Murphy H. John

Education

University of Georgia   Aug. 2024 - Present
Ph.D. in Epidemiology and Biostatistics, Concentration: Biostatistics

University of New Mexico   May 2024
B.S. in Mathematics and Statistics
Certificate in Honors Interdisciplinary Liberal Arts, Summa Cum Laude

Research Experience

Graduate Research Assistant - Handel Group   Aug. 2024 - Present
Department of Epidemiology and Biostatistics, University of Georgia, Athens, GA
- Research focuses on infectious disease dynamics, vaccine efficacy, and immune response, mainly pertaining to influenza.

Biostatistics, Epidemiology, and Preventive Medicine Student Research Tech   Oct. 2023 - July 2024
Department of Internal Medicine, University of New Mexico, Albuquerque, NM
- Developed an online curriculum on biostatistical methodology and research design for residents in the UNM School of Medicine.

NSF REU - DEIM: Research Projects in Data-Enabled Industrial Mathematics   May 2023 - July 2023
Embry-Riddle Aeronautical University, Daytona Beach, Florida
- Summer Research Intern funded by the National Science Foundation's Research Experience for Undergraduates (REU) program.
- Built a spatio-temporal forecasting model to predict the demand for private jet travel during high-demand events and holidays.

NSF EPSCoR: TickBase Team Researcher   Feb. 2022 - May 2024
University of New Mexico, Albuquerque, NM
- Undergraduate Researcher funded by the National Science Foundation's Established Program to Stimulate Competitive Research.
- Built statistical models to characterize the geographic distribution of tick-borne diseases in Arizona and the contiguous U.S.
- Studied Geographic Information Systems (GIS) and geospatial data science for applications to environmental health issues.

Presentations and Talks

"Be Here Now"
University of New Mexico Dpt. of Mathematics & Statistics Convocation, Albuquerque, NM, May 10, 2024.

"Spotted Fever Rickettsiosis Dynamics in the United States"
University of New Mexico Undergraduate Research Opportunity Conference, Albuquerque, NM, Apr. 12, 2024.
University of Texas at Austin Gateway to Graduate Studies in Sciences Symposium, Austin, TX, Nov. 14, 2023.
University of New Mexico ASPIRE Open House, Albuquerque, NM, Nov. 9, 2023.

"Rocky Mountain Spotted Fever Dynamics in Arizona"
University of New Mexico Undergraduate Research Opportunity Conference, Albuquerque, NM, Apr. 21, 2023.

Work Experience

Mathematics Learning Lab Tutor   Aug. 2023 - Dec. 2023
Department of Mathematics and Statistics, University of New Mexico, Albuquerque, NM

Resident Advisor/Leasing Agent   Jun. 2021 - May 2023
American Campus Communities, Albuquerque, NM

Volunteering

Pathmaker Program Mentor   Apr. 2022 - May 2023
Honors College, University of New Mexico, Albuquerque, NM

Resident Hall Association (RHA)   Jun. 2021 - May 2023
University of New Mexico, Albuquerque, NM

Scholarship Awards

UGA College of Public Health Graduate Research Assistantship   Aug, 2024 - Present
UNM A&S Support for Undergraduate Research Experience (ASSURE)   Aug. 2022 - May 2024
Frank O. and Sadie M. Lane Research Scholarship   Aug. 2022 - May 2024
UNM Tallant Cooper Scholarship   Jan. 2022 - May 2022
UNM Alumni Association New York Chapter Scholarship   Jan. 2021 - May 2022
University of New Mexico Amigo Scholarship Award   Aug. 2020 - May 2024

Technical Skills

Programming Languages: R, Python, MATLAB
Other: ArsGIS, Microsoft Office, Windows OS, Salesforce CRM