Swiss albino mice. *J Immunotoxicol* 10:141-149, 2013.

Stølevik SB, Nygaard UC, Namork E, Haugen M, Meltzer HM, Alexander J, Aaberge I, van Loveren H, Lovik M and Granum B. Prenatal exposure to polychlorinated biphenyls and dioxins from the maternal diet may be associated with immunosuppressive effects that persist into early childhood. *Food Chem Toxicol* 51:165-172, 2013.

Zhang Y, Bolivar VJ and Lawrence DA. Developmental exposure to mercury chloride does not impair social behavior of C57BL/6 × BTBR F1 mice. *J Immunotoxicol* 9:401-410, 2012.

General Immunotoxicology

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El-Mahdy NA, El-Sisi AE, Bewidar BI and El-Desouky KI. Histamine protects against the acute phase of experimentally-induced hepatic ischemia/re-perfusion. *J Immunotoxicol* 10:9-16, 2013.

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Horras CJ, Lamb CL, King AL, Hanley JR and Mitchell KA. Consequences of TCDD treatment on intra-hepatic lymphocytes during liver regeneration. *J Immunotoxicol* 9:359-367, 2012.

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Kelly ADR, Lemaire M, Young YK, Eustache JH, Guilbert C, Molina MF and Mann KK. In vivo tungsten exposure alters B-cell development and increases DNA damage in murine bone marrow. *Toxicol Sci* 131:434-446, 2013.

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Kodavanti UP, Thomas RF, Ledbetter AD, Schladweiler MC, Bass V, Krantz QT, King C, Nyska A, Richards JE, Andrews D and Gilmour MI. Diesel exhaust induced pulmonary and cardiovascular impairment: The role of hypertension intervention. *Toxicol Appl Pharmacol* 268:232-240, 2013.

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Migdal C, Botton J, El Ali Z, Azoury ME, Guldemann J, Gimenez-Arnau E, Lepoittevin JP, Kerdine-Romer S and Pallardy M. Reactivity of chemical sensitizers toward amino acids *in cellulo* plays a role in the activation of the Nrf2-ARE pathway in human monocyte dendritic cells and the THP-1 cell line. *Toxicol Sci* 133:259-274, 2013.

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- Zeidler-Erdely PC, Erdely A and Antonini JM. Immunotoxicology of arc welding fume: Worker and experimental animal studies. *J Immunotoxicol* 9:411-425, 2012.
- Zhang Q, Kline DE, Bhattacharya S, Crawford RB, Conolly RB, Thomas RS, Andersen ME and Kaminski NE. All-or-none suppression of B cell terminal differentiation by environmental contaminant 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 268:17-26, 2013.
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Methods

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Lalko JF, Dearman RJ, Gerberick GF, Troutman JA, Api AM and Kimber I. Reactivity of chemical respiratory allergens in the Peroxidase Peptide Reactivity Assay. *Toxicol in Vitro* 27:651-661, 2013.

Teunis M, Corsini E, Smits M, Bernhard Madsen C, Eltze T, Ezendam J, Galbiati V, Gremmer E, Krul C, Landin A, Landsiedel R, Pieters R, Rasmussen TF, Reinders J, Roggen E, Spiekstra S and Gibbs S. Transfer of a two-tiered keratinocyte assay: IL-18 production by NCTC2544 to determine the skin sensitizing capacity and epidermal equivalent assay to determine sensitizer potency. *Toxicol in Vitro* 27:1135-1150.

Ulker OC, Ates I, Atak A and Karakaya A. Evaluation of non-radioactive endpoints of *ex vivo* local lymph node assay-BrdU to investigate select contact sensitizers. *J Immunotoxicol* 10:1-8, 2013.

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Reviews/Workshops/Editorials

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Kimber I and Pieters R. Household chemicals, immune function, and allergy: A commentary. *J Immunotoxicol* 10:169-172, 2013.

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Roggen EL and Blaauboer BJ. Sens-it-iv: A European Union project to develop novel tools for the identification of skin and respiratory sensitizers. *Toxicol in Vitro* 27:1121, 2013.

Roggen EL. Application of the acquired knowledge and implementation of the Sens-it-iv toolbox for identification and classification of skin and respiratory sensitizers. *Toxicol in Vitro* 27:1122-1126, 2013.

Selgrade MJS, Sullivan KS, Boyles RR, Dederick E, Serex TL and Loveless SE. Decision Trees for Evaluating Skin and Respiratory Sensitizing Potential of Chemicals in Accordance with European Regulations. *Regul Toxicol and Pharmacol* 63:371-380, 2012.

Stebbing R, Eastwood D, Poole S and Thorpe R. Paper from the 20th Summerschool in Immunotoxicology, Beaune, France, Sept. 26–28, 2011. After TGN1412: Recent developments in cytokine release assays. *J Immunotoxicol* 10:75-82, 2013.

Terhune TD and Deth RC. How aluminum adjuvants could promote and enhance non-target IgE synthesis in a genetically-vulnerable sub-population. *J Immunotoxicol* 10:210-222, 2013.

SAVE THE DATE!

53rd Annual Society of Toxicology Meeting
March 23-27, 2014
Phoenix, Arizona

Abstract Submission: October 7, 2013
Award Nominations: October 9, 2013

