
AGENDA

DAY ONE – MARCH 21, 2017

8:30 – 9:00 a.m.  Registration

9:00 a.m.  Brief Introduction to Workshop
Jonathan Hollander, NIEHS

9:15 a.m.  Welcome
Linda Birnbaum, NIEHS

9:30 a.m.  Keynote Address One:
The Architecture of Risk for Psychiatric Disorders: The Implication of Multiple Risk Factors with Small Effects for Future Research
Speaker: John Gilmore, University of North Carolina at Chapel Hill (UNC)

10:20 a.m.  Session One:
Genetic Architecture of Psychiatric Disorders: Implications for Environmental Etiologies
Chair: Tomas Guilarte, Florida International University

10:25 a.m.  Genetic Risk Architecture for Psychiatric Disorders: Update 2017
Anjene Addington, National Institute of Mental Health (NIMH)

10:50 a.m.  Integrating GWAS and Epidemiological Data to Accelerate GxE Discovery in Psychiatry
Jim Crowley, UNC

11:15 a.m.  Break

11:30 a.m.  Epigenetics as a Potential Mediator and Biomarker in Exposure-Psychiatric Disease Associations
Christine Ladd-Acosta, Johns Hopkins University

11:55 a.m.  Cell Type-Specific Mechanisms of Gene-Environment Interaction in Psychotic Disorders
Mikhail Pletnikov, Johns Hopkins University

12:20 p.m.  PANEL DISCUSSION

12:50 p.m.  Lunch
Environmental Risks for Psychiatric Disorders: Exploring Biological Mechanisms

2:05 p.m.  **Session Two:**
Neuronal Mechanisms and Circuits Underlying Mental Disorder Susceptibility Following Environmental Exposure
Chair: Deborah Cory-Slechta, University of Rochester

2:05 p.m. **Brief Overview of Cellular, Molecular, and Neuronal Mechanisms Commonly Associated With Mental Health Disorders**
Deborah Cory-Slechta, University of Rochester

2:15 p.m. **Marijuana Exposure and Schizophrenia Risk**
Beng Choon Ho, University of Iowa

2:40 p.m. **Translational Approach to Environmental Contaminants in Psychiatry: Metals in Mice and Human Postmortem Samples**
Steven Szabo, Duke University

3:05 p.m. **Early Life Lead Exposure and Schizophrenia: An Environmental Model of NMDA Receptor Hypofunction**
Tomas Guilarte, Florida International University

3:30 p.m. **Features of Developmental Exposures to Ambient Ultrafine Particles and Features of Neurodevelopmental Psychiatric Disorders**
Deborah Cory-Slechta, University of Rochester

3:55 p.m. **PANEL DISCUSSION**

4:25 p.m. **Day One Summary and Closing Comments**
Cindy Lawler, NIEHS

4:40 p.m. **Adjourn for the Day**
Environmental Risks for Psychiatric Disorders: Exploring Biological Mechanisms

DAY TWO – MARCH 22, 2017

8:00 – 8:30 a.m. Registration

8:30 a.m. Keynote Address Two:
Understanding Mental Illness Risk: the NIMH Perspective
Joshua Gordon, NIMH

9:30 a.m. Session Three:
Immunee-Inflammatory Signaling and Mental Illness: Role of Environment
Chair: Mady Hornig, Columbia University

9:30 a.m. How Chronic Immune Dysregulation Leads to Behavioral Symptoms Among Patients With Mood Disorders?
Ebrahim Haroon, Emory University

9:55 a.m. The Role and Therapeutic Potential of Diet and the Gut Microbiota in Brain and Behavior
Felice Jacka, Deakin University

10:20 a.m. Autoimmunity and Neuropsychiatric Disorders: The Case for Microbial and Xenobiotic Triggers
Mady Hornig, Columbia University

10:45 a.m. Modulation of Microglia by Maternal Immune Activation: Relevance for Neuropsychiatric Disorders
Staci Bilbo, Harvard University

11:10 a.m. PANEL DISCUSSION

11:40 a.m. Lunch

12:35 p.m. Session Four:
Tool and Resource Advances for How to Model Environmental Factors in Psychiatric Disorders
Chair: Cindy Lawler, NIEHS

12:35 p.m. Explicating the Environment in the Research Domain Criteria (RDoC) Initiative
Uma Vaidyanathan, NIMH

1:00 p.m. Cognitive, Emotional, and Sensory Function in Adult Zebrafish is Impaired by Developmental Exposure to Drugs and Environmental Toxicants
Edward Levin, Duke University

1:25 p.m. Genes, Environment, and Behavior: Mouse Models of Psychiatric Disorders
Sheryl Moy, UNC

1:50 p.m. The Comparative Toxicogenomics Database: A Tool for Exploring Mechanisms of Environmentally Influenced Psychiatric Disorders
Carolyn Mattingly, North Carolina State University

2:15 p.m. PANEL DISCUSSION

2:45 p.m. Closing Remarks
Gwen Collman, NIEHS

3:00 p.m. Adjourn