



## Postdoctoral Research Fellow \* Ecology of Mosquito Disease Vectors

Applications are invited for a full-time, non-tenure track, postdoctoral associate. The position is available immediately. Applicants should have a Ph.D. in entomology, biology, or microbiology and an interest in vector biology. The ideal candidate will have a competitive publication record, enjoy working in a multidisciplinary environment, and experience with vector ecology, molecular genetics and evolutionary biology. Fluency in French is desirable but not required. Funding is available for up to four years with renewal contingent upon satisfactory performance. Research will likely require an ability and willingness to live and conduct research overseas (in French Polynesia).

The position will be to work on a National Institutes of Health funded project focusing on ecological research with mosquito adults and larvae relevant to the development of novel mosquito and pathogen control methods. Opportunities are available for attendance at professional meetings and writing research proposals.

Salary level will be commensurate with qualifications and experience. An additional 'cost of living' adjustment will be used for overseas deployment.

Applicants are requested to send a detailed curriculum vita, statement of career goals and research interests, reprints of recent papers, and the names and contact details of three referees.

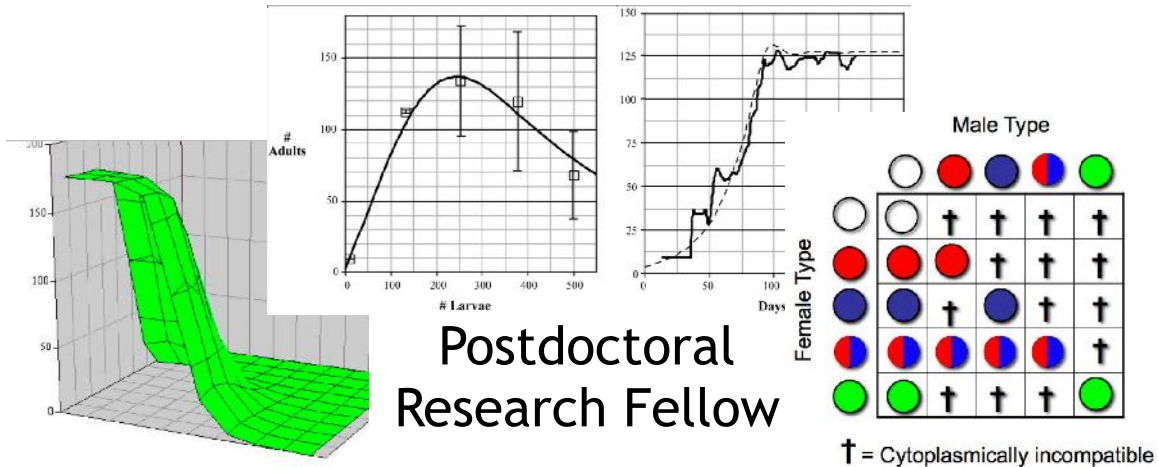
Applications, informal enquiries, and requests for additional information should be addressed to:

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University of Kentucky  
S-225 Agricultural Science Center North  
Lexington, KY 40546  
sdobson@email.uky.edu  
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\* Potential graduate students interested in this area of research are also encouraged to apply.



6/8/09



## Modeling, *Wolbachia* impacts on Insect Population Dynamics and Demography

Applications are invited for a full-time postdoctoral fellow. The position is available immediately.

*Wolbachia* cause a form of sterility in insects known as cytoplasmic incompatibility (CI), which results in karyogamy failure and arrested embryonic development. In populations that include both uninfected and infected individuals, unidirectional CI can drive the replacement of the uninfected cytotype with the infected cytotype, resulting in the conversion of an uninfected population into an infected population (termed: 'population replacement'). In populations where individuals are infected with different *Wolbachia* types, bi-directional CI can occur: sterility results in both cross directions between mates infected with different *Wolbachia* types. Models predict that in natural populations, sterility resulting from bi-directional CI is a transient event, since one infection will predominate and replace the other cytotype.

While substantial effort has been devoted to examining the effect of *Wolbachia* on individuals (e.g., *Wolbachia* effects on egg hatch, longevity, etc...), relatively little is known about population-level effects of *Wolbachia*. We seek a collaborator with interest and experience in mathematical modeling, statistics, demography and ecology. The successful applicant will lead the analysis of existing data sets of insect populations that are either infected with *Wolbachia* or are uninfected. The recruit will also be encouraged to develop additional modeling and/or empirical projects.

Applicants should have a Ph.D. The ideal candidate will have a competitive publication record and enjoy working in a multidisciplinary environment. Funding is available for up to four years with annual renewal contingent upon satisfactory performance. Funds are available for participation in professional meetings.

Applicants are requested to send a detailed curriculum vita, statement of career goals and research interests, reprints of recent papers, and the names and contact details of three referees.

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