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 Polimenti, 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
       Alcohol-related Findings from the Substance Use Disorder Working Group of the Psychiatric Genetics Consortium
  4:30  Arpana Agrawal, PhD and Alexander Hatoum, PhD
       Findings from the Psychiatric Genetics Consortium’s Substance Use Disorders Group: Extensions to MRI imaging data
  4:45  Eric O. Johnson, PhD
       NIDA Genetics Consortium Genome-wide Association Study of Opioid Addiction – The Endgame for Wave 1
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
       Implementing FAIR Data Standards
  9:20  Elissa Chesler, PhD
       Interpreting human genetics of SUD using multi-species heterogeneous functional genomics data
  9:35  Hyejung Won, PhD
       Elucidating the neurobiological bases of cigarette smoking and nicotine dependence
  9:50  Dan Jacobson, PhD
       Digging Deeper: Tackling the Complexity of Genetics and Molecular Mechanisms for Addiction in Human and Model Organism Populations
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
       Custom RNA-Seq methods identify tissue- and age-specific patterns of retrotransposon expression in vivo
  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