Blake Byer

(541)-745-4802 blake.byer@uky.edu linkedin.com/in/blake-byer github.com/blakebyer

July 26, 2024

Education

Bachelor of Science in Neuroscience

December 2025

University of Kentucky Minors in Biology, Computer Science, and Mathematics With Honors, 3.95 GPA

Experience

SURE Scholar June 2024 – August 2024

University of North Carolina at Chapel-Hill

SURE Scholar at the University of North Carolina at Chapel-Hill. I studied rare lysosomal storage disease patients and their COVID-19 outcomes in the National COVID Cohort Collaborative (N3C).

Research Assistant

August 2023 - Present

University of Kentucky

Research Assistant at the University of Kentucky College of Medicine. I research polygenic risk scores for Alzheimer's disease and statistical fine-mapping for GWAS loci prioritization.

Research Assistant

January 2023 – August 2023

University of Kentucky

Research Assistant at the Sports Medicine Research Institute at the University of Kentucky College of Health Sciences. I contributed to a pilot study that tested wireless motion capture and force-plate insoles for gait retraining of military personnel.

Presentations

Office of Graduate Education Symposium

July 2024

University of North Carolina at Chapel-Hill

Lysosomal storage diseases are not protective against severe COVID-19 infection. Clustering analysis shows that lung disease and lysosomal storage diseases further increase infection severity. 10.5281/zenodo.12971921

Great Lakes Bioinformatics Conference

May 2024

 $University\ of\ Pittsburgh$

Averaging polygenic risk scores derived from multiple genome-wide association studies increases predictive accuracy for Alzheimer's disease.

Selected Publications

- 1. Averaging polygenic risk scores derived from multiple genome-wide association studies increases predictive accuracy for Alzheimer's disease. Manuscript in preparation.
- 2. Lysosomal storage diseases and COVID-19. Manuscript in preparation.

Awards

- Great Lakes Bioinformatics Conference Travel Fellowship, International Society for Computational Biology, 2024
- Eagle Scout Award, Boy Scouts of America, 2019
- Bob and Billie Holcomb Youth Hero Award, Benton Community Foundation, 2017

Memberships

• International Society for Computational Biology, 2024 - Present