



**55<sup>th</sup> Symposium / 55<sup>e</sup> Symposium**

**December 3 – 5, 2023**

DoubleTree by Hilton Montreal  
1255 Jeanne-Mance St, Montreal, Quebec H5B 1E5

Montréal

**ADVANCES AND INNOVATIONS IN INTEGRATED AND TRANSLATIONAL  
TOXICOLOGY**

**AVANCÉES ET INNOVATIONS EN TOXICOLOGIE INTÉGRÉE ET  
TRANSLATIONNELLE**

**Organized by / Organisé par:**

SOCIETY OF TOXICOLOGY OF CANADA  
LA SOCIÉTÉ DE TOXICOLOGIE DU CANADA

**Programme Committee / Comité du Programme**  
Albert Licollari, Nucro-Technics, Chair, Industry Member  
Ed Krol, University of Saskatchewan, Academic Member  
Clotilde Maurice, Health Canada, Government Member

## DAY 1 – December 3, 2023

STC Board of Directors Meeting 2:00 – 3:30 PM  
ICT-2028 Vancouver 1st Planning Meeting 3:30 – 5:00

All Attendees:

Meet & Greet @ La Cage Aux sports, Complexe Desjardins  
(Appetizers provided, Dinner and Alcohol not included)  
150 Sainte-Catherine O local 201C, Montréal, QC H5B 1B3

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## DAY 2 – December 4, 2023

Welcome and Opening Remarks

8:15: 8:30

Session I - **Artificial intelligence/machine learning in Predictive Toxicology** (Chair: Albert Licollari, Director of Toxicology, Nucro-Technics)

8:30-9:00 **Standardized Informatics for Regulatory and Safety Assessments**  
Andy Nong, Senior Scientist Computational Toxicology, Canada

9:00-9:30 **To AI or Not: Nitrosamine Potency Prediction Defined**  
Kevin Cross, PhD, Vice President, Principal Investigator U.S. FDA Collaborations, Instem

9:30-10:00 **Estimating Steady-State Blood Concentrations ( $C_{SS}$ ) and Administered Equivalent Doses (AEDs) from cellular (in vitro) Bioassays Using Toxicokinetic Models**  
Alessandro Sangion, PhD, Arnot Research and Consulting

10:00-10:30 Coffee/Tea Break

10:30-11:30 **Plenary Lecture**  
**From Toxicity Testing for the 21<sup>st</sup> Century to a Human Exposome Project**  
Thomas Hartung, PhD, Center for Alternatives to Animal Testing (The Johns Hopkins University Bloomberg School of Public Health)

11:30-11:50 **Flash Talks**

Poster Award Finalists:

- Maddison Arlen, McGill University
- Madeleine Carew, Queen's University,
- Laura Pelland-St-Pierre, University of Montreal,
- Xiaotong Wang, McGill University,

**Break**

11:50-1:00 Lunch

**Session II - Microphysiological Systems for Toxicological Safety Prediction and Regulatory Challenges**

*Chair* – Margaret Magdesian, PhD, Ananda Devices/ *Cochair*: Christopher Nicol

1:00-1:30 **Development of Predictive Drug Discovery Platforms Merging Human Tissue Chips and Translational Software**

Murat Cirit, PhD, CEO, Javelin Biotech

1:30-2:00 **3D models and Toxicology Applications**

Jan Lichtenberg, PhD, CEO, InSphero

2:00-2:30 **Organ-on-a-chip models for disease modelling and drug testing**

Milica Radisic, PhD, Canada Research Chair in Organ-on-a-Chip Engineering.

2:30-2:45 Coffee/Tea Break

2:45-3:15 **Predictive and scalable platform to test toxicity and efficacy of compounds directly on patients derived 3D neuromuscular junction-on-a-chip.**

Margaret Magdesian, PhD, Ananda Devices.

3:15-4:00 **Poster Review**

**STC Annual Business Meeting - - Main Plenary Session Room SOPRANO AB**

4:00-6:00 All STC regular and retired Members

**Concurrent Session: Trainee-Networking Session – Venue: SYMPHONIE 1 Room at DoubleTree**

Chairs: Natasha Iaboni and Madeleine Carew, Queen’s University

4:00-6:00

**Reception & Awards**

6:30 pm All attendees are welcome – Venue: **Galaxie Brasserie Upstairs Room side entrance next to the main restaurant door, 1414 Rue Clark, Montreal**  
*(finger food & refreshments provided and cash bar)*

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## DAY 3 – December 5, 2023

### Session III – Safety biomarkers and other alternative methods in translation toxicology

*Chair* – Angela Hofstra, PhD (Syngenta); *Co-chair* – Richard Bagshaw, PhD (Nucro-Technics)

8:30-9:00      **Next-Gen Genotoxicity Testing: where Genomics and Transcriptomics Meet**  
Carole Yauk, PhD, Department of Biology, University of Ottawa

9:00-9:30      **Implementation of translational safety biomarkers following health authority qualification**  
Nicholas King MS, Executive Director Predictive Safety Testing Consortium, Critical Path Institute

9:30-10:10     **Weight of evidence approach to assess the human carcinogenic risk of small molecule pharmaceuticals: Overview of the ICH S1B(R1) Addendum and initial experience with implementation (joint Health Canada / US FDA presentation)**  
Alisa Vespa, PhD, Senior Scientific Evaluator, Health Canada  
Todd Bourcier, PhD, Center for Drug Evaluation and Research, Food and Drug Administration (in discussion)

10:10-10:40    Coffee/Tea Break

10:40-12:00   **Poster Review and Networking**

#### **Break**

12:00-1:00     Lunch

1:00-2:00      **Short Oral Presentations.** Selected Posters  
Alec McDermott, Institut National de la Recherche Scientifique  
Mercedes Rose, Health Canada  
Emily Wilson, McGill University  
Dongwei Yu, McGill University

### **Session IV – Food Chemical Safety: Science & Regulation**

**Chair: Anne Marie Gannon, PhD**

2:0-2:45        **The State of Science of TiO<sub>2</sub> as a Food Additive**  
Catherine Smith and Gordon Barrett, Health Canada

2:45-3:15       Coffee/Tea Break

3:15-3:40       ***Cellular Agriculture Products***  
David Prescott, PhD, Health Canada

3:40-4:00       **Global Harmonizing of Food Safety Regulations**  
Samuel Godefroy, PhD, Laval University

#### **Closing Remarks**

4:00-4:15