

Postdoctoral Research Associate in Ecosystem Biogeochemistry

Focus: Ecosystem-scale fluxes of carbon, water, N₂O and energy, with coupled isotopic analysis of CO₂ fluxes, for Midwest Cropping Systems

The Sustainability Theme of the Center for Advanced Bioenergy and Bioproducts Innovation (<http://cabbi.bio>) is seeking a creative postdoctoral scientist with a strong background in ecosystem biogeochemistry to join an interdisciplinary team of researchers at the University of Illinois at Urbana-Champaign. The successful candidate will become a member of the Bernacchi lab (<http://www.life.illinois.edu/bernacchi/>), which collaborates with multiple research groups on addressing key opportunities and challenges associated with land use change to meet growing demand for bioenergy production in the Midwest and Southeast United States.

The successful candidate will lead efforts in measuring gas and energy exchange between the land surface and atmosphere using the eddy covariance technique. The experiments will incorporate traditional CO₂, water vapor, and energy exchanges and will couple these measurements with quantum cascade lasers to measure CO₂ isotopes and N₂O fluxes. The candidate will work closely with many faculty, postdoctoral researchers, graduate students, and technicians who are focusing on key aspects of ecosystem biogeochemistry, which provides a highly collaborative and engaging work environment.

The scientific goals of this position are to resolve the gross fluxes associated with mass and energy exchange and to understand the mechanistic basis for how different plant functional types interact with their growth environment. Through this primary goal, the candidate will have the opportunity to work with a highly productive research community and interact with researchers ranging in all scales from microbial to the landscape.

Qualifications:

The successful candidate will have a Ph.D. in Plant Biology, Ecology, Biogeochemistry, Agronomy, or a related field. As this is a postdoctoral researcher position, training will be provided as needed, but experience in techniques including micrometeorology, eddy covariance, isotopic analysis, and/or gas flux analysis are preferred. The successful candidate will have great oral and written communication skills, with a proven publication record. Furthermore, this position requires the candidate to be willing and able to participate in field research activities — including assisting with setup and maintenance of field sensors and field campaigns for ancillary data collection.

This position includes a competitive salary and full benefits. Applications will be reviewed starting Oct. 1, 2018, and the position will remain open until filled. The position has an anticipated start date on or shortly after Dec. 1, 2018.

For more information, contact CABBI Research Coordinator Anya Knecht at knecht2@illinois.edu. All materials should be submitted to Knecht with the subject line Postdoc: Bernacchi. Applications should include a brief cover letter, curriculum vitae, and the names and contact information for three references.

Any offer for this position is contingent upon your successful completion of a criminal background check (<http://humanresources.illinois.edu/job-seekers/background-checks.html>). Illinois is an Affirmative Action /Equal Opportunity Employer and welcomes individuals with diverse backgrounds, experiences,

and ideas who embrace and value diversity and inclusivity. Read more at www.inclusiveillinois.illinois.edu.