Maria Ma, MPH

maria.ma@berkeley.edu | (650) 690-5672 | Fremont, CA | linkedin.com/in/marialma | github.com/marialma | **Summary**

Public health graduate passionate about harnessing data for improved health outcomes

Skills

- Software: MS Excel, R (ggplot2, dplyr, knitr), STATA, Python, SQL (MS Access), Tableau
- Data cleaning, data analysis, data visualization, project management, grant writing, literature review
- Experience working with protected health information, diverse data sources,
- US citizen, conversational Mandarin speaker

Projects

Benioff Children's Hospital - Family Information and Navigation Desk

Intervention aimed at addressing social determinants of health for families of patients

• Wrote research approach, data collection plan, and analysis plan for a grant application to evaluate impact and cost effectiveness of an existing social intervention

Cancer Support Community - Social Impact Metrics (coursework)

Devised impact metric plan for assessing educational program from the nonprofit Cancer Support Community

- Identified organization's theory of change and determined bottlenecks for data gathering
- · Developed surveys and facilitated focus groups to create an implementation plan for impact assessment

Additional projects at: http://marialma.github.io

Work Experience

Keep Antibiotics Working - Staff Assistant

Feb 2018 - Present

Providing support for a nonprofit leading advocacy efforts to reduce superbugs in our food supply

- Researched and analyzed FDA, USDA, and OIE documents in support of advocacy efforts, generating reports that have been synthesized from various publically available sources
- Implemented web scraper for harvesting FDA animal drug approval data
- Compiled and managed database of supporters and donors
- Drove increased audience engagement in social media and outreach efforts

Roche Molecular Diagnostics – Health Policy Intern

May 2016 – Aug 2016

Medical and Scientific Affairs Department

Generated recommendations for Roche within the antimicrobial resistance policy landscape

- Devised strategy for inclusion of cutting edge diagnostic device in treatment guidelines
- Created in-depth slide decks and proposed strategy recommendations to senior management

DuPont Industrial Biosciences – Research Assistant

Aug 2011 – Aug 2015

Molecular Biology – Fungal Expression Department

Developed solutions for consumer goods through synthetic biology

- Designed, executed, and evaluated experiments for optimizing protein expression in fungal host strains
- Worked in a cross-functional team to develop a new product offering 2% additional yield over competitors, delivering results in an unprecedented timespan
- Lead a molecular biology sub-project focused on engineering bonus improvements
- Made major contributions to 3 patent applications concerning uses of a novel enzyme
- Managed an intern on a research project

Education

UC Berkeley School of Public Health

May 2017

MPH in Infectious Disease and Vaccinology

Capstone Paper: Modeling of Antibiotic Resistant Gonorrhea to Determine Economic Value of Interventions

UC Davis June 2011

BS in Microbiology

Other Experience

Santa Cruz County, Communicable Disease Unit - Volunteer Epidemiologist

Oct 2017 - Nov 2017

Provided analytical and miscellaneous support during a protracted Hepatitis A outbreak

- Looked for demographic related trends within the outbreak and vaccination efforts
- Analyzed subsets of the California Reportable Disease database for demographic trends in sexually transmitted infections, using both reported demographic data and survey results

CalSTAPH - Executive Board Member

Aug 2016 - May 2017

Provided overflow support to state and local health agencies

- Set organizational development priorities for the 2016-2017 year
- Collaborated with health agencies to develop fruitful and beneficial student projects
- Planned and organized workshops, strengthening relationship with a federal government department office

US Department of Health and Human Services - Data Analysis Intern/Volunteer

Oct 2015 - Oct 2016

Office of Pacific Health

Assisted with activities focused on US Affiliated Pacific Island (USAPI) nation healthcare challenges

- Developed interactive visualization of federal grant data using Microsoft Excel and Tableau
- Created basis of a formulary for improving drug purchasing power for USAPI nations

Publications

Patent Applications

- WO2016062857A1: Use of proline tolerant tripeptidyl peptidases in feed additive compositions
- WO2016065238A1: Method for producing alcohol by use of a tripeptidyl peptidase
- US20170325479A1: Proline tolerant tripeptidyl peptidases and uses thereof