University of Connecticut Job: Postdoctoral Researcher studying evolution of gene co-expression networks in stickleback

A postdoctoral research position is available in Dr. Daniel Bolnick's research group (https://bolnicklab.wordpress.com), in the Department of Ecology and Evolution at the University of Connecticut. The position is available for up to four years, supported by a National Science Foundation Rules of Life: Emerging Networks grant. A consortium of researchers recently established 8 replicate whole-lake experimental evolution populations of threespine stickleback. The postdoc will apply network statistics methods to study changes in gene co-expression networks as the experimental populations evolve, and diverge. The postdoc may also pursue analyses that integrate the gene expression networks with host-parasite, predator-prey and host-microbiome networks. The project also entails developing and applying innovative analytical methods in network statistics, in collaboration with Dr. Tina Eliassi Rad (Northeastern University, http://eliassi.org) and Miaoyan Wang (Univ Wisconsin Madison, https://pages.stat.wisc.edu/~miaoyan/index.html). Additional project collaborators include Dr. Rowan Barrett, Dr. Kathryn Milligan-McClellan, and Dr. Jesse Weber. Opportunities exist to pursue side-projects along with the core project task.

Tasks: The postdoctoral researcher may contribute to some or all of the following activities: field work to collect samples, laboratory work to generate sequencing libraries for transcriptomics and genomics, bioinformatic processing of sequence reads, developing or adapting network statistics methods, applying existing network analysis tools to gene expression data, and publishing manuscripts arising from the work. It is not expected that the postdoc would have prior mastery of all these elements.

Duration: The position is currently funded for up to four years, with extensions subject to availability of grant funds. The start date is flexible.

Qualifications: Applicants must have a PhD in evolutionary biology, genetics, computational biology, or statistics with an emphasis on network analysis. Previous research experience and publications should demonstrate a commitment to basic research, ethical conduct of research, computational skills, organizational ability, and publication productivity. Prior experience with generating or analyzing genomic or transcriptomic data is strongly preferred. Expertise in statistical analysis of network data is preferred.

Applications should electronically submit a single pdf file with:

1) a Coverletter outlining research achievements, skills, and goals as pertinent to the advertised project.
2) a copy of the applicant's CV,
3) copies of up to three publications or submitted manuscripts
4) A list of three references, with contact information (email, telephone, and mailing address). We will request letters directly from these references, after identifying top candidates. Please notify the references that they may be contacted by Dr. Bolnick for recommendations.

An initial application should be emailed to Dr. Daniel Bolnick (daniel.bolnick@uconn.edu ). Include the subject line "Network Evolution Postdoc: <YOUR NAME>". Applications will be reviewed beginning May 15 and will remain open until the position is filled.

For questions about this position, please email Dr. Bolnick (daniel.bolnick@uconn.edu). For information about the Bolnick Lab visit the lab website (https://bolnicklab.wordpress.com), lab photostream (https://www.flickr.com/photos/98765823@N08/albums), and Dr. Bolnick’s Google Scholar page (https://scholar.google.com/citations?user=cfwxm0AAAAAJ&hl=en).

The University of Connecticut is an Equal Opportunity Employer. Applicants with questions about disability services can privately discuss their application with the University of Connecticut Disability Services Office. A statement of BolnickLab values can be found here: https://bolnicklab.wordpress.com/2015/10/01/labvalues/