

Submitter name: Arpana Agrawal
Submitted email: arpana@wustl.edu

Findings from the Substance Use Disorders Working Group of the Psychiatric Genetics Consortium

Arpana Agrawal¹, Alexander Hatoum¹, Howard J. Edenberg^{2,3}, Joel Gelernter⁴, Ryan Bogdan⁵,
and PGC-SUD members

¹Department of Psychiatry, Washington University School of Medicine; ²Department of Medical and Molecular Genetics, Indiana University School of Medicine; ³Department of Biochemistry and Molecular Biology, Indiana University School of Medicine; ⁴Department of Psychiatry, Yale School of Medicine and Veterans Affairs Connecticut Healthcare Center; ⁵Department of Psychological & Brain Sciences, Washington University in Saint Louis

Presenters at this meeting have showcased novel findings for cannabis and opioids emerging from the Psychiatric Genomics Consortium's Substance Use Disorders (PGC-SUD) Working Group. The next steps will involve substantial enhancements in sample size so that additional novel loci may be identified. In addition, there are two key avenues for continued discovery. First, we will outline insights from cross-disorder analyses that have begun to inform our understanding of the links between substance use disorders and other outcomes. Second, collaborations between the PGC-SUD group and neuroimaging as well as animal eQTL researchers is also beginning to provide mechanistic insights. Here, we will outline some recent findings resulting from the integration of findings from recent GWAS with neuroimaging data. Overall, these findings highlight the value of large-scaled GWAS of measures of substance use disorder in outlining the neurobiology and genetics of the addictive process.