

David L Nieland

Subject: Postdoc in Evolutionary Ecology, University of Iowa

The Forbes Lab in the Department of Biology at the University of Iowa is seeking a highly motivated evolutionary ecologist with an interest in tropical insect diversity and expertise in population genomics for a 2-3 year postdoctoral position funded by NSF's Dimensions of Biodiversity Program.

Position Summary:

The aim of the project is to examine patterns of present day and historical gene flow among species in the tephritid fruit fly genus *Blepharoneura* and the same for the *Bellopius* parasitoid wasps that attack *Blepharoneura* flies. These flies and wasps are highly host-specific, incredibly diverse, and many species often overlap in their apparent niche space. A major goal is to understand why these insects are so diverse. The postdoc will develop and score double-digest RAD markers for several existing fly and wasp collections from across Central and South America, use those data to model gene flow and migration within each fly and wasp species, and collaborate with other project participants to test hypotheses regarding species interactions and the origin of reproductive isolation in these hyper-diverse insect systems. More information about this system can be found in the following two publications:

<http://www.sciencemag.org/content/320/5878/928.short>

<http://www.sciencemag.org/content/343/6176/1240.short>

Education required:

- PhD in evolutionary biology or closely related field

Desirable Qualifications:

- Experience developing and working with RAD-based marker system (or similar marker system) in non-model organisms
- Strong background in population genetics / genomics
- Interest in diversification, insect evolutionary ecology, insect population genomics, or related field
- Interest in working as part of a collaborative research team

Preferred Starting date: September 2016 (negotiable)

Application Deadline: March 15th, 2016 (or until position is filled)

How to apply: send C.V., a letter of inquiry, two representative publications (if available), and contact information for three potential referees to: andrew-forbes@uiowa.edu Informal inquiries or questions about the position may also be sent to the same email address.