

How Dermal Toxicology Specialty Section

Fall Newsletter 2018

2018-2019 DTSS Executive Council

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President's Message

by Jeff Klein

Greetings to current and future DTSS members!

To begin with, I would like to thank all of the members of the DTSS Executive Council for all of their hard work. This includes Michael Hughes (VP), Neera Tewari-Singh (VP-elect), Tom Lewandowski (Secretary/Treasurer), Zbig Wojcinski (Past President and Councilor), Sara Farahmand (Councilor), Yoke-Chen Chang (Councilor), Laila Al-Eryani (Postdoctoral Representative), and Gabriella Composto-Wahler (Graduate Student Representative). The Executive Council has been looking for ways to increase membership and increase the visibility of the Specialty Section to other members of the SOT. This year, the DTSS has a Continuing Education course at the upcoming Annual Meeting chaired by Mike Hughes and Neera Tewari-Singh and a DTSS-endorsed workshop. The leadership team continues to find new opportunities for the DTSS, and I encourage interested individuals to actively participate in the election process to join this motivated group of dermal toxicologists.

As has been shared by past presidents of the DTSS, growing the Specialty Section is always a priority. Although we are an active Specialty Section, we need to focus on growing the section, especially when it comes to student participation. The DTSS has a number of student and postdoctoral awards available and active involvement of student members helps to propel the success of the Specialty Section for the future. DTSS members are encouraged to engage students at both the graduate and undergraduate levels to foster interest in Dermal Toxicology and in our Specialty Section.

In this edition of the DTSS newsletter you will find our financial report, postdoctoral and graduate

student update, awards opportunities, recent publications by our members, and photos from the reception at last year's Annual Meeting. I would like to thank everyone who contributed to this newsletter, in particular Neera Tewari-Singh. I would also like to thank our Sponsors for their continued support of dermal toxicology.

I look forward to seeing you all at the 2019 SOT meeting in Baltimore and hope that you will be able to find the time to join us at the DTSS Annual Business Meeting and Reception.

DTSS Trainee Newsletter Section

Hello student and postdoctoral members! We hope that 2018 has been a great year for you so far.

The 2018 Annual Meeting in Baltimore began with the Student/Postdoc Mixer on Sunday evening. The Dermal Toxicology Specialty Section (DTSS) displayed a poster at the mixer and representatives Laila Al-Eryani and Gabriella Composto-Wahler interacted with many fellow trainees. The event provided a great forum for inquiry into the work and membership of our specialty section. Trainees also attended the DTSS reception, winning several awards and an iPad mini thanks to our great sponsors.

We look forward to the 2019 Annual Meeting in Baltimore. One of the major events for trainees at the annual meeting is the graduate student/postdoc mixer on Sunday night. This event is a great opportunity to network, learn about SOT groups and programs, and enjoy delicious food. Don't forget to request a free ticket when registering for the annual meeting! DTSS will display a poster at this event so please stop by and say hi. Additional trainee opportunities at the Annual Meeting include: 'Chat with an Expert' sessions, Poster Tours for Trainees, Trainee Discussions with Speakers, and the Tox ShowDown, a game show-style event.

Information for all these opportunities will be posted on the annual meeting website soon. Also,

DTSS has several trainee-specific awards; submission information can be found at: <https://www.toxicology.org/awards/sot/awards.aspx?Filter=14>. Award deadlines are **January 15, 2019** so don't forget to apply!

It is our honor to serve as your representatives and we welcome any questions, comments or suggestions regarding our service of DTSS.

Sincerely,

Laila Al-Eryani (Postdoctoral Representative)
laila.al-eryani@nih.gov

Gabriella Composto-Wahler, Graduate Student Representative, gabriecco@pharmacy.rutgers.edu

2018 DTSS Awards

Postdoctoral Award by Stratacor

Puneet Vij, MB Research Laboratories, Spinnerstown, PA.

Title: Human Cell Line Activation Test (h-CLAT): Pitfalls and Considerations.

"Paper of the Year" Award

Neera Tewari-Singh, University of Colorado Denver, Aurora, CO.

Title: Cutaneous exposure to vesicant phosgene oxime: Acute effects on the skin and systemic toxicity.

Battelle Student Research Award

Gabriella Composto-Wahler, Rutgers, the State University of New Jersey, Piscataway, NJ.

Title of Project: Nitrogen Mustard Alters Repair in Mouse Skin Epithelium.

Informa Healthcare Award

Alain Stricker-Krongrad, Catherine R. Shoemake, Jason Liu, Derek Brocksmith & Guy Bouchard

Title: The importance of minipigs in dermal safety assessment: an overview.

Cutaneous and Ocular Toxicology: Volume 36 2017: Issue 2, Pages: 105-113

Student Travel Awards by Charles River

Sarah Phelan, PhD Candidate, Toxicology Training Program, University of Rochester, Rochester, NY

Alicia Richards, UNC-Chapel Hill Graduate Student, National Cancer Institute at NIEHS

DTSS Postdoctoral Travel Awards by Charles River

Debrup Chakraborty, Research Associate, Michigan State University, East Lansing, MI

GSCL Representative Travel Funding

Laila Al-Eryani, Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD

[Congratulations to all of the awardees.](#)



2019 DTSS Awards

Be recognized for your research efforts! DTSS offers a number of award to members, particularly students and post-doctoral fellows. For award information:

<https://www.toxicology.org/awards/sot/awards.aspx?Filter=14>.

Submit awards to Sara Farahmand at sara.farahmand@avon.com by January 15, 2019.

DTSS thanks the sponsors of our awards

Battelle

The Business of Innovation



DTSS 2018-2019 Financial Report

Income	
Membership Dues	\$2,595
Contributions	\$1,500
Registration	\$836
Interest	\$279
Total Income	\$5,210
Expense	
Awards - Sections	\$4,006
Executive Meetings	\$204
Reception	\$4,012
Total Expense	\$8,222
Excess (Deficiency)	(\$3,012)
Net Assets - Start of Year	\$8,861
Current Net Assets	\$5,849

SOT 2019

Congratulations to Michael Hughes of the US EPA and Neera Tewari-Singh of University of Colorado Denver for the selection of their "Continuing Education" course sponsored by DTSS, by the Scientific Program Committee for presentation at the upcoming Annual Meeting. The title of the continuing Education course is: *Beauty of the skin is in the eye of the beholder: a basic course on dermal and ocular toxicology*. The course # is PM10 and will be held on Sunday, March 10, 2019 at 1:15 pm.

Congratulations to Andreas Schepky and Sandra Coecke for the acceptance of their Workshop session "In Vitro Static and Dynamic Skin Metabolism Methods and Strategies to Address the Safety Assessment of Topically-Applied Chemicals" sponsored by DTSS. The workshop, WKSP90-03, will be held on Tuesday, March 12, 2019 at 1:00 pm in CC Room 309.

DTSS Business Meeting and Reception
Monday, March 11, 2019
6:00-7:30 pm
Place to be determined.

Call for Candidates!

DTSS is looking for candidates for the upcoming election of our Section's Executive Council. We need candidates for Vice President-elect, Councilor, Post-doctoral Fellow Representative and Vice Graduate Student Representative. This is an opportunity to develop leadership skills, serve the interests of the Section, learn the workings of SOT and meet fellow scientists. Contact Jeffrey Klein at: JKlein@sinclairresearch.com for more information.

Session Proposals for SOT 2020

One way to enhance the visibility of our Specialty Section is to sponsor sessions at the Annual Meeting. Chairing (or co-chairing) a session at the Annual Meeting is also an excellent way to develop your own career. Session proposals for the 2020 Annual Meeting will be solicited soon after the 2019

meeting. Start making plans to work with your colleagues to submit session proposals. There are number of session types at the Annual Meeting. Contact Michael Hughes at Hughes.MichaelF@epa.gov or Jeffrey Klein at: JKlein@sinclairresearch.com for more information.

DTSS Website News

Hopefully by now, everyone has had a chance to look at the new DTSS website and see the improved look. Many thanks to Raul Suarez and the SOT web group for designing our new site.

Now that the look is shiny and new, it's time to update the content. The DTSS needs input from as many people as possible to provide content, let us know what links would be helpful for you, and generally make the site a place that will be a useful resource to our members.

As the website liaison between the DTSS and the SOT, I would like to try and include as many ideas as people have so that the updated website is a reflection of all DTSS members.

Please take the time to think of new ideas and send them on to Jeffrey Klein at: JKlein@sinclairresearch.com to ensure that your voice is heard. I look forward to hearing your ideas so that the website will be as useful as it is nice to look at.

Meetings of Interest

American Academy of Dermatology
March 01-05, 2019, Washington, DC
<https://www.aad.org/meetings/annual-meeting>

Perspectives in Percutaneous Penetration
April 14-17, 2020, La Grande Motte, France
<http://www.pppconference.org/ppp2020.html>

International Society for Biophysics and Imaging of the Skin
2020 International Meeting, Berlin, Germany

<http://www.i-s-b-s.org/>

International Investigative Dermatology

May 08-11, 2019, Hilton Chicago, Chicago, IL

<http://www.sidnet.org/page/annualmeeting>

Insights into Skin Barrier Function from In Silico Models to In Vivo Pathology

August 11 - 16, 2019

Waterville Valley, NH

<https://www.grc.org/barrier-function-of-mammalian-skin-conference/2019/>

Gordon Research Seminar -Emerging Mechanistic and Experimental Insights into Mammalian Skin Barrier

August 10 - 11, 2019

Waterville Valley, NH

<https://www.grc.org/barrier-function-of-mammalian-skin-grs-conference/2019/>

Occupational and Environmental Exposure of Skin to Chemicals (OEESC).

September 16-18, 2019

Dublin, Ireland

<https://www.oeesc.com/>

Publications of DTSS Members

Effect of aqueous dilution on the absorption of the nerve agent VX through skin in vitro.

Dalton C, Graham S, Jenner J. Toxicol In Vitro. 2018

Dec;53:121-125.

PMID: 30099087.

TRPA1 and CGRP antagonists counteract vesicant-induced skin injury and inflammation.

Achanta S, Chintagari NR, Brackmann M, Balakrishna S, Jordt SE.

Toxicol Lett. 2018 Sep 1;293:140-148.

PMID: 29535050.

Sulfur mustard induced mast cell degranulation in mouse skin is inhibited by a novel anti-inflammatory and anticholinergic bifunctional prodrug.

Joseph LB, Composto GM, Perez RM, Kim HD, Casillas RP, Heindel ND, Young SC, Lacey CJ, Saxena J, Guillon

CD, Crutch CR, Laskin JD, Heck DE. Toxicol Lett.

2018 Sep 1;293:77-81.

PMID: 29127031.

Phosgene oxime: Injury and associated mechanisms compared to vesicating agents sulfur mustard and lewisite.

Goswami DG, Agarwal R, Tewari-Singh N.

Toxicol Lett. 2018 Sep 1;293:112-119. Review.

PMID: 29141200.

Expression of cytokines and chemokines in mouse skin treated with sulfur mustard.

Chang YC, Soriano M, Hahn RA, Casillas RP, Gordon MK, Laskin JD, Gerecke DR.

Toxicol Appl Pharmacol. 2018 Sep 15; 355:52-59.

doi: 10.1016/j.taap.2018.06.008. Epub 2018 Jun

20. PMID:29935281

Expression of Laminin 332 in Vesicant Skin Injury and Wound Repair.

Chang YC, Gordon MK, Gerecke DR. Clin Dermatol

2018; 2(1).pii:115.PMID:30058002

PMCID:PMC6063082

Differentially Expressed mRNA Targets of Differentially Expressed miRNAs Predict Changes in the TP53 Axis and Carcinogenesis-Related Pathways in Human Keratinocytes Chronically Exposed to Arsenic.

Laila Al-Eryani, Sabine Waigel, Ashish Tyagi,

Jana Peremarti, Samantha F Jenkins, Chendil

Damodaran, J C States; Toxicological Sciences,

Volume 162, Issue 2, 1 April 2018, Pages 645–

654, <https://doi.org/10.1093/toxsci/kfx292>

miRNA expression profiles of premalignant and malignant arsenic-induced skin lesions.

Al-Eryani L, Jenkins SF, States VA, Pan J, Malone JC, et al. (2018)

miRNA expression profiles of premalignant and

malignant arsenic-induced skin lesions. PLOS ONE

13(8): e0202579.

<https://doi.org/10.1371/journal.pone.0202579>

Arsenic-Induced Carcinogenesis: The Impact of miRNA Dysregulation.

Ana P Ferragut Cardoso, Laila

Al-Eryani, J Christopher States; Toxicological

Sciences, Volume 165, Issue 2, 1 October 2018,

Pages 284–290,

<https://doi.org/10.1093/toxsci/kfy128>

DTSS 2018 Pictures



Senior Councilor David Aremu presenting the Informa Healthcare award to Alain Stricker-Krongrad



Senior Councilor David Aremu presenting Postdoctoral Award by Stratacor to Puneet Vij



Senior Councilor David Aremu presenting "Best Paper of the Year" Award to Neera Tewari-Singh



Past President Douglas Learn presenting "Student travel Award by Charles River" to Sarah Phelan



Senior Councilor David Aremu presenting Battelle Student Research Award to Gabriella Composto-Wahler



Past President Douglas Learn presenting "Student travel Award by Charles River" to Alicia Richards

See you in Baltimore!



Past President Douglas Learn presenting “Postdoc travel Award by Charles River” to Debrup Chakraborty



Douglas Learn, Jeff Klein, Neera Tewari-Singh, Puneet Vij, Gabriella Composto-Wahler, Sarah Phelan, Alicia Richards, Debrup Chakraborty, David Aremu, Zbigniew Wojcinski