Quest L. Whalen

Email: whalengla@gmail.com | (769) 926-4233

Education

Doctorate of Population Health, Biostatistics & Data Science

GPA: 4.00

Tuskegee University

Expected Graduation: Spring 2025

Tuskegee, AL

Masters of Population Health, Biostatistics & Data Science

GPA: 3.76

University of Mississippi Medical Center (UMMC)

Graduation Date: May 22, 2021

Jackson, MS

Bachelor of Science, Mathematics

GPA: 3.89

Tuskegee University

Graduation Date: May 11, 2019

Tuskegee, AL Summa Cum Laude

Research & Work Experience

Department of Pediatric Research Fellow, UMMC

2022 - Present

Advisor: Dr. Norma Ojeda

- Study community interventions to improve breastfeeding rates among African American mothers
- Method: logistic regression Implemented using R Software

Summer Research, UMMC

2021 - Present

Advisor: Dr. Jeannette Simino

- Apply logistic regression to analysis the relationship between inflammation biomarkers and Dementia-Free in the oldest old
- Multisite analysis
- Implemented using SAS

NIH Project SCORE, UMMC

2021 - Present

Advisor: Dr. Caroline Compretta

- Engage high school students from groups underrepresented in STEM career trajectories
- Served as a near peer mentor
- Developed and co-led public health curriculum
- Facilitated student health research

Health Policy Fellowship, UMMC

January - June 2023

Advisor: Dr. Fazlay Farque

Engaged with Mississippi legislative process to follow health policy

Data Manager and Statistical Consultant, Glenn Family Foundation

January 2022 - 23

Supervisor: Dr. Helen Beady & Dr. Mary Coleman

- Study purpose is to enhance teachers' knowledge of and capacity to teach goal-setting strategies and health and social behaviors that can increase positive lifestyle outcomes
- Managed data collection and entry with Apricot Social Solution
- Built reports to inform effects of implemented curriculum

Summer Research, UMMC

Summer 2021

Advisor: Dr. Seth Lirette

- Cardiometabolic Risk and Aggressive Prostate Cancer in African-American and White Men
- Apply survival analysis techniques to quantify burden of cardiometabolic risk factors on prostate cancer for men collectively and stratified by race in ARIC dataset
- Implemented using STATA

Student Research, UMMC

Spring 2021

Mentor: Dr. Hamidreza Moradi

- Extract and parse 2010 US census dataset for CDC public data
- Analysis patterns in census tract level social vulnerability index
- Apply cluster machine learning algorithms: DBScan and OPTICS
- Implemented using Python

Summer Research, UMMC

Summer 2020

Advisor: Dr. Rajesh Talluri

- Applied statistical network to analysis degrees of connectivity
- Analyzed genetic relationships from network structure
- Implemented using R Studio

NSF MAKERS Scholar Program

Advisors: Dr. Mohammed Qazi & Dr. Yasmeen Rawajfih

- Collaborated with varying STEM Fields
- Coded a mobile application to improve on campus communications
- Programmed sensors to connect with raspberry pi to detect interruption from mail delivery
- Presented mobile application development to STEM scholars at 2018 MAKERS Conference
- Implemented using AppInventor and Python

Harvard's T.H. Chan Biostatistics & Computational Biology Fellowship

Summer 2018

Advisor: Dr. Kimberlee Gauvreau

- Developed a risk adjustment model with logistic regression
- Analyzed international data on congenital heart surgery
- Computed odds ratio, c-statistic, Hosmer-Lemeshow value
- Implemented using R programming

Tuskegee University and

2016 - 18

National Science Foundation Fly High Program

Advisor: Dr. Chadia Affane Aji

- Coordinated summer workshops for high school students
- Develop workshops to apply algebraic and geometrics concepts to physics and aeronautics
- Arranged activities intended to gather data for future research

Conferences and Presentations

ASA International Conference for Health Policy Statistics

January 2023

Workshops: (1) National Center for Health Statistics: Realizing the Power of Data through Linkages, (2) Structural Equation Modeling with Health Data, (3) Introduction to Social Network Analysis and Network Science Methods

2017 - 19

Mississippi Public Health Association Epidemiology Section

September 2022

ASA MS-AL Regional Conference

April 2022

School of Population Health Biostatistics & Data Science Department UMMC Journal Club

December 2021

Lecture Presentation: "Inflammation and Dementia-Free Survival in the Oldest Old"

 $25^{\mbox{\tiny th}}$ Summer Institute in Statistical Genetics, University of Washington

June 2020

Scholarship Recipient

Workshops: (1) Introduction to Genetics and Genomics, (2) Gene Expression Profiling, and (3) Pathway & Network Analysis for Omics Data

Joint LSAMP/S-STEM Conference

April 2019

Tuskegee, AL

Poster Presentation: "Skegee Way Mobile App"

Field of Dreams October 2018

Travel Scholarship Recipient

Harvard's T.H. Chan Biostatistics & Computational Biology

Summer Research Symposium

July 2018

Presentation: "International Quality Improvement Collaborative for Congenital Heart Surgery: Refining and Applying a Risk Adjustment Model"

Technical Skills

R Studio Programming Python Programming Stata Programming SAS Programming SQL Machine Learning

Modeling

Statistics

Computational and Theory Mathematics

Training and Certifications

NIH Information Security and Management

CITI Biomedical Responsible Conduct of Research

July 2022 - July 2025

CITI Human Research, Biomedical Research Investigators and Key Personnel

June 2021 - May 2024

Teaching Experience

Tutor 2016 - 19

Tuskegee Center of Academic Excellence and Innovative Learning

Lead Math tutor

- Coordinated tutorial sessions and workshops in basic math and higher-level math
- Tutored seven different math courses starting with college algebra up to differential equations
- Standardized the center's math intake information
- Catalogued the center's data

Selected Awards

<u>University of Mississippi Medical Center</u>

- Dean's Scholarship (2021-2022)
- Robert Hearin Foundation Grant (2019-2021)
- SOPH 2021 Student of the Year
- Diversity Equity Inclusion 2022 Pillar's Nomination

<u>Tuskegee University</u>

- Tuskegee University Merit Scholar (2015-2019)
- Tuskegee University Eminent Scholar (2015-2016)
- Top 5 finalist in university wide President's Essay Writing Contest (2016)

Professional Membership and Affiliation

American Statistical Association (2020-Present) Pi Mu Epsilon Math Honor Society (2017)

Professional Leadership & Community Outreach

Vice President, School of Population Health UMMC

2019 - Present

Accomplishments:

- Organized campus wide food donation drive benefitting EversCare Food Pantry
- Organized campus wide children's warm clothing drive benefitting Stewpot Community Services

Diversity and Inclusion Officer, Association of Student Body IJMMC

Tuskegee Airmen Scholarship Foundation Intern

2021 - 2022

Fall 2018

Accomplishments:

 Served on the 2022 Pillars Committee awarding UMMC and community leaders who promoted diversity, equity, and inclusion

| promoted diversity, equity, and melasion | |
|---|----------------|
| Stewpot Community Service Youth Volunteer Tutor Jackson, MS | 2016 - Present |
| Tax Preparer Volunteer Intake Tax Assistance, Hinds Community College Single Stop | 2020 - 21 |
| Forest Hill JROTC Math ACT tutor Jackson, MS | Fall 2019 |
| Pre-Alumni Club Fundraising Tuskegee University | 2018 - 19 |
| Student Intern for Mississippi State Conference NAACP Jackson, MS | Summer 2018 |

References

Available upon request