

Postdoctoral Research Position in Infectious Disease Dynamics at the University of Notre Dame

A candidate for a postdoctoral research position is sought for the Perkins Lab at the University of Notre Dame. Research will focus on the development and application of mechanistic models of the dynamics of vector-borne pathogen transmission and control, with an emphasis on dengue and malaria. There are a range of projects that the successful candidate could pursue, depending on her/his interests and skills. Major research themes include (i) modeling human movement, exposure, and contact at a variety of scales; (ii) developing and applying theory for targeted control and surveillance; and (iii) developing, applying, and testing new methods for the inference of pathogen movement based on a combination of genetic and epidemiological data. A variety of approaches will be taken, including development of new theory, statistical inference using novel methods, simulation studies, and confronting these approaches with data. Candidates will also be encouraged to dedicate a portion of their time to developing and leading projects of their own that are broadly consistent with the goals of the lab.

Desirable qualities of candidates include (1) a Ph.D. in Biology, Mathematics, Statistics, Physics, or another relevant field; (2) strong programming and software development skills; (3) experience conducting research using mathematical models; (4) an interest in infectious disease dynamics and global health; and (5) knowledge of population genetics and/or phylogenetics. Salary will be competitive and commensurate with skills and experience, benefits will be provided, and support is available for travel to conferences and to visit field sites as appropriate.

The Perkins Lab is based in the Department of Biological Sciences and the Eck Institute for Global Health at the University of Notre Dame, which provide stimulating environments for research on the epidemiology and pathobiology of infectious diseases of global concern. Interactions with the Department of Applied and Computational Mathematics and Statistics and other units on campus are also encouraged.

For further information, please email Alex Perkins (taperkins@nd.edu) with a statement of interest, a CV, and the names of and contact information for three references.