CURRICULUM VITAE

DATE PREPARED: February 29th, 2024

NAME: Bryce Rowland, PhD

EDUCATION:

Institution	Year	Degree
University of North Carolina, Chapel Hill	2022	PhD, Biostatistics
Centre College, Danville, KY	2017	BS, Mathematics

PROFESSIONAL TRAINING AND ACADEMIC CAREER:

Institution	Position/Title	Years
University of North Carolina, Chapel Hill	Senior Research Scientist	2022-present

PUBLICATIONS

1. Sun, Quan*, **Bryce T. Rowland***, Jiawen Chen, Anna V. Mikhaylova, Christy Avery, Ulrike Peters, Jessica Lundin, et al. 2024. "Improving Polygenic Risk Prediction in Admixed Populations by Explicitly Modeling Ancestral-Differential Effects via GAUDI." Nature Communications 15 (1): 1016.
2. Quan Sun, **Bryce Rowland**, Wanjiang Wang, Tyne W Miller-Fleming, Nancy Cox, Misa Graff, Annika Faucon, et al., 2023. "Genetic Examination of Hematological Parameters in SARS-CoV-2 Infection and COVID-19." Blood Cells, Molecules, and Diseases, 103: 102782.
3. **Bryce Rowland**, Ruth Huh, Zoey Hou, Cheynna Crowley, Jia Wen, Yin Shen, Ming Hu, Paola Giusti-Rodríguez, Patrick F. Sullivan, and Yun Li, 2022. "THUNDER: A Reference-Free Deconvolution Method to Infer Cell Type Proportions from Bulk Hi-C Data." PLoS Genetics, 18 (3): e1010102.
4. **Bryce Rowland**, Sanan Venkatesh, Manuel Tardaguila, Jia Wen, Jonathan D. Rosen, Amanda L. Tapia, Quan Sun, et al., 2022. "Transcriptome-Wide Association Study in UK Biobank Europeans Identifies Associations with Blood Cell Traits." Human Molecular Genetics, 31 (14): 2333–47.
5. Tapia, A. L., **B. T. Rowland**, and J. D. Rosen. 2022. "A Large-scale Transcriptome-wide Association Study (TWAS) of 10 Blood Cell Phenotypes Reveals Complexities of TWAS Fine-mapping." Genetic. https://onlinelibrary.wiley.com/doi/abs/10.1002/gepi.22436.
6. Sun, Quan, Misa Graff, **Bryce Rowland**, Jia Wen, Le Huang, Tyne W. Miller-Fleming, Jeffrey Haessler, et al. 2021. "Analyses of Biomarker Traits in Diverse UK Biobank Participants Identify Associations Missed by European-Centric Analysis Strategies." Journal of Human Genetics, August. https://doi.org/10.1038/s10038-021-00968-0.
7. Wen Jia, Munan Xie, **Bryce Rowland**, Jonathan D. Rosen, Quan Sun, Jiawen Chen, Amanda L. Tapia, et al., 2021. "Transcriptome-Wide Association Study of Blood Cell Traits in African Ancestry and Hispanic/Latino Populations." Genes, 12 (7): 1049.

TEACHING RESPONSIBILITIES

At University of North Carolina at Chapel Hill

2023 - Co-Instructor, BIOS 752 Biostatistics for Clinical Trials
2020 - Instructor, Linear Algebra, Biostatistics Bootcamp

2020 - Teaching Assistant, BIOS 782/BCB 725: Statistical Methods in Genetic Association Studies
2019 - Teaching Assistant, BIOS 511: Introduction to Statistical Computing and Data Management

RESEARCH ASSISTANT MENTORSHIP

Alexis Bryant (GRA mentor)
Annika Cleven (GRA mentor)
Alex Quinter (GRA mentor)
Carolina Downie (GRA mentor)
Kennedy Peters (GRA mentor)

ONGOING RESEARCH SUPPORT

1 U24 AT076730-01 (Anstrom (contact PI), Ivanova, LaVange)   9/26/2019 - 5/31/2024
National Institute of Arthritis & Musculoskeletal and Skin Disease
Back Pain Consortium Research Program (BACPAC) Data Integration, Algorithm Development and Operations Management Center
Role: Lead Biostatistician
The goal of the Back Pain Consortium (BACPAC) Data Integration, Algorithm Development and Operations Management Center (DAC) is to ensure that the research collaborative objectives are met. The objectives of BACPAC include (i) discovery of lower back pain mechanisms through expert application of clinical and translational medicine methodologies; (ii) identification of new interventions targeted to individual patients; and (iii) evaluation of promising interventions.

2 PLACER-2020C3-21070 (Bushnell, Rosamond)   1/1/2022 – 9/30/2028
Patient-Centered Outcomes Research Institute
Achieving Blood Pressure Goals after Stroke: Comparative Effectiveness of Intensive Tailored Telehealth Management vs Intensive Clinic Management – Data Coordinating Center
Role: Co-Investigator
The proposed trial will compare two effective strategies for the currently recommended SBP management goal of ≤130 mm Hg: one tested in stroke patients (SAMMPRIS-based clinic management), and the other tested in primary prevention using telehealth BP monitoring (HyperLink telehealth management) in patients without stroke. Trial design specifically to address health disparities in post-stroke care.

AWARDS

2019-22	National Science Foundation, Graduate Research Fellowship Program
2017-18	Doctoral Merit Assistantship, University of North Carolina, Chapel Hill
2013-17	Brown Fellows Scholarship, Centre College