# ADVERSE OUTCOME PATHWAYS (AOP): THE HOW AND WHY OF DEVELOPMENT & APPLICATION

#### LOCATION

Department of Biology, Rooseveltov trg 6, Zagreb

### WORKSHOP GOAL

AOP is a novel approach in chemical risk assessment that provides the systematic organization of toxicological information to support development of predictive relationships between measures of the initiation of a chemical-induced perturbation (molecular initiating event) and adverse outcomes occurring at a level of biological organization relevant to regulatory decision-making. The goal of this workshop is to provide the participants with the theory and hands-on skills about the principles and practices underlying AOP development and its application in interpretation of environmental surveillance and monitoring data.

### **SCHEDULE - DAY 1** DECEMBER $18^{TH}$ , 2018 Max number of participants: 50

09:00-10:30 Welcome and Introduction to AOPs

10:30-10:50 Coffee Break

10:50-12:00 Introduction to AOPs and Case Studies

12:00-13:15 Lunch Break (lunch not provided)

13:15-14:30 Introduction to Databases that support AOP development (Ecotox, CTD, ToxCast)

14:30-14:50 Coffee Break

14:50-16:00 Introduction to methods to develop empirical evidence for the key events (behavioral, neurophysiology, genetics)

16:00 - 16:15 Day 1 Workshop close

## **SCHEDULE - DAY 2** DECEMBER $19^{TH}$ , 2018 Max number of participants: 24

09:00-10:15 Hands-on exercise; building AOPs

10:15-10:30 Coffee Break

10:30-11:45 Hands-on exercise: AOP Weight of Evidence and Causal Inference Analysis

11:45-12:00 Coffee Break

12:00-13:30 Experimental Design and General Discussion

13:30-13:45 Day 2 Workshop close

#### INSTRUCTORS



DR. MARTINOVIĆ-WEIGELT is Associate Professor at University of St. Thomas, St. Paul, MN and Oak Ridge Institute fellow at U.S. EPA. Her research focus is on development of AOPs using high content and high throughput data.



DR. ILLIG is Associate Professor of Biology and Neuroscience at the University of St. Thomas, St. Paul, MN. Dr. Illig has a special interest in the evolution of the nervous system, particularly in the adaptive changes in neuroanatomy that occur with speciation and in different environments.







