

## **Education**

Ph.D. Biostatistics

University of Washington, expected 2021

B.S. Applied and Computational Mathematics

California Institute of Technology, June 2016

## **Work Experience**

Research Assistant, University of Washington Department of Biostatistics,  
September 2016 – Present

- Analyzed TOPMed whole genome sequence data of JHS participants to identify variants associated with biomarkers potentially involved in the telomere production complex in African-Americans.
- Conducting platelet-related traits GWASs using TOPMed whole genome sequence data of JHS, FHS, GeneSTAR, OOA, ARIC, CHS, MESA, and SAFS participants to identify variants associated with biomarkers that are potentially involved in platelet production for these admixed populations

Technical College Intern, Northrop Grumman Corporation, Summer 2016

- Supported aerospace sector analytics on the supplier performance use case
- Built, expanded, and helped maintain project tracking website using SharePoint
- Identified data integration tools and methodologies for big data from disparate sources
- Set up a framework for documentation of a process using the CRISP methodology
- Supported predicting at-risk suppliers by re-engineering a performance score using raw delivery and quality data

Summer Undergraduate Research Fellow, University of Washington Department of Biostatistics, Summer 2015

- Using genetic data from Jackson Heart Study participants, conducted telomere length GWAS of African Americans

Summer Undergraduate Research Fellow, California Institute of Technology, Summer 2014

- Developed a method for determining the length of transmembrane alpha helices for a large dataset
- Used MATLAB, Mathematica, and MySQL Workbench

Solutions Author, Chegg, California, March 2012 – June 2016

- Wrote detailed solutions for problems in a Numerical Analysis textbook and an Algebra textbook

## **Teaching Experience**

BIOST 310 Teaching Assistant, University of Washington Department of Biostatistics, September 2018 – March 2019, September 2019 – December 2019

- Instruct undergraduate students on introductory topics of biostatistics

ACM 95/100 Teaching Assistant, California Institute of Technology, September 2014 – June 2016

- Instruct undergraduate and graduate students on topics of complex analysis, ordinary differential equations, and partial differential equations

Math Instructor, Mathnasium, Orlando, FL, September 2011 - August 2012

- Instruct students in math, ranging from second grade math to single variable calculus

## **Qualifications**

Programming languages: Java, Python, C, C++

Software: R, MATLAB, Mathematica

Basic laboratory skills

Other: LaTeX

## **Awards and Scholarships**

Mellon Mays Undergraduate Fellowship, Caltech (2014)

Bibi Jentoft-Nilsen Memorial Award, Caltech (2016)

ARCS Fellowship, University of Washington (2016)

NSF Graduate Research Fellowship (2018)

## **Presentations**

SURF Oral Presenter, California Institute of Technology, September 2014

MMUF West Coast Regional Undergraduate Conference Presenter, October 2014

MMUF West Coast Regional Undergraduate Conference Presenter, October 2015

ASHG Conference Poster Presenter, October 2017

UW Biostatistics Retreat Poster Presenter, November 2017

## **Publications**

1. Raffield LM, Lu AT, Szeto MD, **Little A**, Grinde KE, Shaw J, Auer PL, Cushman M, Horvath S, Irvin MR, Lange EM, Lange LA, Nickerson DA, Thornton TA, Wilson JG, Wheeler MM, Zakai NA, Reiner AP. Coagulation factor VIII: Relationship to cardiovascular disease risk and whole genome sequence and epigenome-wide analysis in African Americans. *Journal of Thrombosis and Haemostasis* 2020.