

22 Dec 2016

Postdoctoral position in physiological ecology

A three-year postdoctoral position in landscape physiology is available starting April 2017 in the laboratory of Goggy Davidowitz, Department of Entomology, University of Arizona. This NSF funded study is in collaboration with Yaron Ziv, Department of Life Sciences, Ben-Gurion University, Israel.

Habitat fragmentation is a dominant feature of landscapes and can lead to loss of total habitat area, reduced average habitat patch size, and increased distances among patches. **We will test a novel, integrative conceptual framework that links insect physiology to landscape ecology.** It predicts that the dispersal-reproduction tradeoff is the mechanistic link by which organisms translate environmental variation created by habitat fragmentation into variation in species abundances that lower local extinction probability and increase population persistence. These hypotheses will be tested using a small beetle that lives in a fragmented landscape in the Southern Judea Lowlands of Israel. This study brings together techniques from landscape ecology and ecological physiology across multiple scales, from the individual, to patches, to populations, to whole landscapes. The successful applicant will receive training in a diverse array of methodologies in physiological ecology including isotope ecology, calorimetry, respirometry and field methods. The postdoctoral fellow will be based at the University of Arizona and will be required to spend 1-2 months a year in Israel assisting in the field work.

We seek a postdoctoral fellow that will assist in the fieldwork in Israel, and undertake experiments in respirometry (using a specially designed beetle treadmill), stable isotopes and calorimetry. The preferred qualifications: PhD in ecology, evolution or physiology, experience in insect physiology, experience with fieldwork. Experience with respirometry, isotope ecology or calorimetry is preferred but not required.

For further information contact Goggy Davidowitz (goggy@email.arizona.edu). He will also be at the SICB meeting in New Orleans and EB meeting in Chicago. If you are at these meetings and interested in the position, contact him by email to set up a time to meet and discuss the position.

Israeli candidates can also contact Yaron Ziv (yziv@bgu.ac.il) for additional information.