

# Blake Byer

July 3, 2024

## Education

Bachelor of Science in Neuroscience

December 2025

*University of Kentucky*

*Minors in Biology, Computer Science, and Mathematics*

*3.95 GPA*

## Experience

### SURE Scholar

June 2024 - Present

*University of North Carolina at Chapel-Hill*

SURE Scholar at the University of North Carolina at Chapel-Hill. I am studying rare lysosomal storage diseases at the intersection of infectious and neurodegenerative diseases.

### 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 in military personnel.

## Presentations

### Summer Student Symposium

July 2024

*University of North Carolina at Chapel-Hill*

Lysosomal storage diseases are not protective against severe COVID-19 infection. Clustering analysis shows the lysosome is implicated in Parkinson's disease.

### 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. Clustering analysis shows the lysosome is implicated in Parkinson's disease. Manuscript in preparation.