Bridging Across Levels of Analysis to Advance Neurotoxic Risk Determination: Toxicology for the Second Fifth of the 21st Century

Duke Integrated Toxicology and Environmental Health Program (ITEHP)
Duke University Superfund Research Center (SRC)

Fall 2019 Symposium

Oct 11, 2019, 8:00 AM – 3:15 PM, Field Auditorium, Grainger Hall, Duke University

Chair: Edward D. Levin, Ph.D., Duke University, Durham, NC, USA

8:00 am	Continental Breakfast and Registration
8:30 am	Welcome and Introduction
8:45 am	Developmental computation: *in vitro* data and *in silico* models Thomas Knudsen, Ph.D., US-EPA
9:15 am	Mechanistic studies of PCB effects on neuronal connectivity *in vitro* and their relevance to *in vivo* developmental neurotoxicity Pamela Lein, Ph.D., University of California-Davis
9:45 am	*C. elegans* as a model for investigating gene-environment influences on dopaminergic dysfunction Joel Meyer, Ph.D., Duke University
10:15 am	**BREAK**
10:30 am	Drosophotoxicology: Inroads to conserved pathways and patterns of neurotoxic form and function in the developing fly Matthew Rand, Ph.D., University of Rochester
11:00 am	Examining the mechanisms by which microbiota and xenobiotics influence neurobehavioral development in zebrafish Tamara Tal, Ph.D., Helmholtz Centre for Environmental Research, Leipzig, Germany
11:30 am	Using zebrafish as a complementary model for neurobehavioral toxicology Edward D. Levin, Ph.D., Duke University
12:00 pm	**LUNCH**
1:00 pm	Examining Parkinson's disease gene-environment interactions using novel mouse models Laurie Sanders, Ph.D., Duke University
1:30 pm	The Translational Value of Rat Models for Neurobehavioral Toxicology: Problems and Progress Helen Sable, Ph.D., University of Memphis
2:00 pm	Environmental exposures and the epigenome: A Durham case study David Skaar, Ph.D., North Carolina State University
2:30 pm	Discussion Linda Birnbaum, Ph.D., D.A.B.T, A.T.S., Retired Director of the National Institute of Environmental Health Sciences (NIEHS) and the National Toxicology Program (NTP)
3:00 pm	Concluding Remarks