POSTDOCTORAL SCHOLAR

Who we are:
The Columbia Basin Agricultural Research Center (CBARC) is an Oregon Agricultural Experiment Station branch at OSU's College of Agricultural Sciences. The Pendleton Station is co-located with the Columbia Plateau Conservation Research Center, a unit of the USDA-Agricultural Research Service. Field research at CBARC emphasizes the production of wheat and rotational crops such as barley, legumes, and canola. Scientists at the Columbia Basin Center specialize in research and extension work essential to producing dryland field crops on 2 million acres in North-central and Northeastern Oregon. The mission of CBARC is to conduct research and extend knowledge to enhance agricultural production on non-irrigated croplands while protecting the environment and sustaining rural communities in Oregon and beyond.

Type of Position: The position is for a Postdoctoral Scholar in Soil Science. The initial appointment will be for one year, with renewal dependent on satisfactory performance and available funding for up to three years. This Postdoctoral Scholar position is restricted to individuals who have received their Ph.D. within three years.

Employer: Oregon State University

Location: The position is at the Columbia Basin Agricultural Research Center (CBARC) in Pendleton, Northeastern Oregon. Pendleton has a population of 17,000 and serves as a regional economic center with attributes of a larger city. Recreational opportunities abound at nearby rivers and mountains. https://agsci.oregonstate.edu/cbarc

Description of Duties: The incumbent will work under the newly formed Carbon Center. Specific duties include investigating the effects of dryland agronomic practices on soil organic carbon accrual, quantifying GHG emissions, developing models to predict soil carbon stock changes, elucidating the relationship between crop yields, grain nutrients, and spatial variation in soil attributes for different agronomic management practices.

The successful candidate will be expected to write scientific and extension publications from the mentioned studies and will also be expected to work in a team environment and contribute to the research interests and projects of the Carbon Center.

Education and qualifications: The qualified candidates should have received a doctoral degree in an agriculture-related field, soil science, engineering, earth systems science, environmental science, biogeochemistry, ecology, agronomy, environmental sciences, geosciences, and natural resources or a related field before the starting date.

It is essential to have:
- Understanding of agriculture or environmental sciences.
- Knowledge of terrestrial C cycling and/or GHG emissions from agricultural systems.
- Expertise in soil biogeochemistry and nutrient measurements in soils. Knowledge of chemical,
physical, and biological soil health indicators
• Experience in one or more soil biogeochemical models (DNDC, RothC, DayCent, etc)
• Proficiency in applying advanced statistical analyses. i.e., multivariate techniques in statistical analysis.
• Experience in developing and implementing algorithms supporting measuring, reporting, and verifying soil carbon and nutrients.
• Experience in field and laboratory research methods
• Ability to disseminate research findings in peer-reviewed publications.
• As appropriate, engage in collaborative research with different stakeholders regionally, nationally, and internationally.
• Applicants must have a valid driver's license or the ability to obtain a driver's license.

It is desirable to have:
• Experience with Geographic Information Systems (GIS) and remote sensing (expertise in UAV/Drones and processing multispectral and LIDAR data)
• Proficiency in R, Matlab, or equivalent software for efficient data handling
• Experience with machine learning algorithms and geospatial analysis
• Knowledge and experience working with GHG quantification methodologies.
• Applicants must have an interest in stakeholder engagement.
• Contribute to the development of grant proposals and progress reports.
• Experience working with people from a variety of culturally diverse backgrounds.

Salary: Stipend and benefits conform with postdoctoral scholar standards at OSU.

Closing Date of Competition: Application reviews will begin on October 27, 2023. However, recruitment will remain open until a suitable candidate is identified.

Date Position Available: December 1, 2023

Instructions to Applicants: All applicants should send a cover letter indicating their interest and qualifications related to the position along with a curriculum vitae and the contact information of 3 references via email with the subject line: CARBON POSTDOC POSITION to Stephen.Machado@oregonstate.edu.

Contact: If you have questions about the position, please contact Dr. Stephen Machado (email: Stephen.Machado@oregonstate.edu, phone: 541-215-8916)