

Postdoctoral Scholar Position

Department: HAREC, Botany and Plant Pathology

Position Title: Postdoctoral Scholar

Job Title: Postdoctoral Scholar

Job Location: Hermiston, OR

Appointment Percent: 100

Appointment Basis: 12

Start Date: March 1, 2024 (Or as negotiated)

End Date: April 30, 2025

Notes on end date: 12-months after start date, may be extended for an additional two years

Notes on Full Consideration Date: Open until filled

Faculty Status: Post Doctorate

Tenure Status: Fixed-Term

Pay Method: Salary

Salary: \$54,840

Position Summary:

This position contributes to the College of Agricultural Sciences (CAS) with principal responsibility for conducting outreach, education, and research for soil health and climate-smart practices for irrigated potato-based rotation systems to fulfill the mission of the USDA Partnership for Climate-Smart Commodities program. The overall goal of the project is to promote adoption of climate-smart agricultural practices that enhance soil carbon sequestration and reduce greenhouse gas emissions while maintaining potato tuber yield and/or quality. The postdoctoral scholar will creatively contribute to a coordinated effort as part of a three-state partnership involving farmers, industry and commodity organizations, and American Indian land managers in Oregon, Idaho, and Washington in partnership with faculty from OSU, University of Idaho, and Washington State University; private project partners including the Soil Health Institute, LoCo+, potato processing companies, and farmers.

Position Duties:**Research 35%.**

Participate in ongoing potato soil health research with emphasis on fieldwork and data analysis. Research topics may include but are not limited to: 1) Monitoring soil health indicators (SHI) (i.e., physical, chemical, or biological properties of soils) in irrigated potato and rotational crop fields in the Columbia Basin; 2) Analyzing existing data from cropping systems experiments and grower fields to identify redundant SHIs and define relationships between SHIs, agricultural practices, and potato yield and quality. This includes conducting statistical analyses to link soil and/or plant microbiomes to plant health and productivity. 3) Identifying system-specific conservation management practices and their associated value-added propositions, including values associated with ecosystem services. This may include estimating GHG emissions at the field and larger scales using COMET-Planner and COMET-Farm and other models. The postdoctoral scholar may also be responsible for helping verify soil C-sequestration through soil sampling for soil organic carbon and bulk density at the farm field scale.

Extension/Outreach 35%

Conduct outreach activities targeting stakeholder groups that are most relevant to the incumbents' research program. Activities must consider accessibility and inclusivity for all participants and include considerations for culturally sensitive and respectful engagement with Native American partners. Activities are expected to include: 1) Providing technical support to determine farmer eligibility and enroll farmers in the Climate Smart program. This includes helping to identify appropriate practices for farmers and tribal land managers to adopt that result in climate-smart outcomes and verifying that enrolled farmers implemented the climate-smart practices outlined in their management plans. 2) Organizing and

participating in field days, regional conferences, workshops, and grower meetings to communicate project results, findings, and management recommendations. These sessions will also be used to discuss decision support tools that can be used to identify alternative management practices for improving soil health and productivity. 3) Maintaining respectful relationships and communications with cooperating farmers and Native American land managers.

Scholarship 15%

Scholarship is creative, intellectual work that is both validated by peers and communicated. Examples of scholarship include: 1) Manuscript writing, development, and publication. 2) Collaborative activities with faculty, graduate students, etc. that result in scholarly outputs. 3) Synthesis of data and preparation of reports for funding agencies. 4) Procurement of competitive grants.

Professional development 15%

Create an individual development plan to establish career and project-based research goals and track progress towards achieving stated goals. Professional development opportunities may include: 1) Establishing collaborations with project personnel, graduate students, OSU faculty, and collaborating faculty at other institutions involved in this project. 2) Supervision and mentorship of technical staff, undergraduate student workers, and temporary employees; with input from the project PIs, the postdoctoral scholar will plan, assign, and approve work and assist with hiring. 3) Professional networking and soft skills development by participating in conferences, workshops, seminars, and training programs is expected, with supervisor approval. 4) Project report and grant writing experience, with supervisor approval.

Minimum Qualifications:

- PhD in plant pathology, soil science, agronomy, horticulture or related discipline.
- Basic or applied research experience in plant pathology, soil science, cropping systems, soil health concepts, soil microbiology, nutrient cycling in soils, and/or agricultural practices
- Demonstrated knowledge in agricultural production systems
- Demonstrated ability to communicate effectively both verbally and in writing; work independently and cooperatively within a team; and work and communicate with colleagues and industry stakeholders.
- Strong scientific writing and technical presentation skills.

Preferred Qualifications:

- Experience in securing extramural funding.
- Experience in data science, statistics, biometry, microbiome analysis, or bioinformatics
- Experience conducting field studies
- A record of effective project management
- Experience with potato production systems

Working Conditions / Work Schedule

Full time, on-site at HAREC in Hermiston, OR. Work is generally conducted in a laboratory, field, or office setting. Occasionally, research projects may require the postdoctoral scholar to work at atypical times (e.g., evenings, weekends) or in extreme weather conditions (e.g., hot or cold temperatures, rain, wind, etc.). Travel for on-farm meetings with farmers and field research, workshops with industry stakeholders and partners, and industry and professional meetings.

Special Instructions to Applicants

When applying you will be required to attach the following electronic documents:

- 1) A cover letter indicating how your qualifications and experience have prepared you for this position.
- 2) A resume/CV; and
- 3) 2 page Research Interest Statement
- 4) You will also be required to submit the names of at least three professional references, their e-mail addresses and telephone numbers as part of the application process.

For additional information please contact Ken Frost at kenneth.frost@oregonstate.edu.