David L Nieland

Subject:

Paid Undergraduate Summer Research Opportunity in Quantitative Ecology

We are seeking an undergraduate student or recent graduate to conduct research supporting an ongoing project aimed at understanding relationships between climate/weather and insect outbreaks in agricultural and forest systems. The researcher will, with the help of mentors, design and carry out a study relevant to the goals of the project. Current research foci include:

1) effects of climate on the synchrony of insect populations, and 2) long-term population dynamic patterns and impacts of climate change on outbreak frequency and severity. Student research projects could, for example, focus on specific taxa or geographic areas, or articulate new, related questions. Activities will include data acquisition and processing, statistical analysis and/or mathematical modeling, and written documentation and oral presentation of results; training and mentorship will be provided.

This position is an excellent opportunity to gain experience with and receive training in quantitative ecological research and to develop relationships with a number of outstanding scientists. This position will be housed at the University of Kansas in the lab of Dan Reuman <u>http://www.reumanlab.res.ku.edu/</u>. The student will be primarily mentored by Jon Walter <u>https://sites.google.com/site/jwalterecology/</u>, and will also interact with other members of the Reuman lab and external collaborators including Derek Johnson (Virginia Commonwealth University), Tony Ives (University of Wisconsin), and John Tooker (Penn State). Compensation is \$10-15/hr depending on experience, with the expectation of 40-hour work weeks from June-August. Exact start and end dates to be negotiated.

The University of Kansas (KU) is located in the town of Lawrence, KS, about

40 miles from Kansas City. Lawrence is a progressive and cosmopolitan university town of about 100,000 people, with vibrant art, music, and sports scenes. Lawrence is consistently ranked among the top college towns in the country, and would be an excellent place to spend a summer. KU itself is a major research university with strength in ecology and evolutionary biology.

The EEB department has >40 tenured and tenure-track faculty working in a variety of areas, and has National Research Council and Chronicle of Higher Education rankings in the top 10 in the USA.

The most important characteristics of any candidate is that he/she is self-motivated, hard-working, creative, and eager to learn. The ideal candidate also has a demonstrated background and interest in at least one

of: population ecology, mathematics, statistics, or computer science. Prior research experience as well as familiarity with software such as R, Matlab or GIS are major plusses.

To apply, please send the following materials to Jon Walter at

jonathan.walter@ku.edu: 1) a 1-page letter describing your background, goals and interest in the position, 2) an unofficial transcript, and 3) names and contact information for three references. For full consideration, please submit your application by March 7. Please direct any questions to jonathan.walter@ku.edu.