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

Occcupational 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 antigen
- 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 Sessions:
1. “Applicability Domains and Future of Nonanimal Tests for Skin Sensitization”
   Chair(s): Jeffrey Ferragut, PhD, US FDA
   Poster Session:
   1. Skin and Dermal Toxicity
   Chair(s): Jeffrey Ferragut, USD
   Thursday, March 24th (1-2:45pm)

DTSS Meeting:
Wednesday, March 17th (9:15-5:00pm)

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 Heera Tewari-Singh at tewari@msu.edu for more information

Dermal Toxicology SS Student & Postdoctoral Awards
In recognition of outstanding student and postdoc abstracts
Grad Student: Careen Khachatourian, 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 Benz(a)pyrene in Psoriatric mouse model”

In recognition of outstanding postdoc candidates for their contribution to skin-related research
Satyendra Singh, PhD
“Mechanism mediating the Dermal Inflammation and Toxicity from Phagocytosis”

In recognition of an exceptional publication in the field of skin toxicology and pharmacology
Nancy Hofg, PhD
“Reflections on the OECD guidelines for in vitro skin absorption studies”