## **David L Nieland**

## Subject:

REU position on spatial ecology of vector-borne disease at the University of Florida

The Ryan lab (<u>http://www.sadieryan.weebly.com</u>) at the University of Florida is recruiting a motivated undergraduate for a summer research internship on the spatial ecology of vector-borne disease through the NSF Research Experience for Undergraduates (REU) program. The REU project will be part of a larger NSF Ecology and Evolution of Infectious Diseases project to model effects of climate, land use, and socioeconomic conditions on vector-borne disease transmission. The project explores a range of diseases, including malaria, dengue, chikungunya, Zika, Rift Valley fever, bluetongue, and others. More about the larger project can be found on NSF's website: <a href="http://www.nsf.gov/news/news\_summ.jsp?cntn\_id=137712">http://www.nsf.gov/news/news\_summ.jsp?cntn\_id=137712</a> <a href="http://www.nsf.gov/awardsearch/showAward">http://www.nsf.gov/awardsearch/showAward?</a>

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The REU student will receive training in spatial ecological modeling, particularly Ecological Niche Modeling (ENM), and can develop a research project using existing empirical data on vectors for dengue, chikungunya, Zika, and malaria, collected at multiple scales in Latin America. The student will have the opportunity to work closely with PIs in Florida, and remotely across multiple institutions, including in Ecuador and the Dominican Republic.

This position will be based at the University of Florida in Gainesville, Florida, hosted jointly in the Geography Department and the Emerging Pathogens Institute (EPI). The student will thus have the opportunity to interact with multiple students and faculty working on spatially explicit health questions, across a broad spectrum of disciplines.

The position starts in May, with the opportunity to attend a small modeling workshop at UF. The position runs for 12 weeks with a stipend of \$6500.

Funded opportunities exist to continue and expand on this work, for the interested and motivated candidate.

The ideal candidate will have a career interest in spatial modeling, GIS, disease ecology, epidemiology, or public health research. A background in geography, ecology, infectious disease biology, and mathematical modeling or quantitative methods is desired but not required. Spanish speaking/reading is a plus.

Applicants should send a CV, unofficial transcript, contact information for two references, and a one page statement about research interests, experience, and career goals to Sadie Ryan <u>siryan@ufl.edu</u>. Please include "REU position" in the subject line. Review of applications will begin on March 15 and continue until the position is filled.