



## **Two post-doctoral research associate positions available at Purdue University to participate in a project aimed at building capacity and enhancing the livelihoods of small-holder farmers in the Colca River Valley, Arequipa, Peru.**

**Project:** Building soils, communities, and profits with organic farming systems.

### **Job Summary**

We are seeking TWO postdoctoral research fellows to work on an [Arequipa Nexus Institute](#) funded project aiming to address organic farming systems challenges in the Colca River Valley of Arequipa, Peru. The long-term goal of this project is to help farmers improve the sustainability of their operations by transitioning to organic farming systems. To help them realize this goal, the project will identify opportunities and barriers to organic farming in this region, work with farmers to improve the health of their soil and increase the productivity of their crops and provide workshops that can help farmers and other local stakeholders overcome specific challenges and adopt improved farming methods.

### **Position #1**

The person in this position will take a lead role in developing and carrying out surveys of farmers and other relevant stakeholders to identify opportunities and barriers to organic farming systems in the region. He/she will also assist with the identification of metrics that can be used to quantify the success of the project, and work with the project team to collect and analyze data and track our efforts in meeting these metrics. Finally, he/she will participate in all engagement activities, and take a lead role in developing new methods for educating local farmers and other stakeholders. This position will be based in the Dept. of Agricultural Sciences, Education and Communication under Dr. Julia Bello-Bravo, and work closely with NEXUS project coordinator, Dr. Rosa Cossio.

**Qualifications:** PhD in Agricultural Education/Communication, Social Science, or related field. Experience with social science research methods (e.g., planning/managing interviews, focus group discussions, case studies) and data management. Experience writing reports containing descriptive, analytical, and evaluative educational content, and experience in creating digital tools, communicating with local audiences, and organizing and conducting trainings.

### **Position #2**

The person in this position will take a lead role in quantifying and evaluating relationships between soil properties and crop health and productivity on a diverse set of local farms. This will include collaborations with local farmers to produce and evaluate the positive and negative impacts on crop productivity and disease suppressive capability of bokashi composts on their farms. They will also work closely with the post-doc in the **Renewable energy for high-mountain Andean communities (CERCA)** project to install sensors and track environmental variables in bokashi bins and an earthen greenhouse-like structure. Finally, they will engage small holder farmers in training activities and serve as a mentor to UNSA faculty, staff, and students. The position will be based in the Dept. of Horticulture and Landscape Architecture under Dr. Lori Hoagland, and work closely with Assistant Director for Program Development in Purdue's International Programs in Agriculture Office, Gary Burniske.

**Qualifications:** PhD in Soil Science, Agronomy, Horticulture or related field. Experience with quantifying various soil properties and plant biotic and abiotic stress responses. Experience using both culture dependent and molecular tools to quantify soil/plant microbiomes and conducting on-farm participatory research trials preferred.



## AREQUIPA NEXUS PHASE III

***Both post-doctoral positions require that candidates be fluent in both English and Spanish. Experience working in Latin America, especially Peru, preferred. Strong communication and critical thinking skills, attention to detail and problem solving, an ability to work in harsh environments at high altitudes and self-motivation are expected. All positions will be based at Purdue University in West Lafayette, IN, but will also work closely with faculty at the National University of San Agustín, in Arequipa, Peru, and engage in extended periods of travel in southern Peru.***

To apply for position #1, please submit a CV including names and email addresses of three references, an unofficial copy of graduate transcripts, and statement of interest addressing your research interest and experience on the areas of the project, to Dr. Bello-Bravo [mbellobr@purdue.edu](mailto:mbellobr@purdue.edu) and/or Dr. Cossio [rcossio@purdue.edu](mailto:rcossio@purdue.edu).

To apply for position #2, please submit a CV including names and email addresses of three references, an unofficial copy of graduate transcripts, and statement of interest addressing your research interest and experience on the areas of the project, to Dr. Lori Hoagland [lhoaglan@purdue.edu](mailto:lhoaglan@purdue.edu) and/or Gary Burniske [gburnisk@purdue.edu](mailto:gburnisk@purdue.edu).

\*For best consideration, applications should be **submitted by February 17<sup>th</sup>, 2023**. Review of applications will continue until positions are filled, and interviews will be conducted over zoom. The position is anticipated to start in March 2023 with a 2-year appointment. Salary will be commensurate with training and experience.