



OFFICE OF THE VICE CHANCELLOR FOR RESEARCH

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University of Illinois at Urbana-Champaign Institute for Sustainability, Energy, and Environment (iSEE)

FIELD AND LAB SPECIALIST

The Institute for Sustainability, Energy, and Environment at the University of Illinois, Urbana-Champaign seeks a full time technician in the DeLucia lab (<https://www.life.illinois.edu/delucia/index.htm>). This is a 12-month non-tenure-track Academic Professional position, and can be renewed annually for an additional year, contingent on progress, and the availability of funds. The overall goal of the project is to investigate whether adaptive multi-paddock (AMP) grazing can increase the delivery of regulating services from grazed pastures used for livestock production compared to the “business as usual” continuous grazing (CG). Our objectives are to: (1) Characterize the impact of AMP on the regulation of Greenhouse Gases (GHGs; CO₂, CH₄ and N₂O) versus CG management; (2) Quantify the efficiency at which pastures under AMP and CG use water; and, (3) Understand the mechanisms by which grazing management strategies affect CO₂, CH₄ and N₂O and H₂O fluxes from pastures. This project is part of a multi-partner effort that helps understand how grazing strategies affect farm resiliency, carbon sequestration, soil diversity, animal wellbeing and productivity. Partners include Arizona State University, Michigan State University, Texas A&M University, Rice University, Colorado State University, University of Exeter, and Carbon Nation. The successful candidate will conduct field work, laboratory experiments, and data processing and analysis to characterize the impact of adaptive multi-paddock (AMP) on the regulation of Greenhouse Gases (GHGs; CO₂, CH₄ and N₂O) versus continuous grazing (CG) management; to quantify the efficiency at which pastures under AMP and CG use water; and; to understand the mechanisms by which grazing management strategies affect CO₂, CH₄ and N₂O and H₂O fluxes from pastures

MAJOR DUTIES AND RESPONSIBILITIES

Establish and maintain eddy covariance towers and sampling of field experiments on working farms in Alabama and Tennessee, U.S.A. Extensive travel to field sites will be required. Process data including data generated from the eddy covariance towers; analyze soil, gas, and plant samples. Prepare field supplies; maintain field instrumentation related to this project (including canopy and soil chambers). Independently lead scientific field research including survey design and implementation; supervision, tasking and scheduling of staff; and maintaining appropriate staffing levels to ensure project success. Purchase and receive scientific supplies, maintaining an adequate level to support project deliverables. Assist with data compilation and analysis.

QUALIFICATIONS

Education: Bachelor's degree in biology, environmental science, or related field. Alternate degree fields will be considered/accepted depending on depth and breadth of experience and skills as related to this position.

Experience: Required: At least six months' supervisory experience. Research experience in the laboratory and/or field. Preferred: Research experience in the field and in the laboratory related to biogeochemistry (e.g., trace gas flux measurements, soil sampling, gas chromatography, eddy covariance); experience working on farms and with farmers. Experience using various statistical programs.

Training, Licenses or Certifications:

Required: A valid driver's license is required due to traveling to research sites throughout the U.S.

Knowledge, Skills, and Abilities:

Ability to work effectively as both a team member/leader and independently with minimal supervision. Basic computer skills (MS Word, Excel). Ability to plan and coordinate research activities. Effective communication, organizational, personal relations, and leadership skills. Ability to travel to research sites throughout the U.S. for short sampling campaigns. Prefer the ability to carry out statistical analyses.

Environmental Demands:

Ability to work long days in the field under hot and humid conditions.

Salary: Commensurate with experience and qualifications

Applications must be received by February 21, 2020. To apply, all candidates must submit an online profile through <https://jobs.illinois.edu> by the close of the posting period. The starting date is flexible as soon as April 1st. Qualified candidates must upload a letter that details qualifications noted above, resume, and the names and contact information of three professional references. All requested information must be submitted for your application to be considered. Incomplete applications will not be reviewed.

For further information about the position, please contact: Dr. Nuria Gomez-Casanovas, ngomezca@igb.illinois

The successful candidate will be supervised by Dr. Nuria Gomez-Casanovas and by Dr. Evan H. DeLucia.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.

The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit <http://go.illinois.edu/EEQ>. To learn more about the University's commitment to diversity, please visit <http://www.inclusiveillinois.illinois.edu>