

GECCRT Meeting Agenda

January 13th to 14th, 2020

NIDA Headquarters, 6001 Executive Blvd. Rockville, MD 20892

Day 1

January 13th, 2020

9:00

Welcome

Amy C. Lossie, PhD, Program Officer, Division of Neuroscience and Behavior, NIDA

9:05

Opening Remarks

Nora Volkow, MD, Director, NIDA (tentative)

9:15 to 9:45

Session 1: A Patient's Perspective (Amy Lossie, Session Chair)

Phillip Rutherford

Faces and Voices of Recovery

Recovery Vital Signs

9:45 to 10:30

Session 2: Genetics of Consumption vs. Genetics of Substance Use Disorders (Jonathan Pollock, Session Chair)

9:45

Abraham Palmer, PhD

Alcohol consumption and misuse have a distinct genetic basis

10:00

Ditte Demontis, PhD

The polygenic risk for cannabis initiation and cannabis use disorder in individuals with cannabis and multiple drug use disorders and comorbid psychiatric disorders

10:15

Susan Sumner, PhD

The Internal Exposome, Opium Use, and Opioid Use Disorder

10:30

Renato Polimanti, PhD

Leveraging genome-wide data to investigate differences between opioid use vs. opioid dependence in 41,176 individuals from the Psychiatric Genomics Consortium

10:45

Emma Johnson, PhD

Measures of consumption versus disordered substance use: evidence of different genetic architectures

11:00

Discussion

11:15 to 12:30

Poster Session A

12:30 to 2:00

Lunch (on your own) – Mentoring Lunch (Roger Little and Holly Moore organizers)

2:00 to 3:00

Session 3: Highlights from the Epigenetics Avenir Program (John Satterlee, Session Chair)

2:00

John Satterlee, PhD

An overview of the NIDA Avenir Program

2:05

Erin S. Calipari, PhD — 2019 Winner

Unique molecular profiles induced by cocaine self-administration in males and females

2:20

Christie D. Fowler, PhD — 2015 Winner

Nicotine Mediates Extracellular Vesicle RNA Signaling in the Brain

2:35

Jeremy J. Day, PhD — 2015 Winner

A dopamine-induced gene expression signature regulates neuronal function and cocaine response

2:50

Discussion

3:00 to 4:15	Poster Session B
4:15 to 5:15	Session 4: Human Studies of Substance Use Disorders (Udi Ghitza and Abbas Parsian, Session Chairs) –
4:15	Howard Edenberg, PhD <i>Alcohol-related Findings from the Substance Use Disorder Working Group of the Psychiatric Genetics Consortium</i>
4:30	Arpana Agrawal, PhD and Alexander Hatoum, PhD <i>Findings from the Psychiatric Genetics Consortium's Substance Use Disorders Group: Extensions to MRI imaging data</i>
4:45	Eric O. Johnson, PhD <i>NIDA Genetics Consortium Genome-wide Association Study of Opioid Addiction – The Endgame for Wave 1</i>
5:00	Discussion
5:15	Wrap Up

Day 2	January 14th, 2020
8:50 AM	Welcome and Summary Jonathan Pollock, PhD
9:00 to 11:00	Session 5: Report from the NIDA Data Jamboree (Marti Head and Susan Wright, Session Chairs)
9:00	Roger Little, PhD, Summary of the Data Jamboree
9:05	Anita Bandrowski, PhD <i>Implementing FAIR Data Standards</i>
9:20	Elissa Chesler, PhD <i>Interpreting human genetics of SUD using multi-species heterogeneous functional genomics data</i>
9:35	Hyejung Won, PhD <i>Elucidating the neurobiological bases of cigarette smoking and nicotine dependence</i>
9:50	Dan Jacobson, PhD <i>Digging Deeper: Tackling the Complexity of Genetics and Molecular Mechanisms for Addiction in Human and Model Organism Populations</i>
10:05	Discussion Moderated by Marti Head and Susan Wright
10:30 to 10:45	Session 6: The International Common Disease Alliance (ICDA) Rachel Liao, PhD, Director, ICDA
10:45 to 12:00	Poster Session C
12:00 to 1:15	Lunch
1:15 to 2:10	Session 7: Mobile DNA (Amy Lossie, Session Chair)
1:15	Victoria P. Belancio, PhD <i>Custom RNA-Seq methods identify tissue- and age-specific patterns of retrotransposon expression in vivo</i>
1:30	Lindsay Payer, PhD

Alu retrotransposon: A common structural variant that can regulate transcript level and structure leading to disease risk

1:45

Benjamin C. Reiner, PhD

L1 Retrotransposons in Psychiatric and Substance Use Disorders

2:00

Discussion

2:10 to 3:30

Session 8: How can Psychiatric Conditions Help Unravel the Genetics of Substance Use Disorders? (Session Chair, Holly Moore)

2:10

Danielle M. Dick, PhD

Using the genetic architecture of substance use disorders to aid in gene identification: Findings from the Externalizing Consortium

2:25

Megan Hagenauer, PhD

A Meta-Analysis of Hippocampal Transcriptional Profiling Studies in a Selectively-Bred Rat Model Converges with Genetic Sequencing to Implicate Specific Candidate Genes and Pathways in the Liability for Internalizing and Externalizing Psychiatric Disorders

2:40

Brad Verhulst, PhD

Analyzing latent propensities to addictive behaviors in a multivariate GWAS framework using GW-SEM

2:55

Discussion

3:00 to 4:15

Poster Session D

4:15 to 5:00

Session 9: Teasing Out Substance Use Disorders Using Animal Models (Session Chair, Jen Wenzel)

4:15

Jean Lud Cadet, PhD

Mimicking methamphetamine use disorder with footshock punishment: epigenetic and transcriptional consequences in the rat brain

4:30

Andreas Pfenning, PhD

Addiction-associated genetic variants implicate cell type- and region-specific cis-regulatory elements in addiction neurobiology

4:30

Victor Mathis, PhD

Septal inputs to habenula regulate nicotine craving

4:45

Cali Calarco, PhD

The effect of developmental fentanyl exposure on mitochondrial gene expression in the brain and blood in C57BL/6 mice

5:00

Discussion

5:10

Wrap Up and Adjourn