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 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
- Cosmetic Industry: Risk assessment for perfumes, after-shaves, body lotions, sunscreens
- Pharmaceuticals: From topical ointments to transdermal delivery systems
- Contact Hypersensitivity: Immunological response to an allergen
- 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, pharmacoepidemiology, 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: Building the Toolbox: Three Dimensional Tissue Constructs as Problem-Solvers
  Tuesday March 28th (9:00 AM – 10:45 AM)
  Chair(s): Erin Hill, IIVS; and Kristie Sullivan, PCRM
  Poster Session:
  Skin and Dermal Toxicity Chair: Hong Duck Kim, New York Medical College
  Monday March 28th (9:00AM-10:45 AM)

Session Proposals for SOT 2023
- 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 2023 Annual Meeting will be solicited soon after the 2022 meeting. Start making plans to work with your colleagues to submit session proposals. There are many types of session types at the Annual Meeting, Contact Sara Farahmand at farahmand.s@gmail.com for more information.

Dermal Toxicology SS Student & Postdoctoral Awards
- Edgewall Personal Care Student and Postdoctoral Award
- In recognition of outstanding student and postdoc abstracts
- Grad Student: Gisselle Rodriguez, InterAcicive Disposition, metabolism, and pharmacokinetics in barrier tissues
- Postdoc: Neha Mishra, Network of miRNAs regulating inflammatory and fibrotic responses in sulfur mustard-induced skin injuries in mice
- Stractor Postdoc Award
- In recognition of outstanding postdoc candidates for their contribution to skin-related research
- Alexandra Neil, Chronic Arsenic Exposure Reduces DNA Damage Response Activation in Human Keratinocytes
- Paper of the Year Award
- In recognition of an exceptional publication in the field of skin toxicology and pharmacology
- Anneliese Struz, PhD, Cytotoxic, genotoxic, and toxicogenomic effects of dihydroxyacetone in human primary keratinocytes

National Institutes of Health (NIH) Office of Extramural Research (OER) Interdisciplinary Program in Human Toxicology (IPT)