

Selected Events Related to Cellular and Computational Toxicology

SOT 2017 Annual Meeting

Saturday, March 11

9:00 AM—5:00 PM SATELLITE MEETING

Horizons and Challenges in Organotypic Culture Models for Predictive Toxicology
Baltimore Convention Center, Room 310

Sunday, March 12

8:15 AM—12:00 Noon CONTINUING EDUCATION

Technologies and Applications of Stem Cells for Use in Toxicology
Erik Takar, NTP, NIEHS, Durham, NC; and Aaron Bowman, Vanderbilt University Medical Center, Nashville, TN.

1:15 PM—5:00 PM CONTINUING EDUCATION

Emerging Approaches in Genetic Toxicology for Product Development
Jeffrey Bemis, Liron Laboratories, Rochester, NY; and Krista Dobo, Pfizer Worldwide R&D, Groton, CT

Extrapolation in the Airways: Strategies to Incorporate *In Vivo* and *In Vitro* Data to Better Protect Human Health
Marie Fortin, Colgate-Palmolive, Piscataway, NJ; and Madhuri Singal, Reckitt Benkinser, Montvale, NJ.

Read-Across: Case Studies, New Techniques, and Guidelines for Practical Application
Kristie Sullivan, Physicians Committee for Responsible Medicine, Oakland, CA; and Mark Cronin, Liverpool John Moores University, Liverpool, United Kingdom.

5:15 PM—6:30 PM AWARD CEREMONY

David Allen – Enhancement of Animal Welfare Award

Monday, March 13

8:00 AM—9:20 AM DAILY PLENARY SESSIONS

Data Science
Peter Sorger, Harvard Medical School, Boston, MA; and Stephen Friend, Apple Inc., Cupertino, CA.

9:30 AM—12:15 PM SYMPOSIUM SESSIONS

Organs-on-a-Chip, Tissue Bioprinting, and 3D Cultures: Next Generation

Models for Toxicology in the 21st Century
Shaun McCullough, US EPA, Chapel Hill, NC; and Emma Bowers, University of North Carolina, Chapel Hill, NC.

WORKSHOP SESSIONS

Fit for Purpose: Using Computational Models for Risk
John Wambaugh, US EPA, Research Triangle Park, NC; and Nisha Sipes, NTP/NIEHS, Research Triangle Park, NC.

10:30 AM—11:30 AM

EXHIBITOR-HOSTED SESSIONS

In Silico Strategies to Assess Potentially Mutagenic Impurities Under ICH M7
Lhasa Limited

Mechanistic Insights into Contractility and Electrophysiology Complemented by Optical Stimulation of iPSC Cardiomyocytes.
Nanon Technologies and Axiogenesis.

12:00 Noon—1:00 PM

EXHIBITOR-HOSTED SESSIONS

Developing an Implementation Strategy for Toxicity Testing in the 21st Century

National Institute of Environmental Health Sciences and the National Toxicology Program

12:30 PM—1:50 PM

INFORMATIONAL SESSIONS

Supporting Open Data in Toxicology
George Woodall, US EPA, Research Triangle Park, NC; and Gary Miller, Emory University, Atlanta, GA.

1:30 PM—2:30 PM

EXHIBITOR-HOSTED SESSIONS

Replacement of Animal Testing for CLP/GHS Potency Classification of Skin Sensitizers is Now Possible Using a Modified Genomic GARDskin [OECD TGP 4.106] Assay
SenzaGen AB

2:00 PM—4:45 PM

SYMPOSIUM SESSIONS

Cell Health and Mechanistic Assays for the *In Vitro* Prediction of DILI
Yvonne Will, Pfizer, Groton, CT; and Dominic Williams, AstraZeneca, Cambridge, United Kingdom.

WORKSHOP SESSIONS

Modernizing Toxicological Risk Assessment for Compounds Released from Pharmaceutical, Consumer, Medical Device and Combination

Products: Alternative Tools and Methods

Richard Hutchinson, Johnson & Johnson, Somerville, NJ; and Alan Hood, US FDA, Silver Spring, MD.

Improving Public Health through Innovations in Exposure Science
Cecilia Tan, US EPA, Durham, NC; and Alicia Paini, Joint Research Centre, Ispra, Italy.

3:00 PM—4:00 PM

EXHIBITOR-HOSTED SESSIONS

Global Initiatives for Replacement, Refinement and Reduction in Animal Use within Toxicology Programs
NC3Rs

5:00 PM—6:20 PM

SCIENTIFIC SESSIONS

Establishment of a Novel Cell-Based Assay for Drug-Induced Liver Injury (DILI) Potential Considering Immune- and Inflammation-Related Factors
Tsuyoshi Yokoi, Nagoya University Graduate School of Medicine, Nagoya, Japan.

6:00 PM—7:30 PM

SPECIALTY SECTIONS

Risk Assessment Specialty Section Meeting/Reception

Tuesday, March 14

9:00 AM—10:00 AM

EXHIBITOR-HOSTED SESSIONS

Integrated Approaches for Inhalation Toxicity Assessment
Faunhofer ITEM

9:30 AM—12:15 PM

WORKSHOP SESSIONS

Incorporating *In Vitro* Reproductive and Developmental Assays into Regulatory Risk Assessment
Suzanne Fitzpatrick, US FDA, College Park, MD; and Elaine Faustman, University of Washington, Seattle, WA.

Opportunities for Read-Across Development and Application Using QSAR Approaches
Richard Becker, American Chemistry Council, Washington, DC; and Grace Patlewicz, US EPA, Research Triangle Park, NC.

INFORMATIONAL SESSION

Thresholds of Toxicological Concern: 21st Century Safety Assessment

Heli Hollnagel, Dow Europe GmbH,
Horgen, Switzerland; and Kristi Muldoon-
Jacobs, US FDA, College Park, MD.

12 Noon—1:00 PM

EXHIBITOR-HOSTED SESSIONS

DILIsym: A Computational Tool for
Assessing the Risk of Drug-Induced
Liver Injury

DILIsym Services Inc.

Novel *In Vitro* Models for the Study of
Drug-Induced Hepatotoxicity

Corning Incorporated

12:15 PM—1:45 PM

SPECIALTY SECTIONS

Ethical, Legal, and Social Issues
Specialty Section Meeting/Luncheon

In Vitro and Alternative Methods
Specialty Section Meeting/Luncheon

1:30 PM—2:30 PM

EXHIBITOR-HOSTED SESSIONS

Comprehensive Solutions for
Genotoxicity Evaluation of All Products
(QSAR to Screening, to GLP Assays)
MilliporeSigma

Functional Assays for Assessing
Mitochondrial Toxicity and Metabolism
of Live Cells

Agilent Technologies

2:00 PM—4:45 PM

SYMPOSIUM SESSIONS

Big Data, Meet Chemical
Carcinogenesis! Are There New
Solutions for an Old Problem?

*Udayan Apte, University of Kansas Medical
Center, Kansas City, KS; and James
Klaunig, Indiana University, Bloomington,
IN.*

Lost in Translation: Bringing the Real
World to *In Vitro* Data

*Michelle Embry, ILSI Health and
Environmental Sciences Institute,
Washington, DC; and Todd Gouin,
Unilever, Milton Keynes, United Kingdom.*

WORKSHOP SESSIONS

Safety or Prediction? What is the
Future of Regulatory Toxicity Testing?

*Douglas Keller, Sanofi US LLC,
Bridgewater, NJ; and Thomas Hartung,
Johns Hopkins University, Baltimore, MD.*

3:00 PM—4:00 PM

EXHIBITOR-HOSTED SESSIONS

Evaluating the Developmental Toxicity
Potential of the ToxCast Chemical
Library with devTOX quickPredict
Stemina Biomarker Discovery

New Life for Natural Killer Cell Assays
Using Non-Radioactive Approaches
Covance, Inc.

Trends, Trials, and Triumphs in *In Vitro*
Toxicology

*Charles River and National Institutes of
Environmental Health Sciences*

5:00 PM—7:00 PM

ANCILLARY MEETING

*Hyatt Regency Baltimore,
Constellation Ballroom A*

Hands-On Seminar: Creating an
Adverse Outcome Pathway in the AOP
Wiki

*Kristie Sullivan, PCRM; Catherine Willett,
HTPC; and Stephen Edwards, US EPA.*

6:00 PM—7:30 PM

SPECIALTY SECTIONS

Stem Cells Specialty Section
Meeting/Reception

Wednesday, March 15

9:30 AM—12:15 PM

WORKSHOP SESSIONS

3D Cell Platforms to Advance
Toxicological Sciences

*Peggy Guzzie-Peck, Janssen
Pharmaceutical Company, Chalfont, PA;*

and Brian Berridge, GlaxoSmithKline, Research Triangle Park, NC.

Measurement and Prediction of Chemicals in Consumer Products
John Wambaugh, US EPA, Research Triangle Park, NC; and Kristin Isaacs, US EPA, Research Triangle Park, NC.

12:30 PM—1:50 PM

EXHIBITOR-HOSTED SESSIONS

ICCVAM Tools for Validation and Regulatory Application of Alternative Methods
National Institutes of Environmental Health Sciences

12:30 PM—1:50 PM

INFORMATIONAL SESSIONS

Data Science to Generate Toxicity Signatures
Jane Bai, US FDA, Silver Spring, MD; and Ravi Iyengar, Icahn School of Medicine at Mount Sinai, New York, NY.

2:00 PM—4:45 PM

SYMPOSIUM SESSIONS

Increasing Confidence in Safety Assessment Decisions: The Inclusion of Metabolism in Toxicity Testing Strategies
Miyoung Yoon, ScitoVation, LLC, Research Triangle Park, NC; and Stephen

Ferguson, NTP/NIEHS, Research Triangle Park, NC.

Novel *In Vitro* and *In Silico* Platforms for Modeling Developmental and Reproductive Toxicity
Thomas Knudsen, US EPA, Research Triangle Park, NC; and Nicole Kleinstreuer, NIEHS, Research Triangle Park, NC.

5:00 PM—6:20 PM

INFORMATIONAL SESSIONS

Bioinformatics Tools for Accelerated Hypothesis Generation and Mechanistic Insights
Susan Bello, Mouse Genome Informatics (MGI), Bar Harbor, ME; and Marc Gillespie, St. John's University, New York, NY.

5:00 PM—6:30 PM

ANCILLARY MEETING

Sheraton Inner Harbor, Loch Raven Room
Alternative Approaches to Systemic and Topical Toxicity: Making Progress on the EPA OPP Six-Pack

Thursday, March 16

8:30 AM—11:15 PM

SYMPOSIUM SESSIONS

In Vitro and Alternative Methods in Ocular Toxicology: The “Eyes” Have It

Mercedes Salvador-Silva, Alcon, a Novartis Company, Fort Worth, TX; and Chris Somps, Pfizer, Inc., Groton, CT.

Quantitative Systems Toxicology for Chemical Safety Assessment
Bob van de Water, Leiden University, Leiden, Netherlands; and Richard Paules, NIEHS, Research Triangle Park, NC.

The Next Technology Wave: Biosensors, Extreme Computing, and Organ Chips for Predicting Cardiovascular Toxicity
Anthony Bahinski, GlaxoSmithKline, King of Prussia, PA; and Amy Kim, H3 Biomedicine, Cambridge, MA.

8:30 AM—11:15 PM

SATELLITE MEETING

Updates on Activities Related to 21st Century Toxicology and Related Efforts: Invited Presentations and Open Microphone
The Center for Alternatives to Animal Testing (CAAT) and The Human Toxicology Project Consortium, and The Human Toxome Project

Friday, March 17

12:30 PM—4:00 PM

SATELLITE MEETING

Read-Across in the 21st Century
The Lord Baltimore Hotel/The Baltimore Theater
The Center for Alternatives to Animal Testing (CAAT)