

Timothy Barry

tbarry2@andrew.cmu.edu • <https://timothy-barry.github.io>

EDUCATION

Carnegie Mellon University

PhD in Statistics and Data Science

2018 –

University of Maryland, College Park

BS in Mathematics with high honors

Minor in Computer Science

2014 – 2018

HONORS AND AWARDS

- Howard Hughes Medical Institute Fellowship 2017
- Maryland Summer Scholars Research Grant 2016
- Banneker-Key Scholarship, University of Maryland's most prestigious scholarship 2014

COMPUTING

- Languages: R, Python, C/C++
- Version control systems: Git/Github
- Operating systems: Unix

TEACHING ASSISTANTSHIPS

- Statistics 36-350: Statistical computing Fall 2018
- Statistics 36-469: Statistical genomics and high-dimensional inference Spring 2020

SERVICE AND SCIENCE OUTREACH

- Volunteer math, science, and English tutor to elementary and middle school students through UMD Lakeland STARS program. 2015 – 2018

INVITED TALKS

- "Conditional resampling improves calibration and sensitivity in single-cell CRISPR screen analysis." Xin He Lab, Department of Genetics, University of Chicago. 2021

PAPERS

- J Morris, Z Daniloski, J Domingo, **T Barry**, M Ziosi, D Glinos, S Hao, E Mimitou, P Smibert, K Roeder, E Katsevich, T Lappalainen, N Sanjana. "Discovery of target genes and pathways of blood trait loci using pooled CRISPR screens and single cell RNA sequencing." Preprint on [bioRxiv](#) 2021
- **T Barry**, X Wang, J Morris, K Roeder, E Katsevich. "Conditional resampling improves calibration and sensitivity in single-cell CRISPR screen analysis." Preprint on [bioRxiv](#). 2021

Undergraduate

- **T Barry***, E Gurarie*, F Cheraghi, I Kajola, W Fagan. “Does dispersal make the heart grow bolder? Avoidance of anthropogenic habitat elements across wolf life history.” *Animal Behaviour* 166. **Joint first authorship*. 2020
- **T Barry**. “Collections in R: Review and Proposal.” *The R Journal* 10.1. 2018

Updated April 2021.