

Thomas Cummings | trc2133@cumc.columbia.edu | (803) 807-1625

Education

Master of Public Health, Epidemiology (4.0 GPA)

Columbia University Mailman School of Public Health (May 2022)

Bachelor of Science, Biochemistry

The Ohio State University (May 2017)

Experience

Malaria Team Fellow, Population Services International

Summer 2021, New York City

- Conducted analysis on 3 years of survey data from across 300 households in rural Kenya; used Cox regression modelling to determine useful lifespan of insecticide treated nets and risk factors for net damage
- Led systematic literature review of >300 peer-reviewed articles to generate context specific recommendations for improving integrated community case management practice

Data Analyst, Bowery Residents' Committee

February 2020 – December 2020, New York City

- Automated QA processes across 3 MS Access databases containing client information and service data
- Compiled 4 monthly reports on homeless service provision, outreach worker performance, and homeless placement trends for the New York City Department of Homelessness Services
- Managed migration of the program's data analysis workflow from Microsoft Access to MySQL

Community Health Specialist, Peace Corps & Last Mile Health

May 2019 – December 2019, Grand Bassa County, Liberia

- Mapped 200 rural communities using QGIS to identify gaps and inequalities in health access
- Created an application to verify and analyze form data generated by Open Data Kit; application used by field QA staff to preemptively find and solve service provision data transfer problems
- Worked with 20 Ministry of Health and Last Mile Health monitoring and evaluation staff to improve proficiency in GIS, data analysis, and the Ministry of Health's DHIS2 systems
- Synthesized data from more than 30 frontline health workers to provide feedback and insights on Ministry of Health community health and disease prevention programs

Education Specialist, Peace Corps

June 2017 – July 2019, Sinoe County, Liberia

- Taught 120 junior and senior high school students in math, science and English
- Planned and facilitated 3 maternal and child-focused malaria prevention and treatment trainings for a mixed audience of 75 teachers and student-parents
- Received 3 USAID grants to purchase science lab supplies and train teachers in the use of the supplies for over 20 Peace Corp volunteers' schools

Research Assistant, Byrd Polar and Climate Research Center

December 2013 – May 2017, Columbus, Ohio

- Developed a mobile sensor platform to study Urban Heat Island Effect (UHIE) that was deployed on campus public transit and used mobile network communications to retrieve and store data
- Created spatial visualizations of UHIE for research manuscript use

Skills

- Quantitative analysis software: used R, SAS, Stata, and Python to clean, analyze, and visualize clinical and program data
- GIS: used ArcGIS and QGIS for spatial clustering, program planning, and capacity building
- Programming Languages: used C++ and JavaScript to build front-end applications for purposes ranging from data validation to hardware emulation