

# Dermal Toxicology Specialty Section

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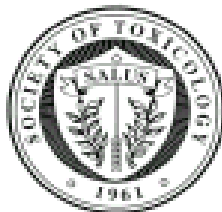
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The *Dermal Toxicology Specialty Section* newsletter is published 2 times/year (March, and September) in electronic format. If you would like to share a book review, meeting report, web site, or any other item of general interest to the specialty section, please send it to the editor by the beginning of the month prior to the listed publication dates. We also welcome any comments or suggestions pertaining to overall content or format.

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## Specialty Section Meeting at SOT

Come meet the new members and new officers and get reacquainted with friends you may not have seen for a year! The DTSS specialty section meeting will be held **6:00 to 7:30 pm on Wednesday, March 8th in room 4 of the San Diego Convention Center.**

## Meeting Program

The Specialty Sections play a critical role in the planning of the Annual Meeting, especially in regards to the identification and development of continuing education courses and scientific sessions. The DTSS and SOT would very much like to receive your comments and suggestions as to improving the annual meeting program. Please think about and propose symposia, workshops, roundtables and continuing education courses related to your interests in dermal toxicology. As in years past, your participation is vital to the success of the Annual Meeting, as well as many other major activities of the Society.

## DTSS Website

Check the DTSS website for valuable information including a

listing of current members and their contact information. The website is accessible following log on to the main SOT website [www.toxicology.org](http://www.toxicology.org) and clicking on the "Specialty Sections" tab in the members area and then selecting the "Dermatotoxicology" section.

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. For more information contact the DTSS Vice-President Elect who is co-chair of the communications committee

## Honors and Awards

We had 7 submissions for our Student/Postdoctoral Travel Awards this year. All of the submitted abstracts were excellent; it was a tough competition and a difficult decision by the DTSS council members. One postdoctoral winner and one graduate student winner were selected and will be announced at our annual meeting, where the awards will be presented. Taylor and Francis will also present awards of \$500 plus a free journal subscription to *Cutaneous and Ocular Toxicology*. So.... plan to attend the DTSS meeting on Wednesday, March 8th for the announcement and presentations. a free journal subscription to *Cutaneous and Ocular Toxicology*.

Anna Shvedova, Past President of the DTSS, has been nominated to receive a "Women in Toxicology Service Recognition Award" on Tuesday, March 7<sup>th</sup> at the 2006

Annual SOT meeting. This award is given to an individual who has been a major influence in the education / training / mentorship of women scientists new to the field of toxicology, including training in government, industry, or academia and/or whose leadership and service have provided career development opportunities for women toxicologists or encouraged women to achieve their professional goals.

### SOT Meeting Information

#### Monday, March 6<sup>th</sup>

Workshop: Screening Methods for Assessing Skin Toxicity of Nanomaterials

Poster Session: Chemical-Biological Weapons I

#### Tuesday, March 7<sup>th</sup>

Poster Session: Dermatotoxicity

Workshop: Dendritic Cells and Skin Sensitization: Biological Roles and Uses in Hazard Identification

#### Wednesday, March 8<sup>th</sup>

Poster Session: Chemical-Biological Weapons II

### Cutaneous and Ocular Toxicology Journal

As you attend the annual meeting and think about submitting your results to journals, consider submitting to Cutaneous and Ocular Toxicology. As editor of the journal, I would like to invite you to submit your work to me. Cutaneous and Ocular Toxicology is a great place for papers related to the skin and the effects of agents on the skin. Check our editorial board and you will notice that it is well supported by members of the Dermal Specialty Section. Taylor and Francis has purchased Cutaneous and Ocular Toxicology and it is now listed in Medline. As a result of the journal's new home, Taylor and Francis has agreed to recognize the best dermatological paper in the journal each year. The winner of the best paper will be honored at the dermal specialty section annual meeting

with a certificate and a one-year subscription to the journal. As the editor of the journal, I look forward to the San Diego meeting, when the winner will be announced.

We look forward to receiving your manuscripts. Please submit your manuscripts to the address below electronically.

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### Meetings and Conferences of Interest

"Perspectives in Percutaneous Penetration", 10<sup>th</sup> International Conference, April 18-22, 2006, La Grande-Motte, France. This conference also includes a pre-conference course on "Fundamentals of Percutaneous Penetration" and a "Dermochannels" symposium on assisted methodologies for percutaneous transport. For more information on registration for this meeting please visit the following website:

[http://www.pppconference.org/resources/PPP2006\\_Regform.pdf](http://www.pppconference.org/resources/PPP2006_Regform.pdf)

"Contact Dermatitis 2006--Blending Science with Best Practice" A combined meeting of the Experimental Contact Dermatitis Research Group (ECDRG) and the American Contact Dermatitis Society (ACDS) will be held in Baltimore, Maryland on September 28-30, 2006. This meeting presents and discusses the basic and applied science of contact dermatitis. The meeting is combined with the American Contact Dermatitis Society meeting. For more information, please visit the website for registration information.  
<http://www.contactderm.org/news.html>

"Occupational And Environmental Exposures of Skin To Chemicals – 2007" The National Institute for Occupational Safety and Health (NIOSH) and the Colorado School of Mines are taking the lead in

organizing this conference. It will likely be held in Golden, Colorado, near Denver, in mid-2007. Watch for details as the planning progresses.

### New Book

"Dermal Absorption Models in Toxicology and Pharmacology," by J.E. Riviere is a concise overview covering experimental and mathematical modeling approaches used to assess dermal absorption. For more information go to the following website:  
[http://www.crcpress.com/shopping\\_cart/products/product\\_detail.asp?sku=TF1776](http://www.crcpress.com/shopping_cart/products/product_detail.asp?sku=TF1776) The publisher, Taylor and Francis is offering a 20 percent discount on the price to SOT Dermal Specialty Section members (List \$139.95; Member's cost \$111.96). If you are interested please contact [marilyn.diprima@taylorandfrancis.com](mailto:marilyn.diprima@taylorandfrancis.com) to obtain this discount.

### DTSS Member Publications in 2005

The following is a listing of publications by DTSS members that appeared in 2005. 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.

**Basketter D, Casati S, Gerberick GF, Griem P, Philips B, Worth A.** Skin sensitisation. *Altern Lab Anim.* 2005 Jul;33 Suppl 1:83-103.

**Basketter D, Menne T.** Lymphocyte transformation test in patients with allergic contact dermatitis. *Contact Dermatitis.* 2005 Jul;53(1):1.

**Basketter DA, Andersen KE, Liden C, Van Loveren H, Boman A, Kimber I, Alanko K, Berggren E.** Evaluation of the skin sensitizing potency of chemicals by using the existing methods and considerations of relevance for elicitation. *Contact Dermatitis.* 2005 Jan;52(1):39-43.

**Basketter DA**, Clapp C, Jefferies D, Safford B, **Ryan CA**, Gerberick F, **Dearman RJ**, **Kimber I**. Predictive identification of human skin sensitization thresholds. *Contact Dermatitis*. 2005 Nov;53(5):260-7.

**Baynes RE**, Brooks JD, Barlow BM, **Riviere JE**. NDELA and nickel modulation of triazine disposition in skin. *Toxicol Ind Health*. 2005 Oct;21(9):197-205.

**Baynes RE**, Yeatts JL, Brooks JD, **Riviere JE**. Pre-treatment effects of trichloroethylene on the dermal absorption of the biocide, triazine. *Toxicol Lett*. 2005 Dec 15;159(3):252-60.

Betts CJ, **Dearman RJ**, **Kimber I**, **Maibach HI**. Potency and risk assessment of a skin-sensitizing disperse dye using the local lymph node assay. *Contact Dermatitis*. 2005 May;52(5):268-72.

Brain KR, Walters KA, Green DM, Brain S, **Loretz LJ**, Sharma RK, Dressler WE. Percutaneous penetration of diethanolamine through human skin in vitro: application from cosmetic vehicles. *Food Chem Toxicol*. 2005 May;43(5):681-90.

Branco N, Lee I, Zhai H, **Maibach HI**. Long-term repetitive sodium lauryl sulfate-induced irritation of the skin: an in vivo study. *Contact Dermatitis*. 2005 Nov;53(5):278-84.

**Brand RM**, Cetin Y, Mueller C, Cuppett SL. Effect of fatty acids on herbicide transport across Caco-2 cell monolayers. *Toxicol In Vitro*. 2005 Aug;19(5):595-601.

**Brand RM**, Charron AR, Brand RE. Decreasing malathion application time for lice treatment reduces transdermal absorption. *Int J Pharm*. 2005 Sep 14;301(1-2):48-53.

Casati S, Aeby P, **Basketter DA**, Cavani A, Gennari A, **Gerberick GF**, Griem P, Hartung T, **Kimber I**, Lepoittevin JP, Meade BJ, Pallardy M, Rougier N, Rousset F, Rubinstenn G, Sallusto F, Verheyen GR, Zuang V; The Report and Recommendations of ECVAM Workshop 51. Dendritic cells as a tool for the predictive identification of skin sensitisation hazard. *Altern Lab Anim*. 2005 Feb;33(1):47-62.

Cumberbatch M, Clelland K, Dearman RJ, **Kimber I**. Impact of cutaneous IL-10 on resident epidermal Langerhans' cells and the development of polarized immune responses. *J Immunol*. 2005 Jul 1;175(1):43-50.

Diepgen TL, Coenraads PJ, Wilkinson M, **Basketter DA**, Lepoittevin JP. Para-phenylenediamine (PPD) 1% pet. is an important allergen in the standard series. *Contact Dermatitis*. 2005 Sep;53(3):185.

Dillman JF, Hege AI, Phillips CS, Orzolek LD, Sylvester AJ, Bossone C, Henemyre-Harris C, Kiser RC, Choi YW, Schlager JJ, **Sabourin CL**. Microarray analysis of mouse ear tissue exposed to bis-(2-chloroethyl) sulfide: gene expression profiles correlate with treatment efficacy and an established clinical endpoint. *J Pharmacol Exp Ther*. 2005 Dec 23

Divkovic M, Pease CK, **Gerberick GF**, **Basketter DA**. Hapten-protein binding: from theory to practical application in the in vitro prediction of skin sensitization. *Contact Dermatitis*. 2005 Oct;53(4):189-200.

Gerberick GF, **Ryan CA**, Kern PS, Dearman RJ, Kimber I, Patlewicz GY, Basketter DA. A chemical dataset for evaluation of alternative approaches to skin-sensitization testing. *Contact Dermatitis*. 2004 May;50(5):274-88.

**Gopee NV**, Cui Y, Olson G, Warbritton AR, Miller BJ, Couch LH, Wamer WG, Howard PC. Response of mouse skin to tattooing: use of SKH-1 mice as a surrogate model for human tattooing. *Toxicol Appl Pharmacol*. 2005 Dec 1;209(2):145-58.

Griffiths CE, **Dearman RJ**, Cumberbatch M, **Kimber I**. Cytokines and Langerhans cell mobilisation in mouse and man. *Cytokine*. 2005 Oct 21;32(2):67-70.

Ho SG, **Basketter DA**, Jefferies D, Rycroft RJ, White IR, McFadden JP. Analysis of para phenylenediamine allergic patients in relation to strength of patch test reaction. *Br J Dermatol*. 2005 Aug;153(2):364-7.

Hulette BC, **Ryan CA**, Gildea LA, **Gerberick GF**. Relationship of CD86 surface marker expression and cytotoxicity on dendritic cells exposed to chemical allergen. *Toxicol Appl Pharmacol*. 2005 Dec 1;209(2):159-66.

K, Berggren E. Evaluation of the skin sensitizing potency of chemicals by using the existing Kim SY, **Kim DS**, Kwon SB, Park ES, Huh CH, Youn SW, Kim SW, Park KC. Protective effects of EGCG on UVB-induced damage in living skin equivalents. *Arch Pharm Res*. 2005 Jul;28(7):784-90.

**Kimber I**, **Maibach HI**, Msotschi H. Thresholds of contact sensitization from disperse dyes in textiles. *Contact Dermatitis*. 2005 May;52(5):295.

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Lee SK, Zhai H, **Maibach HI**. Allergic contact dermatitis from iodine preparations: a conundrum. *Contact Dermatitis*. 2005 Apr;52(4):184-7.

Levin G, Gershonowitz A, Sacks H, **Stern M**, Sherman A, Rudaev S, Zivin I, Phillip M. Transdermal delivery of human growth hormone through RF-microchannels. *Pharm Res*. 2005 Apr;22(4):550-5.

Lin FH, Lin JY, Gupta RD, Tournas JA, Burch JA, Selim MA, **Monteiro-Riviere NA**, Grichnik JM, Zielinski J, Pinnell SR. Ferulic acid stabilizes a solution of vitamins C and E and doubles its photoprotection of skin. *J Invest Dermatol*. 2005 Oct;125(4):826-32.

**Loretz LJ**, Api AM, Barraç LM, Burdick J, Dressler WE, Gettings SD, Han Hsu H, Pan YH, Re TA, Renskers KJ, Rothenstein A, Scrafford CG, Sewall C. Exposure data for cosmetic products: lipstick, body lotion, and face cream. *Food Chem Toxicol*. 2005 Feb;43(2):279-91.

Loretz LJ, Api AM, Barraç LM, Burdick J, Dressler WE, Gettings SD, Han Hsu H, Pan YH, **Re TA**, Renskers KJ, Rothenstein A, Scrafford CG, Sewall C. Exposure data for cosmetic products: lipstick, body lotion, and face cream. *Food Chem Toxicol*. 2005 Feb;43(2):279-91.

Lowney YW, Ruby MV, Wester RC, Schoof RA, Holm SE, Hui XY, Barbadillo S, **Maibach HI**. Percutaneous absorption of arsenic from environmental media. *Toxicol Ind Health*. 2005 Mar;21(1-2):1-14.

Mallon D, Snyder NK, Swanson JE, **Casterton PL**. Comparative assessment of the acute skin irritation potential of detergent formulations using a novel human 4-h patch test method. Marriott M, Holmes J, Peters L, Cooper K, Rowson M, **Basketter DA**. The complex problem of sensitive skin. *Contact Dermatitis*. 2005 Aug;53(2):93-9.

Monteiro-Riviere NA, Nemanich RJ, Inman AO, Wang YY, **Riviere JE**. Multi-walled carbon nanotube interactions with human epidermal keratinocytes. *Toxicol Lett*. 2005 Mar 15;155(3):377-84.

Muhammad F, **Monteiro-Riviere NA**, **Baynes RE**, **Riviere JE**. Effect of in vivo jet fuel exposure on subsequent in vitro dermal absorption of individual aromatic and aliphatic hydrocarbon fuel constituents. *J Toxicol Environ Health A*. 2005 May 14;68(9):719-37.

Muhammad F, **Monteiro-Riviere NA**, **Riviere JE**. Comparative in vivo toxicity of topical JP-8 jet fuel and its individual hydrocarbon components: identification of tridecane and tetradecane as key constituents responsible for dermal irritation. *Toxicol Pathol*. 2005;33(2):258-66.

Nakada T, Iijima M, **Maibach HI**. Eyeglass frame allergic contact dermatitis: does tacrolimus prevent recurrences? *Contact Dermatitis*. 2005 Oct;53(4):219-21.

Oberdorster G, Maynard A, Donaldson K, Castranova V, Fitzpatrick J, Ausman K, Carter J, Karn B, Kreyling W, Lai D, Olin S, **Monteiro-Riviere N**, Warheit D, Yang H; ILSI Research Foundation/Risk Science Institute Nanomaterial Toxicity Screening Working Group. Principles for characterizing the potential human health effects from exposure to nanomaterials: elements of a screening strategy. Part Fibre *Toxicol*. 2005 Oct 6;2:8.

**Riviere JE**, Brooks JD. Predicting skin permeability from complex chemical mixtures. *Toxicol Appl Pharmacol*. 2005 Oct 15; 208(2):99-110.

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Strid J, Hourihane J, **Kimber I**, Callard R, Strobel S. Epicutaneous exposure to peanut protein prevents oral tolerance and enhances allergic sensitization. *Clin Exp Allergy*. 2005 Jun;35(6):757-66.

Stroo HF, **Roy TA**, Liban CB, Kreitinger JP. Dermal bioavailability of benzo[a]pyrene on lampblack: implications for risk assessment. *Environ Toxicol Chem*. 2005 Jun;24(6):1568-72.

Tornier C, Rosdy M, **Maibach HI**. In vitro skin irritation testing on reconstituted human epidermis: Reproducibility for 50 chemicals tested with two protocols. *Toxicol In Vitro*. 2005 Oct 14

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Van der Merwe D, **Riviere JE**. Comparative studies on the effects of water, ethanol and water/ethanol mixtures on chemical partitioning into porcine stratum corneum and silastic membrane. *Toxicol In Vitro*. 2005 Feb;19(1):69-77.

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Waller JM, **Maibach HI**. Age and skin structure and function, a quantitative approach (I): blood flow, pH, thickness, and ultrasound echogenicity. *Skin Res Technol*. 2005 Nov;11(4):221-35.

**Williams RI, Reifenrath WG,**

Krieger RI. Artificial sweat enhances dermal transfer of chlorpyrifos from treated nylon carpet fibers. J Environ Sci Health B. 2005;40(4):535-43.

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Zhai H, Behnam S, Villarama CD, Arens-Corell M, Choi MJ, **Maibach HI,** Evaluation of the antioxidant capacity and preventive effects of a topical emulsion and its vehicle control on the skin response to UV exposure. Skin Pharmacol Physiol. 2005 Nov-Dec;18(6):288-93.