



Ecological Modeling of Lyme Disease

A postdoctoral research fellowship for an Ecologist/Ecological-Mathematical Modeler is available as part of a new 5-year NSF-funded research program on the ecology of Lyme disease. The post will be based at The Institute of Agriculture at the University of Tennessee, Knoxville, in collaboration with The University of Montreal.

The successful applicant will play a key role in the newly funded NSF Emerging Infectious Disease program *Testing alternative hypotheses for gradients in Lyme disease in the eastern U.S.: climate, host community and vector genetic structure* (Award EF-0914476). This \$2.5 million program is a collaborative effort led by Michigan State University and involving The University of Tennessee, The University of Montreal, Hofstra University, Georgia Southern University, and the USGS Patuxent Wildlife Research Center. The program aims to understand the ecological drivers for the geographic variation in Lyme disease risk in eastern North America: http://wildlifehealth.tennessee.edu/lyme_gradient. The Fellow will model effects of climate and host diversity on tick/pathogen cycles and Lyme disease risk using existing models and new models to be developed during the program.

Support for the Fellow includes an annual stipend within the range \$34,000 - \$38,000, full University of Tennessee employee fringe benefits including health care, and an annual travel allowance of up to \$2,000 for attendance at project and professional meetings.

Skills: Essential skills include a Bachelors level degree in biology, mathematics or other relevant science area, plus a PhD in mathematical ecology or epidemiology. Additional desirable competencies include project management skills, experience in field ecological studies and geographic information systems, and experience in the ecology of infectious diseases of wildlife (particularly the ecology/epidemiology of Lyme disease or other arthropod-borne diseases).

Expectations: The Fellow will be based in the Center for Wildlife Health at the University of Tennessee in Knoxville (<http://wildlifehealth.tennessee.edu>), and will be expected to interact with faculty there and at the National Institute for Mathematical and Biological Synthesis (NIMBioS; <http://www.nimbios.org>). The Fellow will also spend time at the University of Montreal's Faculty of Veterinary Medicine (Saint-Hyacinthe campus). The Fellow will be expected to attend project management meetings of the multi-center team, which will require travel and weekend duties. The applicant may also be asked to assist with some field and outreach activities associated with the project. The position is for a minimum of 2 years, subject to satisfactory 6-monthly performance reviews. Extension of the position for a further 1-2 years is a possibility. Anticipated start date for the position is March 1 2010, or as negotiated.

Mentors: The Fellow will be mentored by:

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Applications: Requests for further information, and applications (in electronic format, including statement of interest and full Curriculum Vitae), should be submitted to Dr. Hickling at the above address. There is presently no closing date for applications, however the initial round of applicants will be considered formally during November 2009.