

NAME OF SPECIALTY SECTION Immunotoxicology

ANNUAL REPORT: 2019-2020

May 1, 2019 to April 30, 2020

I. Officers/Committees:

<u>Officers</u>	<u>2018-2019</u>	<u>2019-2020</u>
President:	Jamie C DeWitt	Emanuela Corsini
Vice President:	Emanuela Corsini	Mark Collinge
Vice President-Elect:	Mark Collinge	Florence Burleson
Secretary/Treasurer:	Stacey E Anderson	Randy Gallucci
Past President	Victor J Johnson	Jamie C DeWitt
Councilors:	Jessica L Lynch	Allison Ehrlich
	Jennifer Wheeler	Jennifer Wheeler
PDA Representative:	Alessandro Venosa	Alessandro Venosa
GSLC Representative:	Alexa Murray	Alexa Murray

Committees: If applicable.

Awards Committee

Chair: Jessica Lynch

Tina Satterwhite

Berran Yucesoy

Jean Sathish

David McMillan

Yining Jin

Joanna Matheson

Michale McCabe

Michael Whitekus

Communication and Membership Committee

Chair: Jennifer Wheeler

Alexa Murray

Alessandro Venosa

Education Committee

Chair: Florence Burleson

Alessandro Venosa

Alexa Murray

Cody Smith

Brian Zhou

Travis Gullede

Program Committee

Chair: Mark Collinge

Ankit Shah
Berran Yucesoy
Joanna Matheson
Jessica Lynch
Peer Karmus
Vic Johnson

Scientific Advisory Committee

Chair: Jamie DeWitt
Mark Collinge
Emanuela Corsini
Florence Burleson

II. 2019 Membership total: 350

III. Key Outcomes in 2019-2020: The revote of the ITSS proposed changes to the current bylaws is in the process. The survey for bylaws votes closes June 9, 2020. If the changes are approved by two-thirds of those voting, the revised document will be submitted to Council for approval.

Activities:

A. 2020 SOT Annual Meeting Courses/Sessions (the asterisk identifies those that have gone online as virtual meetings, some of the others have been modified and sent for SOT2021):

Continuing Education Courses:

*Timing Is Everything: Developmental Exposure Alters the Path of Immune Cell Maturation and Function

Chair(s): Alessandro Venosa, University of Utah; and Jamie DeWitt, East Carolina University.

Harnessing the T Cell for Cancer Immunotherapy: A Course on T Cell Redirection

Chair(s): Jessica L. Lynch, Janssen Research & Development; and Rafael Ponce, Shape Therapeutics.

Symposia:

*Can We Predict and Manage Immune-Related Adverse Events Associated with Cancer Immunotherapy?

Chair(s): Yasuo Yoshioka, Osaka University, Japan; and Peyton Myers, US FDA/CDER.

Developmental Toxicity of Per- and Polyfluoroalkyl Substances (PFAS): Current In Vivo Approaches and Application to Human Health Risk Assessment

Chair(s): Justin Conley, US EPA; and Atlee Watson, NIEHS/NTP.

Immune Cell Polarization in Toxicology and Therapeutic Approaches

Chair(s): Cheryl Rockwell, Michigan State University; and Sarah Blossom, University of Arkansas for Medical Sciences.

Immunosuppressive and Anti-inflammatory Activity of Cannabis and Cannabinoids:
Adverse or Therapeutic?

Chair(s): Norbert Kaminski, Michigan State University; and Barbara Kaplan, Mississippi State University.

Resolution of Inflammation in Chemical Toxicity/Tissue Injury:
What's Emerging?

Chair(s): Kymberly Gowdy, East Carolina University; and Srikanth Nadadur, NIEHS.

Workshops:

Applicability Domains and Future of Nonanimal Tests for Skin Sensitization

Chair(s): Victor J. Johnson, Burleson Research Technologies; and Marc Pallardy, Université Paris-Sud, France.

**In Vitro* Microphysiological Systems: Developing Tools to Evaluate Immunotoxicity of Drug Candidates

Chair(s): Nikki Marshall, GlaxoSmithKline plc; and Anthony Bahinski, GlaxoSmithKline plc.

**Immune-Mediated Adverse Drug Reactions: State-of-the-Art Learnings from Preclinical and Clinical Drug Development*

Chair(s): Amy M. Sharma, Genentech Inc.; and James J. Monroe, Merck & Co. Inc.

Poster Sections:

Autoimmunity/Hypersensitivity

Chair(s): Rachel Frawley, NIEHS/NTP; and Hui Wang, University of Texas Medical Branch at Galveston.

Immunotoxicity I

Chair(s): Anthony M. Franchini, University of Rochester; and Hazel Lin, Université de Strasbourg, France.

Immunotoxicity II

Chair(s): Muthanna A. Sultan, University of South Carolina School of Medicine; and Katherine Tang, Celgene Corporation.

Merit Award Lecture:

Unraveling the Molecular Mechanisms of Cannabinoid-Mediated Immune Modulation and Cannabinoid Receptor 2 as a Putative Therapeutic Target

Lecturer: Norbert E. Kaminski, Michigan State University, East Lansing, MI.

B. Awards Information:

Best Presentation by a Student

Melissa Wilkinson, “OANO2 Increases the Likelihood of Survival and Resolution Signaling in Response to Bleomycin-Mediated Lung Injury”, Rutgers, The State University of New Jersey.

Cassandra Houser, “Aryl Hydrocarbon Receptor Regulation of T Follicular Helper Cells”, University of Rochester

Best Presentation by a Postdoctoral Trainee

Dr. Yining Jin, “Effects of two food additives, 3-HT and BHT, on OVA-elicited food allergy in mice,” Michigan State University.

Dr Hiu Wang, “Delineation of the role of gut microbiome in trichloroethylene-mediated autoimmunity,” University of Texas

Best Paper of the Year Award

A.R. Henriquez, S.J. Snow, M.C. Schladweiler, C.N. Miller, J.A. Dye, A.D. Ledbetter, M.M. Hargrove, J.E. Richards, U.P. Kodavanti, “Exacerbation of Ozone-Induced Pulmonary and Systemic Effects by β 2-adrenergic and/or Glucocorticoid Receptor Agonists,” *Inhal Toxicol.* 2020 Mar;32(4):155-169. doi: 10.1080/08958378.2020.1759736.

U.S. Department of Energy and U.S. Environmental Protection Agency

Health and Environmental Sciences Institute (HESI) Immunotoxicology Young Investigator Travel Award

Dr. Thea Golden, University of Pennsylvania

Mitzi and Prakash Nagarkatti Research Excellence in Immunotoxicology Travel Award

Dr Valentina Galbiati, Università degli Studi di Milano, Italy

Student: Sarah Atreed, John Hopkins University

Outstanding Senior Investigator Award

Dr Gary Burleson, Burleson Research Technologies, Inc

Vos Lifetime Career Achievement Award in Immunotoxicology

Dr. Marc Pallardy, Université Paris-Sud, France

2020 Annual Meeting Mentorship event:

Mentors volunteering for the event would have included:

Academia:

Jamie DeWitt East Carolina University - DEWITTJ@ecu.edu

Judith Zelikoff NYU - judith.zelikoff@nyumc.org

David Freier Lynchburg College - freier@lynchburg.edu

Industry:

Jessica Lynch Johnson and Johnson - jlynch18@its.jnj.com
Greg Ladics DuPont - gregory.s.ladics@dupont.com
Ellen Evans Pfizer - ellen.w.evans@pfizer.com

CRO:

Florence Burleson Burleson Research Technologies - fburleson@brt-labs.com
Christina Satterwhite Charles Rivers - christina.satterwhite@crl.com

Regulatory/Government:

Peyton Myers FDA - Laine.Myers@fda.hhs.gov
David McMillan FDA - David.McMillan@fda.hhs.gov

C. Communication Activities

Newsletters:

Summer Newsletter – Published in July 2019.
Pre-SOT Newsletter – Published in February 2020.
Post-SOT Newsletter – Published in April 2020.

Teleseminars: none

White Papers: N/A

Contributions to SOT website: N/A

D. Endowment Fund Details (as of December 2019):

Health and Environmental Science Institute (HESI) Immunotoxicology Award
Endowment Fund: \$64,860, which is a gain of \$802 from 2018-2019.
Mitzi and Prakash Nagarkatti Research Excellence in Immunotoxicology Award Fund:
\$57,340 which is a gain of \$9,490.

E. Other Specialty Section 2018-2019 Activities:

1. Continued to hold monthly teleconferences of Executive Committee members and maintained meeting minutes for teleconferences.
2. Maintained a DropBox account for ITSS document sharing and storage for Executive Committee business. Allows for continuity from outgoing to incoming Executive Committee.
3. Refined best practices documents for all committees and published 2019 versions.
4. Continued to promote and campaign for the “Mitzi and Prakash Nagarkatti Research Excellence in Immunotoxicology Award Fund” endowment fund, which is now permanent. The goal of the fund is to encourage and recognize graduate students and postdoctoral scholars for their excellence in research involving mechanisms of immunomodulation in health and disease.
5. Maintained ITSS membership in the 2019-2020 term.

6. Strengthened and expanded the ITSS International Committee. The ITSS-JSIT collaboration resulted in submission of a symposium for the 2020 SOT meeting that was accepted (Can We Predict and Manage Immune-Related Adverse Events Associated with Cancer Immunotherapy?), which was also presented online. In addition, as part of the collaboration, Dr. James Bonner presented a Special Lecture entitled “Immunotoxicology of inhaled nanoparticles and the implications for lung disease susceptibility”, as the ITSS delegate at the 2019 Japanese Society of Immunotoxicology annual meeting in Kitakyushu, Fukuoka Prefecture, Japan. ITSS was successful in helping Dr. Bonner obtain travel support through the SOT Global Initiatives funding mechanism.

IV. Feedback and Ideas:

- A. How might SOT better support your group’s activities (perhaps something the Society should be doing that we currently do not do, or do not do effectively, that would be of importance/benefit to the members of your component group?):
 - We are very satisfied with how SOT manages the Specialty Sections, and the support provided.
- B. What is one thing that the Society is currently doing that impacts your component group that should be changed (e.g., stopped, modified, etc.)?
 - Even if the reason is understandable, sometimes there is no possibility to freely insert (without prior authorization) job opportunities and to advertise events.
- C. What changes does your component group anticipate making in the way in which it operates in the coming year?
 - None in the near future.