

Summer 2023 Undergraduate Research Internship

Project Name

Epidemiology of Tick-Borne Diseases in North Carolina

Faculty Mentor

Dr. Ross Boyce (Epidemiology and Infectious Diseases)

Project Description

Our multidisciplinary team (veer.unc.edu) works in collaboration with the CDC Center of Excellence on a variety of projects trying to better define the epidemiology of tick-borne diseases like Lyme, Rocky Mountain spotted fever, and Ehrlichiosis in North Carolina. These efforts include public health surveillance projects in which will investigate the clinical history and environmental exposures related to infections as well as interventions designed to improve clinical management and reduce tick-human-animal interactions.

Scope of Work for Internship

Interns will have the opportunity to contribute across projects so as to gain experience with a wide variety of methods and skillsets, including laboratory techniques, entomological surveillance (i.e., collecting and identifying ticks) and data analysis applying basic epidemiological or spatial (GIS) techniques. Interns will be expected to identify one specific project or element of a larger project for which they can take a lead. Interns will be asked to provide updates on their project during weekly team meetings and ideally will serve as first-author any resulting posters and/or publications. Immediate supervision will be provided by graduate research assistants, lab techs, and the VEER Program Manager, but the intern will have weekly meetings with the PI.

Expected Deliverables

Completed data analysis; abstract/poster; peer reviewed manuscript

Preferred Skills

None required; basic biostatistics or GIS programming will be valuable Intern should feel comfortable working outside and potentially around ticks