**Post-doctoral position in ecological model-data synthesis to predict productivity, greenhouse gas balance, and warming potential of biofuel agroecosystems**

A post-doctoral position in ecosystem model-data synthesis and forecasting is available in the Energy Biosciences Institute at the University of Illinois, Urbana-Champaign.

This is a full-time position as a Postdoctoral Research Associate within the feedstock production and ecosystem services modeling program at the Energy Biosciences Institute, University of Illinois at Urbana-Champaign. Our group uses ecological model-data synthesis to predict the potential productivity and ecosystem services of second-generation cellulosic bioenergy feedstocks, including grasses, trees, and CAM plants.

The objectives of our group are to evaluate and improve conceptual models of ecosystem functioning and provide information to support scientific research as well as land use and energy production decisions. The candidate may choose to focus on one or more current areas: light interception by heterogeneous canopies; biogeochemical cycling to predict carbon storage and trace gas emissions, and/or implementation of routines for new species.

**Responsibilities:**

The focus of this position will be to contribute to the evaluation and improvement of mechanistic representations of crop physiology and growth, ecohydrology, biogeochemical cycles, light interception, and vegetation to climate feedback. This position will be supervised by Dr. Steve Long in the Department of Plant Biology and the Energy Biosciences Institute at the University of Illinois at Urbana-Champaign.

**Qualifications:**

Minimum qualifications are a doctoral degree in a relevant field of biology, physics, chemistry, statistics, or computer science and experience with the development and evaluation of computer simulation models. The ideal candidate will also have experience with model development using C/C++ or FORTRAN in one (or more) of the following areas: agronomy, ecology, plant biology, radiative transfer, modern statistics, and high performance computing.

Salary will be commensurate with experience and qualifications. This is a one-year position with possibility for extension contingent upon progress and availability of funds. Evaluation of applications is rolling with a preferred starting date of September 2014.

**How to apply:**

Interested applicants are encouraged to submit a cover letter, CV, and contact information for three references to Ank Michielsen (michiels@illinois.edu). We will begin reviewing applications on July 28, 2014.