

Ty Darnell

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EDUCATION

University of North Carolina at Chapel Hill (2018-2020)

MS Biostatistics

Thesis: GeneticMediation: An R Package for Causal Mediation Analysis of ROSMAP Data

- Conducted causal mediation analysis and identified pathways of SNP, gene, and ChIP-seq peak effects on Alzheimer's Disease.
- Developed an R package to clean, process and analyze the data
- Created a website <https://tydarnell.github.io/GeneticMediation/>

Advisor: Dr. Di Wu

Relevant Coursework: Survival Analysis, Statistical Consulting, Regulatory Science, Linear Models, Longitudinal Analysis, Categorical Analysis, Statistical Inference, Data Science, Epidemiology

Appalachian State University, Boone, NC (2009-2013)

BS Middle Grades Education

Concentration: Mathematics and Social Studies

WORK EXPERIENCE

Horton Middle School, Chatham County Schools, Pittsboro, NC (2013-2018)

- Chair of Mathematics Department
- Mathematics Teacher, Grades 6 and 7
 - Collaborated with a team of teachers to ensure student success
 - Created curriculum that used real world applications of algebra
 - Used data to drive instruction and helped students gain basic financial literacy
 - Instructed students in need of remediation & enrichment
- Created after-school tutoring program to help struggling students two days a week
- Initiated a running club to help promote wellness and allow students to build relationships with each other outside the classroom
- Co-leader of chess club

UNC-CH Faculty-Staff Recreation Association Summer Camp (2007-2012)

- Assistant director for Youth Camp (children ages 9-12)
- Directed camp activities and organized group activities for 30-40 children
- Established and maintained time schedules for activities

Skills

- **Programming:** R, SAS, Python, Bash, MATLAB
- **Tech/Tools:** LaTeX, Markdown, Git, GitHub