

NAME OF SPECIALTY SECTION: Mixtures Specialty Section

ANNUAL REPORT: 2018-2019

May 1, 2018 to April 30, 2019

I. Officers/Committees:

<u>Officers</u>	2017-2018	2018-2019
President:	Cynthia V Rider	Chris Gennings
Vice President:	Chris Gennings	Danielle Jessica Carlin
Vice President-Elect:	Danielle Jessica Carlin	Thomas Webster
Secretary/Treasurer:	Emily F Madden	Emily F Madden
Past President	Margaret H Whittaker	Cynthia V Rider
Councilors:	Julia E Rager	Bethany R Hannas
	Bethany R Hannas	Jennifer Schlezinger
PDA Representative:	Justin M Conley	Courtney Roper
GSLC Representative:	Elizabeth Marie Martin	Oluwadamilare Adebambo

Committee meetings:

At 2019 SOT Annual Meeting: Mixtures Specialty Section Officers Face-to-Face Meeting, Monday, March 11, 2019, 7:00-8:00 AM at Ms. Shirleys Cafe, 750 E Pratt Street, Baltimore, MD

Attendees: Marie Bourgeois, Krisa Camargo, Danielle Carlin, Chris Gennings, Troy Hubbard, Mansi Krishan, Esra Mutlu, Cynthia Rider, Jennifer Schlezinger, Tom Webster

Kick-off Webinar to Cover New Officer Duties/Upcoming Activities: WebEx, Thursday, April 4, 2019, 12:00- 1:00 pm

Attendees: Marie Bourgeois, Krisa Camargo, Danielle Carlin, Chris Gennings, Troy Hubbard, Mansi Krishan, Esra Mutlu, Cynthia Rider, Jennifer Schlezinger, Tom Webster

II. Activities:

2019 SOT Annual Meeting Reception was held at the Hilton Baltimore, Maryland (Room Key 7) on (Tuesday, March 12, 2019, 6:00-7:30 PM). Approximately 80 people were in attendance. Dr. Chris Gennings called the meeting to order at 6:30 PM.

Meeting Minutes:

- Hors d'oeuvres and networking
- Chris Gennings welcomed everyone and provided an update on recent MixSS activities.
- *Mixtures Speed Networking Event:* Nigel Walker moderated the event. One "mixture expert" was seated at each table. Trainees and junior members spent 10 minutes at each table and then rotated from table to table. The table discussions on research interests and mentorship were informal and well received by attendees.

- Chris Gennings presented the new MixSS officers:
 - Vice President-Elect: Mansi Krishan
 - Councilor: Marie Bourgeois
 - Graduate Student Representative: Krisa Camargo
 - Secretary Treasurer: Esra Mutlu
- Chris Gennings provided the results of a survey released to MixSS Members on January 2, 2019:
 - Questions from the survey: 1) Which of the following best describes your current or most recent position? 2) Did you know that the MixSS co-sponsors the Risk Assessment Specialty Section (RASS) webinar? 3) Are you interested in knowing the work MixSS members do regarding analyses of mixtures? 4) Would you use a MixSS blog to engage members? 5) Are you satisfied with the general format of the MixSS reception at SOT?
 - Responses: 37 members responded; most work in academics (41%) or government (32%); the vast majority are aware of the co-sponsorship of the RASS webinar, read our newsletter, and are satisfied with the MixSS reception; Most are NOT interested in a blog to engage members (59% no vs 41% yes); 95% want to know what MixSS members do regarding analyses of mixtures.
- Chris Gennings discussed upcoming MixSS-sponsored SOT sessions and program session proposal submissions for 2019.
- Chris Gennings presented awards (see below).

Awards:

Best Mixtures Abstract: Jennifer Schlezinger (Boston University), Title: Predicting the Activation of the Androgen Receptor by Mixtures of Ligands Using Generalized Concentration Addition, Abstract No. 3060, Board No. P529. Presenting on 3/13/19, 3:00 pm-4:30 pm.

Graduate Student Award: Emily Brehm (University of Illinois-Champaign), Title: Prenatal exposure to a phthalate mixture alters sex steroid, peptide, and gonadotropin hormones in the F1, F2, and F3 generations of female mice, Abstract No. 1494, Board No. P609. Presenting on 3/11/2019, 3:00 pm – 4:30 pm.

Post-doctoral Award: Courtney Roper (Oregon State University), Title: PM2.5 Characterization in Biomass and Non-biomass Burning Households, Abstract No. 1110, Board No. P131. Presenting on 3/11/2019, 9:15 am – 10:45 am.

Top 5 Abstracts (listed alphabetically)

- Zunwei Chen (Texas A & M University), Title: A Multi-Tissue Organotypic Human In Vitro Model for Rapid Hazard Identification of Environmental Chemicals and Mixtures, Abstract No. 1074, Platform Session; Presenting on 3/11/19, 9:15 am -12:00 pm.
- Yunjia Lai (University of North Carolina-Chapel Hill), Title: Amniotic Fluid Exposomics Identifies Novel Prenatal Exposures and Metabolic Signatures in Relation to Preterm Birth: A Prospective Case-Control Study. Abstract No. 3082, Board No. P623. Presenting on 3/13/19, 10:45 am-12:15 pm.

- Jennifer Ong (University of New Mexico), Title: Cytokine Expression Profiles and Metals Exposure Cluster Analysis within a Population Study, Abstract No. 2385, Board No. P797, Presenting on 3/12/19, 1:30 pm -3:00 pm.
- Jennifer Schlezinger (Boston University), Title: Predicting the Activation of the Androgen Receptor by Mixtures of Ligands Using Generalized Concentration Addition, Abstract No. 3060, Board No. P529. Presenting on 3/13/19, 3:00 pm -4:30 pm.
- Eva Tanner (Icahn School of Medicine at Mount Sinai), Title: A Novel Risk Assessment Model for Incorporating Co-Exposures Provides Preliminary Guideline Values for Unregulated Chemicals, Abstract No. 3053, Board No. P522. Presenting on 3/13/2019, 3:00 pm – 4:30 pm.

2019 SOT Annual Meeting Courses/Sessions:

Continuing Education Course: Handling Uncertainties in Evaluating Mixtures: What's the Difference between a "Similar" and a "Sufficiently Similar" Mixture?

Session chairs: Suzanne Fitzpatrick, US FDA, College Park, MD; and Mansi Krishan, Danone North America, Louisville, CO.

Speakers: Glenn Rice (USEPA) and Amy Roe (Proctor and Gamble)

Continuing Education Course: Complex Mixtures and UVCBs: Analysis, Testing, and Risk Assessment

Session chairs: Cynthia Rider, NIEHS/NTP, Research Triangle Park, NC; and Mansi Krishan, Danone North America, Louisville, CO

Speakers: Brenna Flannery (US FDA), Timothy Baker (Procter & Gamble Company), Joshua Kellogg (University of North Carolina at Greensboro) and Cynthia Rider (NIEHS/NTP)

Symposium Session: Patterns of Co-exposure and Its Implications for Understanding the Health Effects of Mixtures

Session chairs: Thomas Webster, Boston University School of Public Health, Boston, MA; and Rogelio Tornero-Velez, US EPA, Research Triangle Park, NC.

Speakers: T. Webster (Boston University School of Public Health), R. Tornero-Velez (US EPA), D. Kapraun (US EPA), J. Wambaugh (US EPA), R. Zaleski (ExxonMobil Biomedical Sciences, Inc.), C. Gennings (Icahn School of Medicine at Mount Sinai) and M. DeVito (NIEHS/NTP).

Informational Session: Electronic Waste: An Evolving Global Health Concern and Risk Assessment Challenge

Session chairs: Babasaheb (Bob) R. Sonawane, TRACS, LLC, North Potomac, MD; and Michelle Heacock, NIEHS, Research Triangle Park, NC.

Speakers: B. Sonawane (TRACS, LLC), B. Trottier (NIEHS), P. Chakraborty (SRM Institute of Science and Technology), L. S. Birnbaum (NIEHS/NTP), B. A. Fowler (Emory University School of Public Health)

Workshop Session: Applying Systems Biology Approaches to Understand the Joint Action of Chemical and Nonchemical Stressors

Session chairs: Cynthia V. Rider, NIEHS/NTP, Research Triangle Park, NC; and Julia E. Rager, University of North Carolina at Chapel Hill, Chapel Hill, NC.

Speakers: C. Rider (NIEHS), J. E. Rager (University of North Carolina at Chapel Hill), J. M. Conley (US EPA/ORD), D. J. Carlin (NIEHS), A. Lampen (BfR), C. V. Rider (NIEHS/NTP)

Poster Session: Mixtures, Poster Board #: P517–P531 Abstract #: 3048–3062 Exhibit Hall

Newsletters:

The Mixtures Specialty Section Newsletter will be “published” in August/September 2019 and disseminated to specialty section members when completed.

Webinars and Mixtures related workshops/conferences:

SOT RASS/MixSS Webinars for 2018-2019:

<https://www.toxicology.org/groups/ss/RASS/downloads.asp>

Workshop: Total Exposure Health

Date: September 6-7, 2018

Location: Bethesda North Marriott Hotel and Conference Center, Bethesda, MD

Website: <http://www.cvent.com/events/total-exposure-health-2018/event-summary-f5ae5c586a414ceb84a7fb594789dd7b.aspx>

Workshop: Converging on Cancer

Date: April 29-30, 2019

Location: William Jefferson Clinton East Building, U.S. Environmental Protection Agency, Washington, D.C.

Website: <https://ntp.niehs.nih.gov/events/webinars-workshops/2019/coc/index.html>

Workshop: Powering Research Through Innovative Methods for Mixtures in Epidemiology (PRIME) Program Meeting

Date: April 29-30, 2019

Location: NIEHS Main Campus, RTP, NC

Website: https://www.niehs.nih.gov/news/events/pastmtg/2019/prime_2019/index.cfm

Workshop: Environmental Mixtures Workshop at Columbia University's Mailman School of Public Health

Date: August 19-20, 2019

Location: Columbia Mailman School of Public Health, 722 W. 168th Street, Allan Rosenfield Building 8th Floor Auditorium, New York City, NY

Website: <https://www.mailman.columbia.edu/research/precision-prevention/workshop-analyzing-mixtures-environmental-health-studies>