The Dermal Toxicology Specialty Section

Executive Council

President
William G. Reifenrath, Ph.D.
Stratacor, Inc.
wgr@stratacor-inc.com

President Elect
Jeffrey J. Yourick, Ph.D., DABT
DTRA
jeffrey.yourick@dtra.mil

Vice President
Carol L. Sabourin, Ph.D.
Battelle
sabourinc@battelle.org

Secretary-Treasurer
Adrienne Black
Rutgers University
atblack@rci.rutgers.edu

Past President
George L. DeGeorge, Ph.D., DABT
MB Research Laboratories
degeorge@mbresearch.com

Senior Councilor
Cynthia A. Ryan, B.S.
Proctor & Gamble
ryanca@pg.com

Councilor
Linda Mutter, Ph.D.
Dow Pharmaceutical Science, Inc.
lmutter@dowpharmsci.com

Post Doctoral Representative
Lauren Mordasky Markell
Pennsylvania State University
lkm162@psu.edu

Student Representative
Gayatri Sankaran
Univ. California, Riverside
gayatri.sankaran@email.ucr.edu

—the Dermal Toxicology Specialty Section newsletter is published 2 times/year (spring and fall) in electronic format. If you would like to share any item of general interest to the specialty section, please send it to Jeff Yourick at (jeffrey.yourick@dtra.mil)

The Mission of DTSS

The objectives of the Dermal Toxicology Specialty Section (DTSS) are to provide a forum for the interaction of individuals involved in risk assessment, pharmacokinetics, dermal penetration/absorption, hypersensitivity and dermal toxicity, regulatory issues, basic skin biology and other professionals working in the field of dermal research. Members who wish to receive more information on the specialty section should contact William Reifenrath by e-mail or any of the other Officers.

President’s Message

Bill Reifenrath

Dear DTSS members,

Spring is a time of change for the Specialty Section with the election of new officers or new roles for existing officers. I would like to welcome Carol Sabourin as the new Vice President, Adrienne Black as the new Secretary-Treasurer, and Linda Mutter as the new Councilor. Carol skillfully served the Section as Secretary-Treasurer for the past two years and the Section will benefit from her continued involvement. Adrienne has previously held office in the Section and the membership will once again benefit from her experience. Cindy Ryan will be with us another year as Councilor. According to our by-laws, Jeff Yourick has replaced me as President-Elect and I have taken over the helm from George DeGeorge. George will be recognized as Past-President and I am sure that the new officers will appreciate his advice over the coming year. Special thanks to Jens Mortensen for service as Councilor for the past two years and to Dae Joon Kim as our Postdoctoral Representative. Lauren Markell will remain with us as the new Postdoctoral Representative and we welcome Gayatri Sankaran as the new Student Representative.

The 2010 annual meeting featured two workshops sponsored by our Section, one entitled “Systems Biology Approaches to Understanding Cell Signaling in Dermal and Ocular Toxicology”, chaired by Carol Sabourin and Jeff Yourick and a second entitled “The Process of Defining Risk for Environmental Chemicals having Significant Skin Exposure and Absorption Potential”, chaired by John Ross and myself. Both sessions were lively and well-attended. Planning is well underway for the 2011 special 50th Anniversary annual meeting in Washington DC. We were recently notified of the tentative acceptance of two Symposia for the 2011
meeting, one entitled “Mechanisms of Inflammation in Skin Carcinogenesis” to be chaired by Lauren Markell and “Stem Cell Biology and Cell Therapy Approaches to Understanding Cellular Injury and Wound Healing in Dermal, Ocular and Pulmonary Injury” to be chaired by Jeff Yourick and John Graham. Because of the special nature of the 2011 meeting, the grand reception, usually held on Sunday evening, will be moved to Tuesday evening. Our DTSS reception has tentatively been scheduled for Sunday evening.

Carol Sabourin, Jeff Yourick, and I represented our Section at the Specialty Section Presidents and Officers meeting during this past annual meeting. We received briefings on the activities of the Communications Committee, SOT Headquarters Support and ToXchange, and others. SOT has posted the presentation slides from this meeting on its website for those who are interested. Of special note, Matt Bogdanffy announced the formation of the Specialty Section Governance Group, which will serve as an interface between all the Specialty Sections and SOT Council. Three new specialty sections were announced, bringing the new total to 25. Membership has generally remained stable within the existing specialty sections, and reflects the fact that SOT members are increasingly joining multiple specialty sections. With the addition of new sections, we are aware that some presentations that in the past have been part of the dermal toxicology poster session now appear in other sessions. While we encourage our membership to participate in the dermal poster session, the choice is the prerogative of the authors, and some spreading of dermal research is unavoidable. I have asked SOT Council to look at this issue, with the recommendation that closely related sessions be held together, rather than on separate days or different locations in the exhibit hall.

On behalf of your Officers and Representatives, we appreciate the continued active involvement of our members. Please do not hesitate to contact any one of us with your comments and suggestions.

As the President of the Dermal Toxicology Specialty Section (DTSS), on behalf of the Executive Council, I’d like to recognize the contributions of the leadership that has guided DTSS since its inception in 2000. Since that time, we have had tremendous contributions from many leaders in the field of dermal toxicology that have been willing to share their busy scientific lives as officers and committee members in our specialty section. We thank them! We appreciate their efforts!

The purpose of the DTSS is to serve as a focal point for SOT members interested in Dermal Toxicology and provide an environment for networking and research collaboration. My personal goals for this year are 1) to increase and enhance student participation and 2) to encourage participation in the exciting opportunities to enhance visibility of Dermal Toxicology that are becoming available.

Our membership has increased to 152 members. Specialty Section membership (first one) is free for students, and it’s a great way for them to get to know people in the field, network and find jobs. Please encourage all your students and postdocs to join so they can also compete for travel and poster/paper awards.

One of the most important functions of the Specialty Sections is to develop proposals for scientific sessions at the annual meetings. Bill Reifenrath (President) was the chair of the Program Committee last year and he was responsible for facilitating development of proposals for Symposia, Workshops, and Continuing Education Courses for the 2010 meeting.

We have an informative Newsletter that is sent to the Specialty Section membership at least twice a year. In one issue of this Newsletter, published papers in the area of dermal toxicology over the past year by all Specialty Section members are listed. Jeff Yourick (President Elect) is chair of the Communication Committee that is responsible for the Newsletter and the Web site. Please contact Jeff if you have announcements or ideas for the newsletter or Web site. If you have any ideas about how DTSS can serve you better, please contact me or one of the other members of the executive council.

Best Regards,
William (Bill) Reifenrath
President, DTSS

Special Thanks

Awards: Awards are discussed in a separate section, but we want to take this opportunity to thank Battelle via Carol Sabourin, for continuing with two $2500 Battelle student research awards! While we are giving thanks, thanks also to MB Laboratories via George DeGeorge, Stratacor, Inc. via Bill Reifenrath, Port Royal Research via Tim Roy, Sinclair Research via Marc Tayman, and Informa via Wally Hayes for continuing to support DTSS awards.

Communications Committee

The communications committee puts together this newsletter and keeps the Dermal Specialty Section website up to date. Check it out at: http://www.toxicology.org/ISOT/SS/dtss/index.html

We are always looking for information to share with members, such as meetings, announcements, job openings, postdoctoral positions, etc. that can be posted on the website or included in the newsletter. We are hoping to include updates on hot topics in dermal toxicology and other updates and information of interest to our members. If you have information or new ideas/suggestions for inclusion in the newsletter contact:

Carol Sabourin
sabourinc@battelle.org

or

Jeff Yourick
jeffrey.yourick@dtra.mil

Treasurer’s Report

The Dermal Toxicology Specialty Section financial summary provided by SOT in November 2009 showed net assets of $14,049.11. Our
current assets will be lower given 2010 meeting expenses.

## Awards

The 2010 Awards were presented by Dr. Jens Mortensen.

DTSS Sinclair Student award: Xiaocho Zhang: Danger signals in nevarapine-induced skin rash. (Faculty of Pharmacy, University of Toronto, Canada).

DTSS Stratacor – Port Royal Postdoc award: Dae Joon Kim and John DiGiovanni, Protein thyrosin phosphatases, TC-PTP, SHIP1, and SHP2 cooperate in rapid dephosphorylation of Stat3 in skin following UVB irradiation. (Dept. of Carcinogenesis, The University of Texas M.D. Anderson Cancer Center, Science Park-Research Division, Smithville, Texas).

DTSS Best paper: Michael G Borland et al., Ligand activation of peroxisome proliferator-activated receptor-beta/delta inhibits cell proliferation in human HaCaT keratinocytes. Mol. Pharmacol. 74, 1429-1442, 2008. (Dept. of Veterinary and Biomedical Sciences and the Center of Molecular Toxicology, Pennsylvania State University, Pennsylvania).

DTSS Battelle awards: 1) Lauren Mordasky Markell: Identification and analysis of ALK5 pharmacological inhibition in premalignant human keratinocytes as a potential target for tumor suppression. (Center for Molecular Toxicology and Carcinogenesis, Pennsylvania State University, Pennsylvania), and 2) Gayatri Sankanar: Dermal absorption of pesticides from strawberry foliage: Dislodgable foliar residues and pesticide glove residues as a human exposure dosimeter. (Environmental Toxicology, University of California, Riverside, California).

Informa Paper of the Year Awards, 1) Transcriptional changes in porcine skin at 7 days following sulfur mustard and thermal burn injury. JA Price, JV Rogers, JN McDougal, MQ Shaw, FM Reid and JS Graham. Cutaneous and Ocular Toxicology, 2009, 28(2) 54-60

Please check out the following link to find information and deadlines related to submission of abstracts and papers for the upcoming 2011 awards.


## 2009 DTSS Member Publications

The following is a listing of publications by DTSS members that were published in 2009. Once a year we feature a listing of peer-reviewed publications by specialty section members (with skin as a keyword) that are available on PubMed. While the editors do their very best to find relevant publications based on the current membership list, it is likely that mistakes will occur and we apologize if we have left any publications out.


Farahmand S, Maibach HI. Transdermal drug pharmacokinetics


Ramos G, Limon-Flores AY, Ullrich SE. JP-8 induces immune suppression via a reactive oxygen species NF-kappabeta-dependent


Riviere JE, Brooks JD. Determination of the effective dermal penetration barrier pH of porcine skin.


Smith WJ. Therapeutic options to treat sulfur mustard poisoning--the road ahead. Toxicology. 2009 Sep 1;263(1):70-3. PMID: 18852011.


Vijay V, White EM, Kaminski MD Jr, Riviere JE, Baynes RE. Dermal permeation of biocides and aromatic chemicals in three generic formulations of metalworking


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DTSS Members - Would you like to become more active in DTSS?

If you have any suggestions or recommendation on how to make our specialty section better or better able to serve your needs, please email your suggestions to:

Send suggestions to:

Bill Reifenrath
President, DTSS
wgr@stratacor-inc.com
Here are pictures from our 2010 DTSS reception