

## **PhD Graduate Research Assistantship in Plant and Soil Sciences**

Agency: Mississippi State University

Location: Main campus in Starkville, Mississippi

Compensation: \$23,500 annual stipend plus tuition, fees, and health insurance for a period of 36 months

Start date: Summer/Fall semester 2024

Description:

The selected candidate will join a large, multi-university project that seeks to increase climate-smart market opportunities for mid-southern US corn and soybean producers. Our team expects to facilitate increased on-farm adoption of climate-smart practices and promote innovation and consistency in quantifying farm-level greenhouse gas benefits. Specific goals of the project include expanding adoption of conservation practices while also developing a process for cost-effective and accurate estimation of greenhouse gas production from climate-smart row crop production systems. This project also seeks to increase opportunities for historically underserved producers to obtain conservation financial and technical assistance.

The selected candidate, with appropriate supervision, assistance, and guidance from team members, will be responsible for necessary data curation and development of a regional model for greenhouse gas production from associated conservation practices implemented under the larger project.

Qualifications:

Required:

- Master's degree in agriculture, geosciences, or another related natural-resource-focused field
- Minimum qualifications for admission to the Graduate School of Mississippi State University and the Department of Plant and Soil Sciences

The most competitive candidates will also have:

- Proficiency with geographic information systems (GIS)
- Experience with GIS-based modelling
- Excellent written and oral communication skills

About us:

A land grant university, Mississippi State University (MSU), is among the < 3% of US universities that hold the Carnegie Foundation R1-Very High Research Activity designation. The National Science Foundation additionally ranks MSU among the nation's Top 100 research institutions for total research and development spending. In 2022, MSU received its third prestigious Higher Education Excellence in Diversity Award for institutional efforts to promote a culture of inclusion. The Graduate School at MSU offers numerous, meaningful opportunities for graduate students to develop professional skills, present research, and engage in leadership roles through their annual programming efforts. The job placement rate for MSU graduate degree holders consistently exceeds 90%.

Although the degree program is through the Department of Plant and Soil Sciences, the position is housed within the Geosystems Research Institute (GRI) at MSU. GRI is an interdisciplinary collaborative of academic scientists, engineers, and government and industry stakeholders active in conducting research to advance knowledge and practice on earth and its systems to improve policy and public awareness. All personnel at GRI have a core focus on geospatial technologies and their application to natural resource management. GRI is located within the Portera High Performance Computing Collaboratory within the Cochran Research, Technology, and Economic Development Park on the north side of the MSU main campus.

Application process:

Interested candidates should email Dr. Joby Czarnecki with a letter of interest and CV. Please include in the subject line, "CSP GRA Application." Review of applicants will commence November 15, 2023. Applications will close when a suitable candidate has been identified. Applicants who self-identify as coming from historically underrepresented backgrounds and/or first generational college students are highly encouraged to apply.

Contact: Dr. Joby Czarnecki, [Joby.Czarnecki@msstate.edu](mailto:Joby.Czarnecki@msstate.edu)