



Dermal Toxicology Specialty Section OF THE SOCIETY OF TOXICOLOGY



What is Dermal Toxicology?

◆ **Skin is the largest and most visible organ of the body; it protects against different types of insults: natural synthetic, biological, chemical, and physical.**

◆ **Dermal toxicology is the study of the local and/or systemic adverse reactions resulting from dermal exposure to chemicals. Dermal toxicology also studies the skin penetration of toxicants and evaluates potential systemic exposure.**

Examples of Dermatotoxic Materials

Poisonous plants



Chemicals



Ultraviolet light



Occupational exposure



Cosmetics



Skin infections



What does a Dermal Toxicologist do?

Basic Research

Risk assessment based on ADME principles

Pharmaceuticals

From topical ointments to transdermal delivery systems

Contact Hypersensitivity

Immunological response to an allergen

Cosmetic Industry

Risk assessment for perfumes, after-shaves, body lotions, sunscreens

Occupational Exposures and Risk Assessment

Occupational exposure in various industries producing chemicals, pesticides, and food

The Dermal Toxicology Specialty Section (DTSS)

The DTSS serves to promote knowledge in the field of dermal toxicology with specific focus on developing clinically relevant models to study **mechanisms and risk assessment for cutaneous exposure to protect against toxicants.**

Members within this Specialty Section conduct research in many diverse areas including **dermal toxicology and pharmacology, risk assessment pharmacokinetics, dermal penetration and absorption, oncology, hypersensitivity, regulatory toxicology and product safety.**

The DTSS meeting/reception is held every year during the SOT Annual Meeting. In order to promote research within the field the Dermal Toxicology Specialty Section offers **student and post-doctoral awards at the SOT Annual Meeting for accepted abstracts as recognition for exceptional research involving skin toxicology and pharmacology.**

Benefits of DTSS Membership

- **Award Opportunities**
- **Networking with pioneers in academic, industrial, and governmental research organizations**

Special Program to Recruit Graduate Student Members

- **The DTSS is offering a membership program to 6 graduate students for free membership to the specialty section. If you have a lab colleague who might be interested in becoming a DTSS graduate student member, encourage them to contact Bo Inscho at SOT headquarters.**

DTSS Sponsored Sessions:

Workshop Session:

1- "Applicability Domains and Future of Nonanimal Tests for Skin Sensitization"
Wednesday, March 24th (11:45 am – 2:30 pm)
Chair(s): Victor J. Johnson, Burleson Research Technologies; and Marc Pallardy, Université Paris-Sud, France

Poster Session:

1- Skin and Dermal Toxicity
Chair(s): Jeffrey Yourick, US FDA
Tuesady, March 23rd (1 - 2:45pm)

DTSS Meeting:

Wednesday, March 17th (5 - 6 pm)

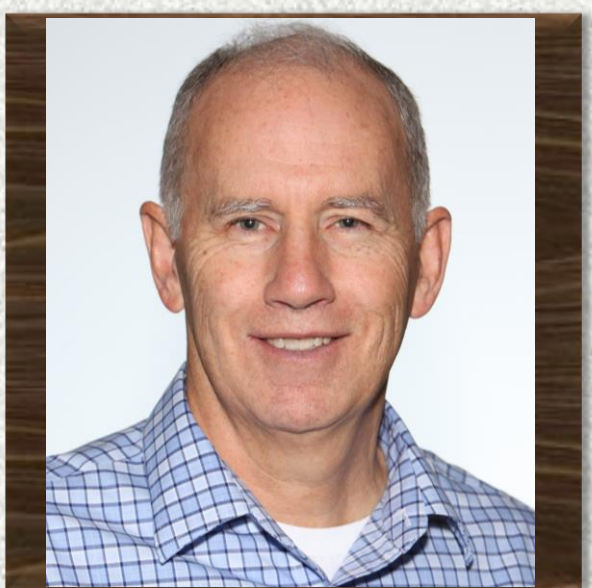
Officers



President

Neera Tewari-Singh, MS, PhD

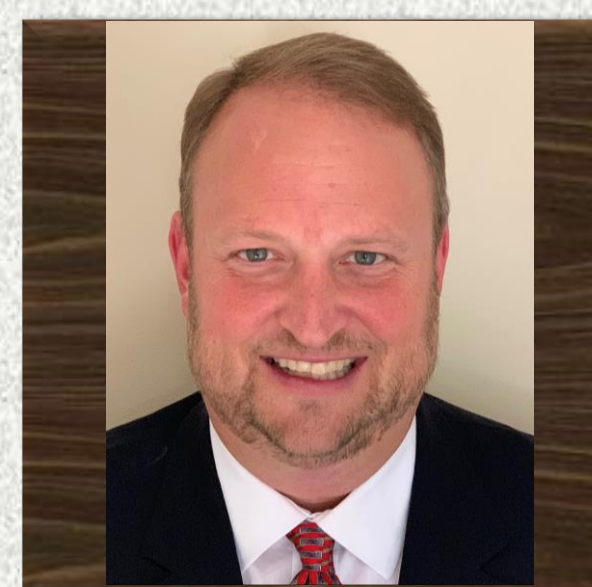
Assistant Professor, Department of Pharmacology & Toxicology, Michigan State University
Interests: Dermal and Ocular Injury Models, Mechanisms and Medical Countermeasures for Toxic Chemical Agents Including Vesicants.
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Past-President

Michael F. Hughes, Ph.D., DABT

Supervisory Toxicologist, U.S. Environmental Protection Agency, ORD/CTE/CCED
Interests: Dermal Toxicology and Absorption
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Councilor

Jeffrey Moehlenkamp, PhD, DABT

Senior Consultant, Aclairo Pharmaceutical Development Group
Interests: Dermal Drug Development; Regulatory Toxicology, Drug Development and CRO Monitoring
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Post Doctoral Representative

Ana Ferragut Cardoso, PhD
Department of Pharmacology and Toxicology, University of Louisville
Interests: Dermal Toxicology and Arsenic induced Skin cancer
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Vice-President

Sara Farahmand, PhD

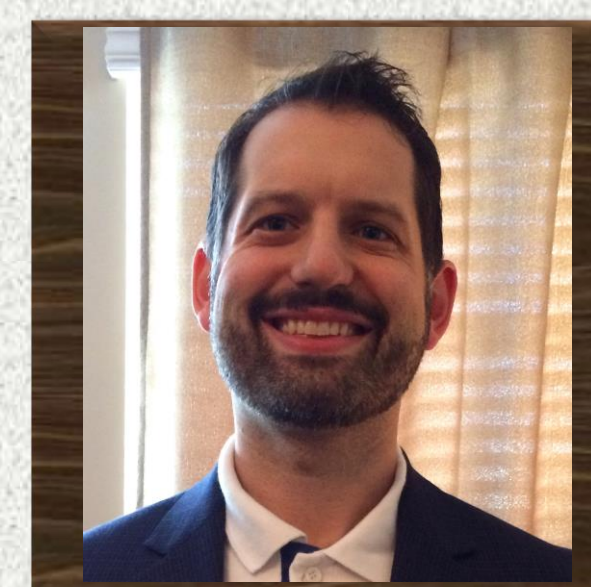
Principal Toxicologist
Edgewell Personal Care
farahmand.s@gmail.com



Secretary-Treasurer

Yoke-Chen Chang, PhD

Assistant Research Professor, Rutgers University, Ernest Mario School of Pharmacy
Interests: Understand the Basic Structure of Skin, and Wound Repair
chang@eohsi.rutgers.edu



Councilor

Gabriel Knudsen, PhD, DABT

Staff Scientist, Mechanistic Toxicology Branch, NTP/NIEHS/NIH
Interests: Xenobiotic disposition, metabolism, and pharmacokinetics in barrier tissues
gabriel.knudsen@nih.gov



Graduate Student Representative

Caren Khachatoorian, PhD
Department of Molecular, Cell & Systems Biology, University of California
Interests: Dermal Toxicology, Electronic Cigarette Toxicity
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Session Proposals for SOT 2022

- 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!
- Start making plans to work with your colleagues to submit session proposals. There are number of session types at the Annual Meeting.
- Contact **Sara Farahmand at farahmand.s@gmail.com or Neera Tewari-Singh at tewarisi@msu.edu** for more information

Dermal Toxicology SS Student & Postdoctoral Awards

In recognition of outstanding student and postdoc abstracts

Grad Student: Caren Khachatoorian, PhD

"Electronic cigarette fluids and exhaled residue cause an inflammatory response in both human keratinocytes and a 3D skin model"

Postdoc: Swati Sharma, PhD

"Mechanisms contributing to skin inflammatory pathology following exposure to Environmental pollutant Benzo(a) Pyrene in Psoriatic mouse model"

Stractor Postdoc Award

In recognition of outstanding postdoc candidates for their contribution to skin-related research

Satyendra Singh, PhD

"Mechanism mediating the Dermal Inflammation and Toxicity from Phosgene Oxime Exposure"

Paper of the Year Award

In recognition of an exceptional publication in the field of skin toxicology and pharmacology

Nancy Hopf, PhD

"Reflections on the OECD guidelines for in vitro skin absorption studies"