

## PhD Graduate Assistantship

*Cover crop model development for agroecosystem nitrogen cycling*

University of Kentucky, Department of Plant & Soil Sciences

The Agroecosystem Nutrient Cycling Laboratory ([www.poffenbargerlab.weebly.com](http://www.poffenbargerlab.weebly.com)) in the Department of Plant and Soil Sciences at The University of Kentucky is seeking an enthusiastic and motivated PhD student. The student will integrate field research with crop model development to study the effects of cover crop mixtures on nitrogen cycling and yield stability in agroecosystems. The student will work closely with Montse Salmeron and the Grain Crops Physiology Laboratory ([www.salmeronlab.weebly.com](http://www.salmeronlab.weebly.com)) along with other soil scientists, crop ecologists, crop modelers, and programmers as part of a USDA-funded project.

**QUALIFICATIONS:** The ideal candidate will have a M.S. degree in agronomy, soil science, ecology, biogeochemistry, environmental science, or a related field and experience working with crop models. Programming experience and interest in crop model development and improvement are required. The candidate will complete coursework necessary for a PhD in Integrated Plant and Soil Sciences with an agreed upon emphasis area of their choosing (please see <https://ipss.ca.uky.edu/> for more information).

The **LOCATION:** The University of Kentucky is situated in Lexington Kentucky, a vibrant and progressive, family-friendly city with a bustling entertainment scene conveniently situated in the inner bluegrass region of Kentucky just 80 miles from Louisville and Cincinnati and a short drive to the world-renowned Red River Gorge and Daniel Boone National Forest. Lexington airport is well connected with daily flights to several major hubs (Atlanta, Chicago, Detroit, Dallas, Washington, Philadelphia) making travel to any national or international destination simple.

To **APPLY:** Application process will remain open until a suitable candidate is identified. The assistantship includes a generous stipend, tuition waiver, and health insurance. Candidates interested in this exciting opportunity should send a cover letter describing skills and motivation for the position, academic transcripts, and CV with at least two references to:

Dr. Hanna Poffenbarger  
Assistant Professor of Soil Nutrient Management  
Department of Plant and Soil Sciences  
University of Kentucky  
Email: [hanna.poffenbarger@uky.edu](mailto:hanna.poffenbarger@uky.edu)

Applications and inquiries from women and minorities are particularly encouraged. The University of Kentucky is an Equal Opportunity Employer. Applications will be accepted without regard to race, color, age, sex, religion, disability, or national origin. The address of the College of Agriculture EEO Coordinator is room S-101 Agricultural Science Building, 500 S. Limestone, Lexington, KY 40546-0091.

## PhD Graduate Assistantship

*Multi-model comparison and Improvement of soybean nitrogen dynamics and seed protein*  
University of Kentucky, Department of Plant & Soil Sciences

A PhD Graduate Assistantship is open in the Grain Crops Physiology Laboratory (<https://salmeronlab.weebly.com>) in the Department of Plant and Soil Sciences of the University of Kentucky. We are seeking applications from highly motivated individuals interested in crop physiology and model development. The candidate will work closely with Dr. Montse Salmeron along with other researchers at the University of Kentucky, and collaborate with an international team of crop modelers and data experimentalists within the Agricultural Model Intercomparison and Improvement Project (AgMIP; <http://www.agmip.org>). The successful candidate will develop skills on: 1) data analysis of results from multi-model studies, and 2) hypothesis-based model development utilizing data from multi-location experiments for improving prediction of soybean nitrogen dynamics and seed protein concentration.

**QUALIFICATIONS:** M.S. degree in crop modeling, agronomy, crop physiology, agricultural engineering, or a related field. Some education and/or experience in the use of a crop simulation model, programming, and statistical analysis is required.

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To **APPLY:** The position will remain open until a suitable candidate is found. The assistantship includes a competitive stipend, tuition waiver, and health insurance. To apply, please submit to Dr. Montse Salmeron ([msalmeron@uky.edu](mailto:msalmeron@uky.edu)) a cover letter describing skills and motivation for the position, academic transcripts, and CV with at least two references.

Applications and inquiries from women and minorities are particularly encouraged. The University of Kentucky is an Equal Opportunity Employer. Applications will be accepted without regard to race, color, age, sex, religion, disability, or national origin. The address of the College of Agriculture EEO Coordinator is room S-101 Agricultural Science Building, 500 S. Limestone, Lexington, KY 40546-0091.