# Ransmond O. Berchie, MS

CONTACT Information University of Utah School of Medicine, Department of Population Health Sciences

295 Chipeta Way, Williams Building, Room 1N410

Salt Lake City, Utah 84108

Phone: 928-255-9413 Ransmond.Berchie@utah.edu

LinkedIn profile Personal website

RESEARCH Interests Survival analysis, longitudinal & multilevel data analysis, causal inference, statistical machine learning

EDUCATION University of Utah School of Medicine, Salt Lake City, UT

May 2024 (Expected)

Ph.D. Biostatistics (Completed 2 years of coursework)

Northern Arizona University, Flagstaff, AZ

May 2020

M.S. Statistics (With Distinction; Final CGPA: 4.00 / 4.00)

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

June 2017

B.S. Statistics (First Class Honors)

COLLABORATIVE RESEARCH Graduate Research Assistant: Study Design & Biostatistics Center (SDBC),

University of Utah

August 2020 - Present

## Mentor: Adam Bress, PharmD, MS

- Co-first author and lead analyst for estimating the Per-protocol effect of initiation and continuous treatment with angiotensin-II receptor blockers versus angiotensin converting enzyme inhibitors on cognitive outcomes in SPRINT
- Leading the data management and analysis for evaluating the association of genetic ancestry with cardiovascular disease among African Americans: Findings from the Jackson Heart Study and the Reasons for Geographic and Racial Differences in Stroke (REGARDS) cohorts
- Leading the analysis for estimating the intent-to-treat effect of initiating an ACEI vs. ARB on cardiovascular disease outcomes among SPRINT and ACCORD-eligible US adults
- Leading the data management and analysis for evaluating the association between living in a pharmacy desert and cardiovascular disease events and blood pressure control among those with treated hypertension in the REGARDS study
- Led the analysis for evaluating the Factors Associated with Antihypertensive Monotherapy Among US
  Adults with Treated Hypertension and Uncontrolled Blood Pressure Overall and by Race/Ethnicity,
  NHANES 2013-2018
- Second analyst for evaluating the distribution of predicted cardiovascular and all-cause mortality benefit of intensive vs standard blood pressure control among SPRINT-eligible US adults

## Mentor: Angela Presson, PhD, MS

• Double programmer for estimating the response rate of the patient reported outcomes 1 year post-op and identifying factors associated with the response rate on among patients who had a hand surgery.

TEACHING EXPERIENCE

### Part-Time Instructor, Northern Arizona University

Jul 2020 - Aug 2020

- Remotely taught one section of Applied Statistics Summer class; with class size of 14.
- Wrote weekly lessons, exams and homework; graded projects and exams.
- Used relatable concepts to motivate students to overcome learning obstacles.
- Developed strong interpersonal skills and provided academic counselling to students

## Graduate Teaching Assistant, Northern Arizona University

Aug 2018 - May 2020

- Primary instructor for two sections of Applied Statistics; with each section having 40 students.
- Taught two sections of Quantitative Reasoning; with each section having 36 students.
- Taught one section of 72 students for Precalculus.
- Co-taught one section of 72 students for Precalculus.
- Precalculus and Quantitative Reasoning courses were taught in modified emporium model.

- Wrote weekly lessons, exams and homework; graded projects and exams.
- Served as a tutor and proctor at the Lumberjack Mathematics Center.
- Developed strong interpersonal skills and provided academic counselling to students

## Teaching Assistant, Kwame Nkrumah University of Science and Tech. Aug 2017 - Aug 2018 Mentor: Nana Kena Frempong, PhD

- Conducted tutorials on Bayesian Statistics, Survival Analysis, Time Series Analysis, Probability and Statistics, Statistical Methods for undergraduate students.
- Individually taught four classes of size 90 students each in traditional lecture.
- Updated class grades for various courses.
- Offered free tutoring services to low-income students.
- Prepared academic materials for teaching, research work and presentations.

## Professional

#### Intern

### EXPERIENCE

## SIC Life Insurance Co Ltd., Kumasi, Ghana.

June 2015 - Aug 2015

- Data entry clerk.
- Sold policies to new clients.
- Educated clients on various products available.

# EXPERIENCE

## OTHER RELEVANT Graduate Student Consultant, Statistical Consulting lab

Aug 2019 - Dec 2020

## Northern Arizona University, Flagstaff, AZ

Mentor: Roy St. Laurent, PhD

- Provided various support of data entry, data analysis and output interpretation for a wide group of clients including students, faculties and local community members.
- Conducted statistical analysis (ANOVA, Regression, Logistic) for various projects.

#### Linen, Extraction & Cleaning Crew, Resident Life Support Services June 2019 - Aug 2019 Northern Arizona University, Flagstaff, AZ

- Coordinated team members to greet guests with enthusiasm and a friendly demeanor.
- Loaded, transported, and delivered items to guests in a safe and timely manner.
- Collaborated with colleagues to assign daily clean-up tasks, making sure no one had to work past scheduled hours.

## Volunteer EXPERIENCE

• Poster Evaluator, University of Utah 2021 Undergraduate Research Summer Symposium

Aug 2021

## • Liaison For Freshmen

#### Osei Kyeretwie High School,Office of the Senior House Master May 2011 - Aug 2013

- Registered and recorded personal information on freshmen.
- Distributed prospectus to freshmen
- Planted lawns and flowers on campus.

## • Published

## **Publications**

- 1. Alexander R. Zheutlin, Catherine G. Derington, PharmD, Jordan B. King, Ransmond O. Berchie, Jennifer S. Herrick, Dave L. Dixon, Jordana B. Cohen, Daichi Shimbo, Ian M. Kronish, Joseph J. Saseen, Paul Muntner, Andrew E. Moran, Adam P. Bress. Factors associated with antihypertensive monotherapy among US adults with treated high blood pressure: NHANES 2013-2018. American Journal of Hypertension.
- 2. Frempong, Nana & Berchie, Ransmond & Baidoo, Richard & Abijah, Benjamin & Oforiwaa-Amanfo, Osei. (2021). A Simulation Study to Examine the Bias of Some Sample Measures of Skewness. Applied Mathematical Sciences. 15(4): 189-200. DOI:10.12988/ams.2021.914276
- 3. Frempong NK, Nartey E, Bukari FK, Berchie RO (2018). "Modelling the force of infection for Hepatitis B among heterogeneous groups at the Komfo-Anokye Teaching Hospital." J Biostat Biometric App, 3(1): 109.

## • Draft in Progress

- Ambarish Pandey, Ransmond O. Berchie, D. Edmund Anstey, Suzanne Judd, Daichi Shimbo, Emily B Levitan, George Howard, Monika M. Safford, Paul Muntner, Ninad S. Chaudhary, Tsegaselassie Workalemahu, Lynn B. Jorde, Rachel Hess, Robert J. Mentz, Michael E. Hall, Javed Butler, Shreya Rao, Rick A. Kittles, Leslie A. Lange, Ethan M. Lange, Marguerite R Irvin, Adam P. Bress. The Association of Genetic West African Ancestry with Incident Cardiovascular Disease among African Americans.
- 2. Jordan B. King, Ransmond O. Berchie, Catherine G. Derington, Zachary A. Marcum, Tom H. Greene, Jennifer S. Herrick, Joshua A. Jacobs, Alexander R. Zheutlin, Adam P. Bress, Jordana B. Cohen. New users of ACEI- vs. ARB-based antihypertensive medication regimens and cardiovascular disease events: An analysis of SPRINT and ACCORD-BP.

Target journal: Hypertension

## • Submitted

1. Catherine G. Derington, Adam P. Bress, Ransmond O. Berchie, Jennifer S. Herrick, Jincheng Shen, Jian Ying, Tom Greene, Gabriel S. Tajeu, Swati Sakhuja, Natalia Ruiz-Negrón, Yiyi Zhang, George Howard, Emily B. Levitan, Paul Muntner, Monika M. Safford, Paul K. Whelton, William S. Weintraub, Andrew E. Moran, Brandon K. Bellows. Estimated population health benefits of intensive systolic blood pressure treatment among SPRINT-eligible US adults. Submitted to: Journals of the American College of Cardiology.

## SCIENTIFIC ABSTRACTS AND PRESENTATIONS

- 1. Derington CG, Bellows BK, Tajeu GS, Herrick JS, Berchie RO, Ying J, Sakhuja S, Greene T, Ruiz-Negron N, Howard G, Levitan E, Muntner P, Safford MM, Weintraub WS, Moran AE, Bress AP. Distribution of predicted cardiovascular and all-cause mortality benefit of intensive vs standard blood pressure control among US adults eligible for the Systolic Blood Pressure Intervention Trial. Podium presentation for the American Heart Association Hypertension Scientific Sessions, September 2021
- 2. **Berchie RO**, Baidoo R, Oforiwaa YA, Okpoti AN.Examining The Performance Of Some Sample Measures Of Skewness Using Monte Carlo Simulation. Podium presentation for Scientific Computing and Industrial Modeling Conference, Kwame Nkrumah University of science & Technology. November 2017.

## HONORS AND AWARDS

Lester R. Curtin Award - American Statistical Association
 African American Doctoral Scholars Initiative Award - University of Utah
 Carlson-Diekelman Rushall-Schroeder Memorial Endowed Scholarship,
Northern Arizona University
 Outstanding Graduate GPA, Northern Arizona University
 Most Hardworking Prefect, Osei Kyeretwie Senior High School
 2013

## LEADERSHIP AND AFFILIATION

- Student Member; American Statistical Association
   Student Member; Royal Statistical Society
   Aug 2018 Present
- Member; American Mathematical Society

  Aug 2018 Present
- Committee member, Population Health Sciences Student Advisory Committee, University of Utah.

Aug 2020 - May 2021

• Organizing Sub-Committee Head; Presbyterian Youth and Student Association 2017 Planning Committee

Nov 2016 - Sep 2017

• President; Organizing Wing, National Union of Presbyterian Students -Kwame Nkrumah University of science & Technology, Ghana

Mar 2016 - Apr 2017

• Organizing Secretary; National Union of Presbyterian Students -Kwame Nkrumah University of science & Technology, Ghana

Mar 2016 - Apr 2017

## Programming Skills

- R: Proficient
- SAS: Intermediate