**SARAH COLBERT**  sarah.colbert@icahn.mssm.edu

PhD Student <https://github.com/sarahcolbert>

Icahn School of Medicine at Mount Sinai

**EDUCATION**

2022-present **Icahn School of Medicine at Mount Sinai** (New York, New York)

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**

**AWARDS & HONORS**

2023 **ECIP 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**

COVID-19 Host Genetics Initiative & Ganna, A. (2023). A second update on mapping the human genetic architecture of COVID-19. In press at *Nature*. Pre-print doi:10.1101/2022.12.24.22283874

**Colbert, S.M.C.**, Wendt, F.R., Pathak, G.A., Helmer, D.A., Hauser, E.R., Keller, M.C., Polimanti, R. & Johnson, E.C. (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, A.S., **Colbert, S.M.C.**, Johnson, E.C., Huggett, S.B., Deak, J., Pathak, G., Jennings, M., Paul, S.E., Karcher, N.R., Hansen, I., Edwards, A., Grotzinger, A., Substance Use Disorders Working Group of the Psychiatric Genomics Consortium, Tucker-Drob, E., Kranzler, H., Sanchez-Roige, S., Davis, L., Polimanti, R., Gelernter, J., Edenberg, H.J., Bogdan, R. & Agrawal, A. (2023). Multivariate Genome-Wide Association Meta-analysis of over 1 million subjects identifies loci underlying multiple substance use disorders. *Nature Mental Health*. doi:10.1038/s44220-023-00034-y

**Colbert, S.M.C.**, Mullins, N., Chan, G., Meyers, J., Schulman, J., Kuperman, S., Lai, D., Nurnberger, J., Plawecki, M.H., Kamarajan, C., Anokhin, A., Bucholz, K., Hesselbrock, V., Edenberg, H.J., Kramer, J., Dick, D.M., Porjesz, B., Agrawal, A. & Johnson, E.C. (2023). Polygenic contributions to suicidal thoughts and behaviors in a sample ascertained for alcohol use disorders. *Complex Psychiatry*. doi:10.1159/000529164

Gorelik, A.J., Paul, S.E., Karcher, N.R., Johnson, E.C., Nagella, I., Blaydon, L., Modi, H., Hansen, I.S., **Colbert, S.M.C.**, Baranger, D.A.A., Norton, S., Spears, I., Gordon, B., Zhang, W., Hill, P., Oltmanns, T.F., Bjisterbosch, J.D., Agrawal, A., Hatoum, A.S., Bogdan, R. (2023). 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*. doi:10.1007/s10519-023-10140-3

Johnson, E.C., Paul, S.E., Baranger, D.A.A., Hatoum, A.S., **Colbert, S.M.C.**, Lin, L., Wolff, R., Gorelik, A., Hansen, I., Karcher, N.R., Bogdan, R., Agrawal, A. (2023). Characterizing alcohol expectancies in the ABCD Study: associations with sociodemographic factors, the immediate social environment, and relevant polygenic scores. *Behavior Genetics*. doi:10.1007/s10519-023-10133-2

Johnson, E.C., **Colbert, S.M.C.**, Jeffries, P.W., Tillman, R., Bigdeli, T., Karcher, N.R., Chan, G., Kuperman, S., Meyers, J.L., Nurnberger, J.I., Plawecki, M.H., Degenhardt, L., Martin, N.G., Kamarajan, C., Schuckit, M., Murray, M.M., Dick, D.M., Edenberg, H.J., Cyril D’Souza, D., Di Forti, M., Porjesz, B., Nelson, E.C. & Agrawal, A. (2022). Associations between cannabis use, polygenic liability for schizophrenia, and cannabis-related experiences in a sample of cannabis users. *Schizophrenia Bulletin*. doi:10.1093/schbul/sbac196

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

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

Baranger, D.A.A., Paul, S.E., **Colbert, S.M.C.**, Karcher, N.R., Johnson, E.C., Hatoum, A. S., & Bogdan, R. (2022). 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*. doi:10.1001/jamapediatrics.2022.3191

Lai, D., Johnson, E. C., **Colbert, S. M. C.**, Pandey, G., Chan, G., Bauer, L., Francis, M., Hesselbrock, V., Kamarajan, C., Kramer, J., Kuang, W., Kuo, S., Kuperman, S., Liu, Y., McCutcheon, V., Pang, Z., Plawecki, M., Schuckit, M., Tischfield, J., Wetherill, L., Zang, Y., Edenberg, H., Porjesz, B., Agrawal, A. & Foroud, T. (2021). Evaluating risk for alcohol use disorder: comparing polygenic risk scores and family history. *Alcoholism: Clinical and Experimental Research*. doi:10.1111/acer.14772

**Colbert, S.M.C.**, Hatoum, A.S., Shabalin, A., Li, Q., Coon, H., Nelson, E., Agrawal, A., Docherty, A.R. & Johnson, E.C. (2021). Exploring the genetic overlap of suicide-related behaviors and substance use disorders. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics.* doi:10.1002/ajmg.b.32880

Hatoum, A. S., Johnson, E. C., **Colbert, S. M. C.**, Polimanti, R., Zhou, H., Walters, R., Substance Use Disorders Working Group of the Psychiatric Genomics Consortium, Gelernter, J., Edenberg, H.J., Bogdan, R. & Agrawal, A. (2021). The Addiction Risk Factor: A Unitary Genetic Vulnerability Characterizes Substance Use Disorders and Their Associations with Common Correlates. *Neuropsychopharmacology.* doi:10.1038/s41386-021-01209-w

**Colbert, S. M. C.**, Funkhouser, S. A., Johnson, E. C., Morrison, C.L., Hoeffer, C. A., Friedman, N., Ehringer, M. A., & Evans, L. M. (2021). Novel characterization of the multivariate genetic architecture of internalizing psychopathology and alcohol use. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics.* doi:10.1002/ajmg.b.32874

Hatoum, A. S., Morrison, C. L., **Colbert, S. M. C.**, Winiger, E. A., Johnson, E. C., Agrawal, A., & Bogdan, R. (2021). Genetic Liability to Cannabis Use Disorder and COVID-19 Hospitalization. *Biological Psychiatry Global Open Science*. doi:10.1016/j.bpsgos.2021.06.005

**PRE-PRINTS AND IN-PREP**

Baranger, D.A.A., Miller, A.P., Gorelik, A.J., Paul, S.E., Hatoum, A. S., Johnson, E.C., **Colbert, S.M.C.**, Smyser, C.D., Rogers, C.E., Bijsterbosch, J., Agrawal, A., & Bogdan, R. (Pre-print). Prenatal cannabis exposure is associated with focal brain differences that may partially mediate associations with increased adolescent psychopathology.

Paul, S.E., **Colbert, S.M.C.**, Gorelik, A.J., Hansen, I.S., Nigella, I., Blaydon, L., Hornstein, A., Johnson, E.C., Hatoum, A.S., Baranger, D.A.A., Elsayed, N.M., Barch, D.M., Bogdan, R. & Karcher, N.R. (Pre-print). Phenome-wide Investigation of Behavioral, Environmental, and Neural Associations with Cross-Disorder Genetic Liability in Youth of European Ancestry. doi:10.1101/2023.02.10.23285783

Paul, S.E., Elsayed, N., Bogdan, R., **Colbert, S.M.C.**, Hatoum, A.S., & Barch, D. (Pre-print). Childhood Socioeconomic Status and Polygenic Scores for Cognition Have Independent Associations with Cognitive Performance in Childhood. doi:10.1101/2021.08.26.21262684

**BOOK CHAPTERS**

**Colbert, S. M. C.** & Johnson, E. C. (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**

**Colbert, S.M.C.**, the Suicide Working Group of the Psychiatric Genomics Consortium, Docherty, A.R., Ruderfer, D. & Mullins, N.M. (2023, October). 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.

**Colbert, S.M.C.**, Wendt, F.R., Pathak, G.A., Helmer, D.A., Hauser, E.R., Keller, M.C., Polimanti, R. & Johnson, E.C. (2023, May). Declining autozygosity over time: an exploration in over 1 million individuals from three large and diverse cohorts. Poster presentation presented at the Friedman Brain Institute Neuroscience Retreat.

**Colbert, S.M.C.**, Agrawal, A. & Johnson, E.C. (2022, June). 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.

**Colbert, S.M.C.**, Hatoum, A.S., Shabalin, A., Coon, H., Nelson, E., Agrawal, A., Docherty, A.R. & Johnson, E.C. (2021, June). Exploring the genetic overlap of suicide-related behaviors and substance use disorders. Poster presentation presented at the Annual Behavioral Genetics Association Meeting.

**Colbert, S. M. C.**, Funkhouser, S. A., Johnson, E. C., Hoeffer, C. A., Ehringer, M. A., & Evans, L. M. (2020, October). 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.

**Colbert, S. M. C.**, Funkhouser, S. A., Johnson, E. C., Hoeffer, C. A., Ehringer, M. A., & Evans, L. M. (2020, June). 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.

**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 **Institute for Behavioral Genetics**, University of Colorado Boulder

Professional Research Associate

Supervisor: Luke Evans, Ph.D.

2020 **Department of Ecology and Evolutionary Biology**, University of Colorado Boulder

Undergraduate Research Project, “*Differential shared genetic influences on anxiety with problematic alcohol use compared to alcohol consumption*”

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

Learning Assistant | Instructor: Cheryl Pinzone

**AD-HOC REVIEW ACTIVITIES**

*Addiction, Biological Psychiatry, European Psychiatry, Molecular Psychiatry*