DUNC CAROLINA POPULATION CENTER

Summer 2025 Undergraduate Research Internship

Project Name

Social/Behavioral Factors Associated with Malaria in Western Uganda

Faculty Mentor

Dr. Ross Boyce (Epidemiology and Infectious Diseases)

Project Description

Now in its fourth year of hosting UNC students, the Vector-Borne Disease Epidemiology, Ecology, and Response (VEER) Laboratory, led by Dr. Ross Boyce, MD, MSc, has recently completed a randomized clinical trial of insecticide-treated baby wraps (NCT05391230), used to carry infants and young children, in western Uganda. As part of that trial, we conducted 400 home visits and administered detailed surveys regarding demographic, health, and care-seeking characteristics. Participants were then followed for 6 months and regularly monitored for malaria.

Scope of Work for Internship

With the dataset now complete, there are a number of potential sub-projects available outside of the primary and secondary analyses. One project would be to examine potential associations between demographic and/or household factors at baseline and subsequent development of malaria. We also have GIS data for each household if a student wanted to explore geographic factors such as elevation, proximity to water, etc. The student will be able to lead the data analysis under supervision of the PI and our Biostats team.

Expected Deliverables

Data analysis, potentially leading to poster/abstract or even manuscript. Opportunity to present findings to the Ugandan team.

Preferred Skills

Statistical programming experience (ideally Biostats courses)