

# Blake Byer

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July 4, 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 – 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 of 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.

## 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