Post-doctoral fellows, Graduate students, and computer scientists

Ecological forecasting
Data assimilation
Cyber-infrastructure
Biogeochemical and ecosystem Modeling

We seek candidates for multiple (4-6) positions as post-doctoral fellows, graduate students, and computer software engineers to develop data assimilation techniques and cyber-environment to facilitate ecological forecasting in areas of biogeochemical and ecosystem sciences.

The field of ecology has been rapidly transformed to a data-rich scientific endeavor due to fast development and implementation of observatory networks. There is an unprecedented demand to convert raw data from the observatory networks into ecologically meaningful information products with the aim of accelerating advances in our fundamental knowledge of ecological processes, testing ecological theory, forecasting changes in ecological services, educating teachers and students, and supporting decision making. To facilitate transformational research in the data-rich era, the NSF-funded projects are to develop software systems to assimilate massive data into process-based models toward ecological forecasting.

We are recruiting post-doctoral fellows and graduate students to develop and apply data assimilation techniques to ecosystem and biogeochemical research using data collected from global change experiments, AmeriFlux sites, satellites, and other spatially distributed measurements. We are also recruiting software engineers to develop cyber environment to weave hardware, software, and collaboration and integration environment together so as to enable data assimilation with models towards ecological forecasting. Researchers will be expected to work collaboratively within a large, interdisciplinary research group. More information about our group can be found from the website: http://bomi.ou.edu/luo/.

Requirements for the post-doctoral positions include: (1) a PhD in ecology, computer sciences, statistics, mathematics, or related areas, (2) demonstrated experience with advanced statistical analysis and/or modeling techniques, (3) strong quantitative skills together with basic ecology training, and 4) high motivation and ability to interact and collaborate with other scientists. Requirements for the graduate assistantships are consistent with those for graduate admission at the University of Oklahoma plus enthusiasm for and commitment on ecological research. Requirements for the software engineering positions include training in computer sciences, experience and knowledge on workflow and cyber-infrastructure.

To apply for those positions, please contact: **Dr. Yiqi Luo**, Department of Botany and Microbiology, University of Oklahoma, Norman, OK 73019, email: yluo@ou.edu or **Xuhui Zhou**, email: zxuhui14@ou.edu.