PhD Studies in Disease Ecology and Epidemiology at Notre Dame

The Perkins Lab at the University of Notre Dame is seeking exceptional students interested in studying diverse topics related to the epidemiology, ecology, and evolution of vector-borne pathogens. Research activities in the lab involve the use of a wide range of mathematical, statistical, and computational tools to address basic and applied research topics, including

(1) forecasting spatiotemporal variability in pathogen transmission and disease incidence,
(2) leveraging pathogen genetic data to make inferences about pathogen spread,
(3) coupling mathematical models with empirical studies of vaccines and vector control, and
(4) blending modeling and experiments to understand and mitigate the evolution of vector resistance.

In addition to a collegial lab environment with members at a variety of career stages and from diverse backgrounds, students will have opportunities for mentorship from and collaboration with a number of intramural and extramural colleagues. A passion for developing and applying innovative quantitative approaches for extracting meaning from empirical data and/or elucidating new biological understanding using theoretical approaches is essential. Engaging in the collection of empirical data is encouraged, but not required.

Interested applicants should email the PI, Alex Perkins, at taperkins@nd.edu after seeking more information at http://perkinslab.weebly.com. Top applicants will have prior experience in research and a demonstrated commitment to learning new quantitative and computer programming skills.

Funding is guaranteed via a mixture of research and teaching assistantships for 5 years. The University of Notre Dame offers excellent benefits, a full tuition waiver, and a generous stipend (~$29K for 2017). A variety of fellowship opportunities are open to top applicants. For more information regarding the Biology Graduate Program, see http://biology.nd.edu and http://graduateschool.nd.edu. The deadline for receipt of all application materials for the PhD program is December 1, 2017.