A two-year post-doctoral position is available (start date flexible, can start as early as January, 2017) in the group of Dr. Van Savage (http://faculty.biomath.ucla.edu/vsavage/) in the Department of Ecology and Evolutionary Biology at UCLA. This position will be supported by an NSF EEID grant (http://www.nsf.gov/awardsearch/showAward?AWD_ID=1518681&HistoricalAward=false). Savage combines mathematical models with analysis of large datasets to uncover insights into biological systems. The overall goal is to better understand, both empirically and theoretically, how mean temperature and fluctuations in temperature affect mosquito-borne disease such as Zika, malaria, dengue, and chikungunya. These effects arise due to changes in lifespan, development time, biting rate, and other mosquito traits. Part of this project is to determine if these mosquito traits change with temperature approximately as predicted by metabolic scaling theory. Answering this and other questions by using transparent, predictive models is greatly needed in light of climate change and emerging epidemics such as Zika. The project has the potential to involve theory development, numerical simulations, and data analysis. Savage will mentor the postdoc in designing and conducting research projects, writing papers, giving talks, and applying for jobs. Moreover, there will be the opportunity to work with and travel to the lab of Dr. Erin Mordecai (https://www.mordecailab.com) at Stanford University as part of this research project.

UCLA is a major research university with the Faculty of Arts and Sciences, Medical School, and Engineering School all on the same campus, allowing access to myriad researchers and resources that could be useful to this project. UCLA is the top ranked public university in the world and consistently in the top 5 in terms of federal research funding awarded to universities. Los Angeles is a vibrant, diverse city with outdoor activities available nearby, including beaches and mountains. L.A. also has a wide array of arts and culture, including world-class museums, theater, music, and of course, movies.

Candidates are expected to be independent, highly motivated problem solvers who communicate well and enjoy working in a collaborative environment. The ideal candidate would have a background in mathematical modeling, knowledge of models for either disease transmission or consumer-resource interactions, and some experience with programming. Applicants with only a subset of these skills are encouraged to apply. Applications and any questions should be sent to vsavage@ucla.edu. The application should include a Curriculum Vitae that details education, past research, and publications. Applicants should also submit a cover letter that describes their interest in the project and the names of three references. Review of applications will begin immediately and continue until the position is filled.

UCLA is an AA/EOE that is strongly committed to diversity and excellence among its researchers.