



OpenTox USA 2018 Preliminary Program

Conference Theme: Maximizing the Benefits of In Vitro- *In Silico* Approaches in Toxicology and Risk Assessment in an Ever Changing Data Landscape.

Venue: North Carolina Biotechnology Center, Durham, NC, USA

Dates: July 11-12, 2018

Organising Committee: Dr. Stephen Edwards (RTI International), Dr. Annie Jarabek (U.S. EPA), Dr. Barry Hardy (Douglas Connect), Dr. George Woodall (U.S. EPA), TJ Bozada (Toxtrack), Brendan Hardy (Douglas Connect) and Dr. Noffisat Oki (Douglas Connect).

Wednesday July 11, 2018

8:00am - 9:00am Breakfast

8:50am - 9:00am Welcome Remarks: Noffisat O. Oki, Ph.D (Douglas Connect, Durham NC, USA)
OpenTox NC Local Chapter President.

9:00am - 10:50am **Session 1:** Precision Medicine and Applications in Predictive Toxicology
Chair: Stephen Edwards, Ph.D (RTI International, Durham, NC, USA)

Speakers and Presentations

Alison Motsinger-Reif, Ph.D (North Carolina State University, Raleigh, NC, USA)

- Genetic Association Mapping in Cell Line Models of Cytotoxic Response.

Sara Imhof, Ph.D (North Carolina Biotechnology Center, Durham, NC, USA)

- The Value of Collaborative Models and Partnerships for Advancing Precision Health.

Kimberly Robasky, Ph.D (RENCI, Chapel Hill, NC, USA)

- NIH Biomedical Translator Project Update: Stratification of Asthma-like Patients Using Clinical Records and Exposures.

Deepak Voora, MD (Duke University, Durham, NC, USA)

- Systems Pharmacogenomics of Aspirin: A new take on an old exposure.

10:50am - 11:10am Coffee Break

11:10am - 1:00pm	<p>Session 2: Reproducibility of In Silico Analysis in Predictive Toxicology.</p> <p>Chair: Huixiao Hong, Ph.D (U.S. Food and Drug Administration)</p> <p>Speakers and Presentations</p> <p>Nisha Sipes, Ph.D (NTP/NIEHS, Research Triangle Park, NC, USA)</p> <ul style="list-style-type: none"> - Concordance in Modeling Concentration-Response Data: Tox21 10k Library Pipeline Comparison. <p>Ruili Huang, Ph.D (NCATS/NIH , Bethesda, MD, USA)</p> <ul style="list-style-type: none"> - Modeling the Tox21 10K Chemical Activity Profiles for In Vivo Toxicity Prediction. <p>Ping Gong, Ph.D (US Army Engineer R&D Center, Vicksburg, MS, USA)</p> <ul style="list-style-type: none"> - Quantitative Target-specific Toxicity Prediction Modeling. <p>Marco Chierici, Ph.D (Bruno Kessler Foundation, Trentino, Italy)</p> <ul style="list-style-type: none"> - Deep Learning for Predictive Toxicology. <p>Xiaohui Fan, Ph.D (Zhejiang University, Hangzhou, Zhejiang Province, China)</p> <ul style="list-style-type: none"> - How to Choose the Right Cancer Cell Line for Your Research: a Transcriptomes-guided Approach.
1:00pm - 2:00pm	<p>Lunch</p> <ul style="list-style-type: none"> ● Lunch will be served in the Dogwood Room of the conference center and posters will be available for viewing in the lobby.
2:00pm - 3:50pm	<p>Poster Platform Session</p> <ul style="list-style-type: none"> ● Lightening platform presentations to precede the general poster viewing.
3:50pm - 4:50pm	<p>Discussion</p>
4:50pm - 5:00pm	<p>Conference day 1 closing remarks</p>
6:30pm	<p>Conference dinner/reception (Details TBA)</p>

Thursday July 12, 2018

8:00am - 9:00am Breakfast

9:00am - 10:40am **Session 4:** Ontologies for Interoperability of Data in Predictive Toxicology, Risk and Safety Assessment.

Chair: Helen Pan, Ph.D (RTI International, Durham, NC, USA)

Speakers and Presentations

Stephan Schurer, Ph.D (University of Miami, Miami, Florida, USA)

- Data Standards, Ontologies, and Software Tools for FAIR Open Data.

Deborah L. McGuinness, Ph.D (Rensselaer Polytechnic Institute, Troy, NY, USA)

- Building, Using, and Maintaining Ontology-enabled Resources in Exposure Science and Health Informatics Settings.

Chris Mungall, Ph.D (Lawrence Berkeley National Laboratory, San Francisco, CA, USA)

- TBA

Helen Pan, Ph.D (RTI International, Durham, NC, USA)

- Extension and Application of Exposure Ontologies in Linking Complex Disease and Exposure Data to Established Data Standards.

10:40am -11:00am Coffee Break

11:00am - 12:40pm **Session 5:** Open Data Standards and Data Sharing Principles for Enabling Predictive Toxicology Collaborations.

Chair: Annie Jarabek, Ph.D (U.S. Environmental Protection Agency)

Speakers and Presentations

Christine Hendren, Ph.D (Duke University, Durham, NC, USA)

- Data Harmonization and Sharing in the Nanoinformatics Community: Navigating convergence within the incentive structures of research efforts.

Rebecca Boyles, Ph.D (RTI International, Oxford, United Kingdom)

- The NIH Data Commons: A novel infrastructure to support data sharing.

Carolyn Mattingly, Ph.D (North Carolina State University, Raleigh, NC, USA)

- Leveraging and Integrating Standardized Language for Predictive Toxicology.

1:00pm - 2:00pm

Lunch

- Lunch will be served in the Dogwood Room of the conference center

2:00pm - 4:00pm

Discussion

- Panel discussion on open data standards, data sharing and the role of ontologies.
- Open discussion on goals for ontology workshop and brainstorming for future hackathon.

4:00pm- 4:30pm

Poster prize presentation and OpenTox Association business meeting

4:30pm

Meeting adjourned