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# **EDUCATION**

### **UC BERKELEY**

MPH IN BIOSTATISTICS & EPIDEMIOLOGY May 2017 | Berkeley, CA

### **UC DAVIS**

BS IN EXERCISE BIOLOGY BA IN PSYCHOLOGY May 2011 | Davis, CA

## **EXPERIENCE**

### ALAMEDA COUNTY PUBLIC HEALTH DEPARTMENT

#### **EPIDEMIOLOGIST II**

August 2019 - Present | Oakland, CA

- Lead data analyses and surveillance reporting of tuberculosis and over 70 other notifiable acute communicable diseases (in R and SAS).
- Conducted epidemiological investigations and evaluations of disease clusters and outbreaks, linkage-to-care projects, and quality improvement efforts.

### HIV DATA-TO-CARE SPECIALIST

August 2018-August 2019 | Oakland, CA

• Managed the HIV Data-to-Care program for the county, leveraging various case management and surveillance data with integrated inter-departmental work-flows to increase the number of HIV positive residents in care.

## CALIFORNIA RURAL INDIAN HEALTH BOARD | EPIDEMIOLOGIST

October 2017-August 2018 | Sacramento, CA

- Developed state wide data collection and disease surveillance tools, IRB and data management, and wrote complex grants to secure future funding.
- Developed databases, SQL Reports using advanced queries, technical reports, spatial data overlays and maps, performed data linkages, and produced tables and figures in R and Tableau.

## UCSF SCHOOL OF MEDICINE | STATISTICIAN

June-August 2017 | San Francisco, CA

• Performed database management, IRB management, data interpretation and conducted various analyses – including machine learning, and causal, time-variant, clustered and multilevel analyses – on two multi-million dollar NIH funded international studies on multi-drug resistant tuberculosis.

## **UC BERKELEY** | GRADUATE STUDENT RESEARCHER

August 2016-March 2017 | Berkeley, CA

• Conducted analysis on the accuracy of population estimates of those with a genetic disorder or genetic determinants (e.g. cancer, congenital malformation, etc.) with those of elusive populations (e.g. drug addiction) using both non-Bayesian and Bayesian methods.

## **GOOGLE** | PUBLIC HEALTH DATA SPECIALIST

May-December 2016 | Mountain View, CA

• Responsible for data curation, data analysis of existing public health and medical research.

• Curated, verified, and provided expert feedback to improve the information in the health knowledge graph and related algorithm performance.

## SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH | RESEARCH ANALYST

May-December 2016 | San Francisco, CA

• Conducted various statistical analyses, mathematical modeling, data management, and data interpretation on over four studies involving randomized control trials of pharmacologic interventions to treat substance use, HIV risk, and a prospective longitudinal study among transgender youth.

### UC BERKELEY | CENTER FOR HEALTH LEADERSHIP (CHL) FELLOW

October 2015 - May 2017 | Berkeley, CA

- Selected to participate in a three-semester leadership development program.
- Learning activities include: consulting project with non-profit agency, training workshops, needs assessment, project management and meeting facilitation.

### **AMITY FOUNDATION** | PROGRAM COORDINATOR

February - August 2015 | Los Angeles, CA

- Managed reporting, program evaluation and program implementation for grant that provided mentors to formerly incarcerated individuals.
- Implemented program plan, maintained program management efforts for a financial literacy grant entitled, Financial Empowerment.
- Provided interim support as financial literacy coach, and served as a mentor to formerly incarcerated individuals re-entering back into society.

## NATIVE AMERICAN HEALTH CENTER

#### **DATA COORDINATOR**

February 2014 - Mar 2015 | Oakland, CA

- Managed data collection, entry and analysis for health clinic that saw over 15 thousand patients at three sites in the San Francisco Bay Area. Supervised two Data Assistants.
- Created clinical and behavioral health reports from EHR with SQL for board of directors, clinicians, staff, and the public that included the status of the clinic and grant funded projects.
- Provided evaluation and project management on a technology integration grant that helped fund the creation of the clinics EHR service.

### PREMEDICAL INTERN

October - December 2012 | Oakland, CA

- Observed attending physician, Dr. Christopher Alexander, in the medical department of the Native American Health Center in San Francisco, CA.
- Duties included: observing doctor/patient interactions, weekly presentations, graded tests and final exam. Also, under the attending physician's supervision, provided relevant medical context to patients.

#### DATA ASSISTANT

June 2012 - February 2015 | Oakland, CA

- Responsible for GPRA and other survey data collection, health behavior data entry, and technical and statistical reporting of over 15 grants.
- Other roles included: consenting survey participants, determining insurance eligibility, entering clients into different health care tracking systems, and performing HIV rapid tests and HIV counseling.

### **DATA & EVALUATION INTERN**

June 2012 - February 2015 | Oakland, CA

- Assisted with the transition from paper medical record data to electronic health records (EHR) by developing NEXTGEN training guides for clinicians.
- Proctored EHR trainings to clinical and administrative staff and developed EHR training materials.

### **UC DAVIS** | RESEARCH ASSISTANT

September 2008 - June 2011 | Davis, CA

- Collected, maintained, and evaluated data on mutations of cardiac Troponin T and cardiac Troponin C and their relation to familial cardiomyopathies. Proteins were expressed in KO mice using in vitro techniques and structurally analyzed via homology modeling.
- Performed various molecular biology techniques such as gel electrophoresis, and western blots to determine relative levels of Ubiquitin levels and proteasome activity expressed KO mice.

# CONSULTING EXPERIENCE

## TRILOGY EDUCATION | TEACHER ASSISTANT, DATA ANALYTICS

July 2019 - Present | Berkeley, CA

• Assisted teaching fundamentals of computer science, programming, Git, Bash, data munging, visualization, web development, project management, and machine learning to multiple different classes of students through the UC Berkeley Data Analytics Boot Camp.

### METHOD DATA SCIENCE | RESIDENT DATA SCIENTIST

November 2018 - April 2019 | Remote Work

• Utilized a complex assortment of data sources to produce data models & prediction algorithms for various clients including Biotechnology start-up companies.

# ABSTRACTS, PUBLICATIONS & PRESENTATIONS

- Allgeier D, Gebreegziabher E, Ycasas J, Murgai N, Brown RE, Moss N. HIV in Alameda County, 2015-2017. 2018; http://www.acphd.org/media/532487/hiv2018\_ac.pdf
- Brown RE, Turner C, Hern J, Santos GM. Partner-level substance use associated with increased sexual risk behaviors among men who have sex with men in San Francisco, CA. Drug Alcohol Depend. 2017:176:176–80.
- Brown RE, Gomes AV. Understanding Cardiomyopathies through a Molecular Modeling Approach (Poster). Presented at the 2011 Undergraduate Research Scholarship, and Creative Activities Conference, Davis, CA.

## OTHER TEACHING EXPERIENCE

# SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH | GUEST LECTURER

July 2016 | San Francisco, CA

• Co-lecturer on Threats to Validity and Causal Inference to undergraduates participating in National Institute of Mental Health (NIMH)-funded Summer HIV/AIDS Research Program (SHARP) at the San Francisco Department of Public Health.

## **BAYEMT | EMT Skills Instructor**

July 2016 | San Francisco, CA

- Taught various Emergency Medical Technician (EMT) skills to students.
- Provided review sessions for students the National Registry of Emergency Medical Technicians (NREMT) exam.

## **UC DAVIS** | TEACHING ASSISTANT

January 2011 | Davis, CA

- Taught various labs focusing on anatomical and physiological features of the human body using cadavers to undergraduate and graduate students during weekly laboratory meetings.
- Conducted weekly office hours, review sessions for exams and was responsible for maintaining the preservation of the cadavers.

# SKILLS

### PROGRAMMING/TECHNOLOGIES

• R • SQL • Python • SAS • Stata • Tableau • ArcGIS • BASH • VBS • git • £TEX• JSON • HTML • XML • CSS • AWS • VBA • JavaScript • Flask • D3.js • Leaflet • Hadoop • Spark • Plotly

### **PROFESSIONAL**

• Project Management • Research • Academic Writing • Study Design • Survey Design • Database Creation • Database Management • Data Management • Grant Writing • Program Evaluation

## COURSEWORK

### **GRADUATE**

 Big Data for Public Health • Causal Inference • Hierarchical and Longitudinal Modeling • Multivariate Statistics • Outbreak Investigation • Intermediate SAS Programming • Program Planning, Development, and Evaluation • Health Care Organizations and Management • Impact Evaluation • Design Thinking • Interpretation of Computer Programs

### INDEPENDENT COURSEWORK

 Machine Learning in Python • Python Programming • R Programming • Managing Big Data with MySQL • Data Visualization with Tableau • Plus over 30 other data/programming related online courses

### **UNDERGRADUATE**

• Multivariate Calculus • Linear Algebra • Physics • Chemistry • Biology

## PUBLIC SERVICE

- MENTOR | GETTING INTO GRADUATE SCHOOL (GIGS) AT UC BERKELEY September 2015 May 2017 | Berkeley, CA
- MENTOR | AMITY FOUNDATION March - August 2015 | Los Angeles, CA.
- HIV TESTER & COUNSELOR | NATIVE AMERICAN HEALTH CENTER July 2013 December 2014 | Oakland, CA
- YOUTH SERVICES OUTREACH INTERN | THE AMERICAN RED CROSS December 2011 June 2012 | Oakland, CA
- VOLUNTEER CASEWORKER | THE AMERICAN RED CROSS October 2011 - June 2012 | Oakland, CA
- MATH TUTOR | DAVIS BRIDGE January 2008 - June 2011 | Davis, CA
- INTERN | CLINICA TEPATI September 2007 - June 2008 | Sacramento, CA

# AWARDS & FELLOWSHIPS

- Grow with Google Challenge Scholarship, Google via Udacity, January 10, 2018.
- Graduate Opportunity Program (GOP) School of Public Health Full Fellowship award, University of California, Berkeley, April 15, 2015.
- Graduate Opportunity Program (GOP) School of Public Health Full Fellowship award, University of California, Berkeley, April 15, 2015.
- Commendation [for public service and dedication to improve quality of life in Alameda county communities], Alameda County Board of Supervisors, San Leandro, May 21, 2012.
- Recipient, Research Scholar Award, University of California, Davis, April 29, 2011.