Scientific Liaison Coalition (SLC) Annual Report
June 2016-2017

Current Supporting and Participating SLC Organizations

American Academy of Clinical Toxicology (AACT)
American College of Medical Toxicology (ACMT)
American College of Toxicology (ACT)
Environmental Mutagenesis and Genomics Society (EMGS)
Safety Pharmacology Society (SPS)
Society for Risk Analysis (SRA)
Society of Toxicologic Pathology (STP)
Society of Toxicology (SOT)
Teratology Society (Teratology)

Other Listed Groups
American Association for Cancer Research (AACR)
International Society for the Study of Xenobiotics (ISSX)
Society of Environmental Toxicology and Chemistry (SETAC)

Current SLC Governance Committee (SLCGC)

Mary Alice Smith (Teratology), Chair
Kenneth L. Hastings (SOT) Society Representative, Incoming Chair
Donna L. Mendrick Immediate Past Chair, Society Representative, At–Large
Mary Jeanne Kallman (SPS), Past Chair
Rosalie K. Elespuru (EMGS), Society Representative
Anne H. Chappelle (SOT Council Contact), Society Representative
Thomas B. Knudsen Society Representative, At–Large
Kenneth E. McMartin (AACT), Society Representative
Susan Emeigh Hart (STP), Society Representative
Clarissa Russell, SLC Executive Director; Marcia G. Lawson, SLC Administrator
Current SLC Representatives

AACT: Kenneth E. McMartin
ACMT: Michael J. Kosnett
ACT: Hanan N. Ghantous
       Sharmilee Sawant
EMGS: Rosalie K. Elespuru
       Catherine F. Gibbons
SPS: Carrie G. Markgraf
       Mary Jeanne Kallman
SRA: John “Jack” R. Fowle, III
STP: Susan Emeigh Hart
       Arun Pandiri
       Charles Wood
SOT: Kenneth L. Hastings
       Anne H. Chappelle
       George M. Woodall, Jr.

Teratology: Mary Alice Smith
            John M. DeSesso
            Alan Hoberman

At-Large Representatives
Thomas B. Knudsen, Donna L. Mendrick
SLC Charge:

Mission:

Improving the ability of societies to partner with other domestic and international organizations with the goal of advancing science to improve human and environmental health
  • Strengthen partnerships among health science organizations to increase awareness of toxicology and related sciences on human health.
  • To enhance cooperation among societies with the goal of accomplishing tasks benefiting human health and disease prevention through joint and shared activities.

Cutting-Edge Scientific Exchanges

The principal goal of the SLC is to plan and develop scientific forums on topics that are timely and relevant to protection of human health and the environment. Recommendations for topics are solicited from participating societies/organizations and responses prioritized by the SLC to ensure mutual interest and broad participation.
  • Ad hoc Working Groups (WG) are organized around each topic with the highest priorities.
  • WGs develop specific action plans at an appropriate scale that can be implemented with minimal staff support.
  • The SLC Governance Committee will review the action plans to ensure alignment with the SLC mission and diversity of this group.
**Benefits of Membership**

- **Education**
  - Develop educational opportunities through webinars, sessions, and courses
  - Obtain access to sessions/programs developed by member organizations
    - Reduced registration to SOT Contemporary Concepts of Toxicology (CCT) meetings
    - Access to live webinars
- **Networking Opportunities**
  - Develop contacts across scientific groups with whom you may or may not normally interact

**Raising Awareness about the SLC**

The SLC website ([http://www.toxicology.org/slc.asp](http://www.toxicology.org/slc.asp)) launched in 2014 has grown to include all SLC webinar recordings. These recordings are freely accessible, demonstrating the SLC commitment to sharing knowledge to improve human and environmental health.

For the SOT 2017 Annual Meeting, the SLC again participated in the SOT Global Gallery of Toxicology, which included 35 societies from around the world. The poster developed for this event is available for presentation at the meetings of the representative societies. In addition, SLC leadership attended the IUTOX Global Collaboration Coffee that provided opportunities for networking with the leadership of these societies.
The SLC is continuing its outreach to other organizations and emphasizing the “SLC Value Proposition” by succinctly articulating the benefits as follows:

Make your members love your Society even more for pennies.
Do the math!
Pennies per Member

- Increased access to cutting-edge educational materials
- Additional leadership opportunities at all levels for your members
- More avenues to communicate sound science

- For a few cents per member, it makes sense to belong.

Moreover, the SLC was featured in the SOT Quarterly Communiqué that can be accessed on the SOT website (http://toxchange.toxicology.org/p/bl/et/blogid=9&blogaid=2177)

2016-2017 Accomplishments

Anna Mae Diehl
Keynote Speaker

The Metabolic Syndrome and Associated Diseases: From the Bench to the Clinic was held as a satellite meeting of the Society of Toxicology (SOT) 2017 Annual Meeting.
The keynote speaker was Anna Mae Diehl, Florence McAlister Professor of Medicine, Duke University, Durham, North Carolina. Her presentation, “Metabolic Diseases: Clinical Manifestations, Role of Genetics, and Lifestyles,” provided an overview of the metabolic syndrome and some of its causes. Other speakers were from academia, industry, and government and their topics can be found on the conference website.

This multidisciplinary forum was attended by nearly 100 scientists and clinicians who gathered to discuss the underlying biological mechanisms that lead to type 2 diabetes and cardiovascular disease, which is on the rise in the general population. This meeting was developed by the SLC and implemented with the SOT Contemporary Concepts in Toxicology (CCT) Conferences Committee.

**SLC Webinar Series**

**The Use of Animal Models of Disease in Safety Assessments**
Tuesday, May 17, 2016, from 11:00 AM–12:30 PM ET USA
Presented by: Diann L. Blanset, PhD, DABT, Boehringer Ingelheim.
This webinar reviewed the use of animal models of disease in the evaluation of exaggerated pharmacology and toxicity to improve the relevance and extrapolation of the assessments to the intended disease population.

**Regulatory Perspective on the Use of Animal Models of Disease in Drug Development**
Tuesday, May 31, 2016, 11:00 AM–12:30 PM ET USA
Presented by: Sruthi King, PhD, Pharmacology/Toxicology Team Leader in the Division of Clinical Review in the Office of Generic Drugs within the Center for Drug Evaluation and Research at the US Food and Drug Administration (CDER/FDA).
This webinar highlighted current regulatory practices within CDER/FDA with case studies in which animal models of disease were used in nonclinical safety studies. At this time, the US FDA recommends the use of animal models of disease be used in “proof of concept” studies, unless the sponsor provides acceptable justification that the animal model is the most relevant species for pharmacology and toxicology testing.
Animal Models of Human Disease for Nonclinical Safety—Why, What and When...
Tuesday, June 21, 2016, from 11:00 AM–12:30 PM ET USA

Presented by Sherry J. Morgan, DVM, PhD, ACVP, ABT, ABVT

joined Abbott/AbbVie, Inc. in 1990. She currently serves a dual role as a pathologist and a Director of Scientific Projects, providing toxicology and pathology guidance for Discovery and Development projects. In this webinar, the rationale for the use of animal models of disease was discussed as it pertains to different adverse drug reactions for which there is relatively low predictability with conventional animal models.

Biology of Vaccines and Molecular Evolution of Viruses
Tuesday, November 1, 2016, from 11:00 AM–12:30 PM ET USA

Presented by Paul E. Turner, PhD, Chair of Ecology and Evolutionary Biology, Yale University, Microbiology Faculty, Yale School of Medicine, New Haven, Connecticut.

This webinar covered fundamentals of virus molecular evolution and the biology of vaccines as well as summarizing the challenges of developing evolution-proof vaccines, such as those against rapidly evolving targets, particularly RNA viruses. The presentation also emphasized past vaccine successes, such as the global vaccination program that eradicated variola virus (causative disease agent of smallpox in humans).

Polypharmacy and the Challenges of Optimizing Pharmacotherapy in Complex Patients
Tuesday, February 28, 2017, 11:00 AM–12:30 PM ET USA

Presented by Cathy Yeung, Pharm D, PhD, MPH, Assistant Professor, Department of Pharmacy, University of Washington School of Pharmacy, Seattle, Washington. This webinar focused on one of the greatest challenges facing clinical pharmacists: the rapid growth of polypharmacy, in which patients are prescribed 10 or more medications, and the associated increased risks of adverse drug reactions, drug-drug interactions, and drug-disease interactions.
Epidemiology of Vaccine Refusal
Tuesday, March 28, 2017, 11:00 AM–12:30 PM ET USA

Presented by Saad B. Omer, MBBS, MPH, PhD, FIDSA, William H. Foege Professor of Global Health and Professor of Epidemiology & Pediatrics at Emory University, Schools of Public Health and Medicine. He also is a faculty member at the Emory Vaccine Center. The webinar addressed the evidence of an increase in vaccine refusal in the United States and of geographical clustering of vaccine refusers resulting in outbreaks. The presentation described the need for development of a robust evidence base of effective interventions for reducing vaccine hesitancy.

Upcoming Conference:

FutureTox IV: Predictive Toxicology and Preventive Medicine for Healthy Children
CCT: November 14–16, 2018, Washington, DC area. The prevalence of adverse children’s health outcomes in the United States demonstrates a (1) growing need for research to understand the impact of environmental factors on human development, and (2) for actionable solutions to ensure well-being across developmental life stages recognizing that adverse consequences of early life exposure may not manifest until later in life. FutureTox IV will bring together basic, clinical, and regulatory scientists to identify the gaps in addressing children’s health and the latest science to improve decision making ability on a multitude of stressors linked to improving children’s health. This meeting is being planned under the auspices of the SOT CCT Committee.
Current Working Groups

- FutureTox IV
- Hydraulic Fracturing/Natural Gas Exploration Work Group*
- Metabolic Syndrome Webinar Series
- Changing Susceptibility from Embryonic, Fetal, and Neonatal Development
- Regulatory Comparisons about Medical Devices Workgroup
- SLC Global Outreach
- Vaccination

*Activities of this group will renew in the spring of 2018.

Face-to-Face Meetings

There are two meetings a year, in the fall and spring. Next meeting will be held, October or November TBD, 2017, SLC Headquarters, Reston, VA.