



Spring Virtual Symposium by National Capital Area Chapter of the Society of Toxicology (NCAC-SOT)

Title: *Next Generation Tools, Technologies and Surrogate Endpoints in Toxicological Assessments*

Date: *Thursday, June 25th, 2020 (8:30am-1:00pm)*

Venue: *WebEx - Society of Toxicology*

Purpose:

The Chapter-wide NCAC is holding a local scientific and virtual research symposium to discuss current and future tools, technological improvements and surrogate endpoints in the field of toxicology and allied regulatory sciences. Both nonclinical toxicology and its clinical manifestation are influenced by genetic, transcriptomic, proteomic and metabolomic considerations, as well as environmental settings and lifestyle factors. Next generation tools, technologies and surrogates have the potential to identify and characterize toxicity and support the selection of safer products and therapeutic procedures. Herein, we aim to present scientific and technological tools that will enhance our ability to characterize toxicity in the upcoming decade. These tools include but are not limited to cells, proteins, microorganisms, chemicals, pharmacodynamics, endpoints, in-silico predictions, and two or more of their hybrid influences. An example of a hybrid tool is the integration of imaging and bio-analytical methodologies. Next generation tools, technologies, and surrogates are expected to bridge data gaps, predict toxicity at the molecular level, and minimize animal and clinical studies.

The purpose of this symposium is to (1) review key biological and exposure characteristics that may impact the evaluation of toxicology and risk assessments, (2) discuss current and future toxicology and safety scopes, and (3) identify potential gaps and future tools and technologies.

About the NCAC-SOT: The National Capital Area Chapter of the Society of Toxicology (NCAC-SOT) provides a regional focus for scientists of all disciplines interested in toxicology. The Chapter acts to:

- Sponsor and co-sponsor symposia on current issues in toxicology.
- Provide an annual award to an outstanding student in toxicology to assist in attending the Annual Meeting of the SOT.
- Sponsor Regional Chapter events at the SOT Annual Meetings.
<https://www.toxicology.org/groups/rc/ncac/>

2020 NCAC-SOT Spring Symposium Logistics:

When: Thursday, June 25th, 2020, 8:30 AM – 01:00 PM

Where: WebEx –Virtual Session through Society of Toxicology (URL/Link will be provided upon registration)

WebEx Registration (free of charge): <https://aim-hq.webex.com/aim-hq/onstage/g.php?MTID=e7018e674a96dc4b3ff7abeb654e9c1e0>



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Time	Topic	Speaker
8:30 – 8:45 am	Joining WebEx NCAC-SOT, Speakers, Attendees	
8:45 – 9:00 am	Welcome/Introduction/Opening	Narayana Garimella, Ph.D., NCAC-SOT President
9:00 – 9:30 am	Modeling Delays in Chemotherapy Induced Hematological Toxicities	Wojciech Krzyzanski Ph.D., University of Buffalo
9:30 – 09:40 am	On the Services and Accomplishments of Renowned Toxicologist Dr. Bern Schwetz	Margaret Whittaker, Ph.D., M.P.H., CBiol., F.R.S.B., E.R.T., D.A.B.T., ToxServices LLC & NCAC-SOT
09:40 – 10:10 am	Insights into the Role of a Synuclein as an Epigenetic Mediator in Environmental Parkinson's Disease	Dana Freeman, John Hopkins University
10:10 – 10:40 am	21 st Century Cures Act: A Boon to the Waiting Patient – A Safety Perspective on the Opportunities and Challenges in Drug	Gopala Krishna, Ph.D., Parexel International & NCAC-SOT
10:40 – 11:05 am	Break	
11:05 – 11:35 am	Novel BSEP and MDR3 Inhibition Assays for Investigating Drug-Induced Liver Toxicity	Kan He, Ph.D., Biotranex
11:35 am – 12:05 pm	Data Science for Life Science: In the post COVID-era.	Avik Pal, Ph.D., CliniOps
12:05 – 12:35 pm	Toxicological Assessment of Cell Therapy	Prabhakar Bhoite, M.V.Sc., D.A.B.T., Syngene International Limited
12:35 – 12:50 pm	Q & A Session with Presenters	Panel Members