

Sarah M.C. Colbert, B.A.

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EDUCATION

2022-present	Icahn School of Medicine at Mount Sinai (New York, NY) PhD Student in Biomedical Sciences Training area: Genetics and Genomic Sciences
2016-2020	University of Colorado Boulder (Boulder, CO) B.A., Ecology and Evolutionary Biology B.A., Environmental Studies

GRANTS & FELLOWSHIPS

2022-2027	The National Science Foundation Graduate Research Fellowship
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AWARDS & HONORS

2023	Early Career Investigator Oral Presentation Award , World Congress of Psychiatric Genetics
2023	Graduate Student Travel Award , Icahn School of Medicine at Mount Sinai
2020	Early-Career Investigator Travel Award , World Congress of Psychiatric Genetics
2016-2020	University of Colorado's Presidential Scholarship - awarded to nonresident freshman in the top 1-3% of the admitted freshman class.
2016	Shredwell Scholarship – awarded by the OISA

PUBLICATIONS (23 total; 8 first-author)

Colbert, SMC, et al. Defining suicidality phenotypes for genetic studies: perspectives of the Psychiatric Genomics Consortium Suicide Working Group. *Molecular Psychiatry* (In press). doi: 10.31234/osf.io/24ue7_v1

Johnson, EC, et al. **[middle author]** Multi-ancestral genome-wide association study of clinically defined nicotine dependence reveals strong genetic correlations with other substance use disorders and health-related traits. *Psychological Medicine* (2025). doi:10.1017/S0033291725100883

Coon, H, et al. **[middle author]** Absence of nonfatal suicidal behavior preceding suicide death reveals differences in clinical risks. *Psychiatry Research* (2025). doi:10.1016/j.psychres.2025.116391

Colbert, SMC, et al. Distinguishing clinical and genetic risk factors for suicidal ideation and behavior in a diverse hospital population. *Translational Psychiatry* (2025). doi:10.1038/s41398-025-03287-6

Paul, SE, **Colbert, SMC**, et al. Phenome-wide Investigation of Behavioral, Environmental, and Neural Associations with Cross-Disorder Genetic Liability in Youth of European Ancestry. *Nature Mental Health* (2024). doi:10.1038/s44220-024-00313-2

Paul, SE, Elsayed, N, **Colbert, SMC**, et al. Family income and polygenic scores are independently but not interactively associated with cognitive performance among youth genetically similar to European reference populations. *Development and Psychopathology* (2024). doi:10.1017/S0954579424001573

Baranger, DAA, et al. **[middle author]** Prenatal cannabis exposure, the brain, and psychopathology during early adolescence. *Nature Mental Health* (2024). doi:10.1038/s44220-024-00281-7

Johnson, EC, Austin-Zimmerman, I, Thorpe, HH, Levey, DF, Baranger, DA, **Colbert, SMC**, et al. Cross-ancestry genetic investigation of schizophrenia, cannabis use disorder, and tobacco smoking. *Neuropsychopharmacology* (2024). doi:10.1038/s41386-024-01886-3

COVID-19 Host Genetics Initiative **[middle author]** A second update on mapping the human genetic architecture of COVID-19. *Nature* (2023). doi:10.1038/s41586-023-06355-3

Colbert, SMC, Wendt, FR, Pathak, GA, Helmer, DA, Hauser, ER, Keller, MC, Polimanti, R & Johnson, EC. (2023). Declining autozygosity over time: an exploration in over 1 million individuals from three large and diverse cohorts. *American Journal of Human Genetics*. doi:10.1016/j.ajhg.2023.04.007

Hatoum, AS, **Colbert, SMC**, et al. Multivariate Genome-Wide Association Meta-analysis of over 1 million subjects identifies loci underlying multiple substance use disorders. *Nature Mental Health* (2023). doi:10.1038/s44220-023-00034-y

Colbert, SMC, et al. Polygenic contributions to suicidal thoughts and behaviors in a sample ascertained for alcohol use disorders. *Complex Psychiatry* (2023). doi:10.1159/000529164

Gorelik, AJ, et al. **[middle author]** A Phenome-Wide Association Study (Phewas) Of Late Onset Alzheimer Disease Genetic Risk in Children of European Ancestry at Middle Childhood: Results From the ABCD Study. *Behavior Genetics* (2023). doi:10.1007/s10519-023-10140-3

Johnson, EC, Paul, SE, Baranger, DAA, Hatoum, AS, **Colbert, SMC**, et al. Characterizing alcohol expectancies in the ABCD Study: associations with sociodemographic factors, the immediate social environment, and relevant polygenic scores. *Behavior Genetics* (2023). doi:10.1007/s10519-023-10133-2

Johnson, EC, **Colbert, SMC**, et al. Associations between cannabis use, polygenic liability for schizophrenia, and cannabis-related experiences in a sample of cannabis users. *Schizophrenia Bulletin* (2022). doi:10.1093/schbul/sbac196

Colbert, SMC, Keller, MC, Agrawal, A & Johnson, EC. Exploring the relationships between autozygosity, educational attainment, and cognitive ability in a contemporary, trans-ancestral American sample. *Behavior Genetics* (2022). doi:10.1007/s10519-022-10113-y

Colbert, SMC & Johnson, EC. Commentary on Lannoy et al.: The continued value of within-family designs in addiction and psychiatric research. *Addiction* (2022). doi:10.1111/add.16040

Baranger, DAA, Paul, SE, **Colbert, SMC**, et al. Increased mental health burden associated with prenatal cannabis exposure persists from childhood to early adolescence: Longitudinal results from the Adolescent Brain Cognitive Development (ABCD) Study. *JAMA Pediatrics* (2022). doi:10.1001/jamapediatrics.2022.3191

Lai, D, Johnson, EC, **Colbert, SMC**, et al. Evaluating risk for alcohol use disorder: comparing polygenic risk scores and family history. *Alcoholism: Clinical and Experimental Research* (2021). doi:10.1111/acer.14772

Colbert, SMC, et al. Exploring the genetic overlap of suicide-related behaviors and substance use disorders. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* (2021). doi:10.1002/ajmg.b.32880

Hatoum, AS, Johnson, EC, **Colbert, SMC**, et al. The Addiction Risk Factor: A Unitary Genetic Vulnerability Characterizes Substance Use Disorders and Their Associations with Common Correlates. *Neuropsychopharmacology* (2021). doi:10.1038/s41386-021-01209-w

Colbert, SMC, et al. Novel characterization of the multivariate genetic architecture of internalizing psychopathology and alcohol use. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* (2021). doi:10.1002/ajmg.b.32874

Hatoum, AS, Morrison, CL, **Colbert, SMC**, et al. Genetic Liability to Cannabis Use Disorder and COVID-19 Hospitalization. *Biological Psychiatry Global Open Science* (2021). doi:10.1016/j.bpsgos.2021.06.005

PRE-PRINTS AND IN-PREP (4)

Han, S, Cabrera-Mendoza, B, **Colbert, SMC**, et al. Genome-wide association study of suicide mortality in North American individuals of Hispanic and Indigenous American ancestry admixtures. (In prep).

Banerjee, S, O'Connell, S, **Colbert, SMC**, et al. Convex approaches to isolate the shared and distinct genetic components of complex traits. (Pre-print). doi: 10.1101/2025.04.15.25325870

Coon, H, et al. [middle author] Different genetic liabilities to neuropsychiatric conditions in suicides with no prior suicidality. (Pre-print). doi: 10.1101/2025.05.02.25326877

Monson, ET, **Colbert, SMC.**, et al. Defining and assessing International Classification of Disease suicidality phenotypes for genetic studies. (Pre-print). doi: 10.1101/2024.07.27.24311110

BOOK CHAPTERS

Colbert, SMC & Johnson, EC (2023). Genetic explanations for the association between cannabis and schizophrenia. In D'Souza D., Castle D., and Murray R. (Eds.), *Marijuana and Madness*, 3rd Ed.

CONFERENCE PRESENTATIONS

Genome-Wide Association Studies of Suicidal Thoughts and Behaviors in the Psychiatric Genomics Consortium. Oral presentation at the Suicide Research Symposium (2025, virtual).

Genome-wide association studies of suicidal thoughts and behaviors: An update from the Psychiatric Genomics Consortium Suicide Working Group. Symposium talk presented at the World Congress of Psychiatric Genetics (2024, Singapore, Singapore).

Distinguishing Clinical and Genetic Risk Factors for Suicidal Ideation and Suicidal Behavior in a Diverse Hospital Population. Oral presentation at the World Congress of Psychiatric Genetics (2024, Singapore, Singapore).

Genome-wide association studies of suicidal thoughts and behaviors: An update from the Psychiatric Genomics Consortium Suicide Working Group. Oral presentation at the World Congress of Psychiatric Genetics (2023, Montreal, Canada).

Declining autozygosity over time: an exploration in over 1 million individuals from three large and diverse cohorts. Poster presentation at the Friedman Brain Institute Neuroscience Retreat (2023, New York, NY).

Cross-disorder genome wide analyses of problematic alcohol use, suicide attempt and depression reveal shared risk loci. Symposium talk presented at the Research Society on Alcoholism Scientific Meeting (2022, Orlando, FL).

Exploring the genetic overlap of suicide-related behaviors and substance use disorders. Poster presentation presented at the Annual Behavioral Genetics Association Meeting (2021, virtual).

Differential shared genetic influences on anxiety with problematic alcohol use compared to alcohol consumption. Poster presentation presented at the Annual World Congress of Psychiatric Genetics (2020, virtual).

Differential shared genetic influences on anxiety with problematic alcohol use compared to alcohol consumption. Oral presentation presented at the 50th Annual Behavioral Genetics Association Meeting (2020, virtual).

RESEARCH POSITIONS

2023-present **Icahn School of Medicine at Mount Sinai**, Department of Genetics
PhD student
Supervisor: Niamh Mullins, Ph.D.

Fall 2022 **Icahn School of Medicine at Mount Sinai**, Department of Genetics
Rotating PhD student
Supervisor: Alison Goate, Ph.D.

Fall 2022 **Icahn School of Medicine at Mount Sinai**, Department of Psychiatry
Rotating PhD student

Supervisor: Niamh Mullins, Ph.D.

2021-2022	Washington University School of Medicine , Department of Psychiatry Statistical Data Analyst Supervisors: Arpana Agrawal, Ph.D., Emma Johnson, Ph.D.
2020-2021	University of Colorado Boulder , Institute for Behavioral Genetics Professional Research Associate Supervisor: Luke Evans, Ph.D.
2020	University of Colorado Boulder , Department of Ecology and Evolutionary Biology Undergraduate Research Project, " <i>Differential shared genetic influences on anxiety with problematic alcohol use compared to alcohol consumption</i> " Supervisor: Luke Evans, Ph.D.
2019- 2020	Rocky Mountain Wild , Colorado Pika Project 100 Women for the Wild Research Intern

TEACHING POSITIONS

2019	EBIO 2070: Genetics: Molecules to Populations , University of Colorado Boulder Teaching Assistant Instructor: Cheryl Pinzone
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AD-HOC REVIEW ACTIVITIES

Addiction, American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, Biological Psychiatry, BMC Psychiatry, European Psychiatry, Molecular Psychiatry

SERVICE

2023-present	Psychiatric Genomics Consortium Suicide Working Group, Data Receiving Committee Representative
2023-present	Psychiatric Genomics Consortium Suicide Working Group, Stage 1 and Stage 2 Analyst