Postdoctoral Researcher Positions-Purdue University

We are looking to hire 2 postdoctoral researchers, with appointments of up to 2.0 years, to participate in a soil and water vulnerability and impairment research project within the newly created Arequipa Nexus Institute for Food, Energy, Water, and the Environment. Purdue University’s Center for the Environment and the Universidad Nacional de San Agustin (UNSA) in Arequipa, Peru will, over the course of this multi-year, multi-disciplinary partnership, investigate key environmental, land use, agroeconomic, and social challenges limiting the development of adaptive, profitable, and sustainable food-energy-water systems in the Arequipa Region of Peru.

The two successful candidates, part of a cohort of 23 new postdoctoral researchers hired within the Nexus Institute in 2018-2019, will investigate soil and river sediment dynamics from the Andean terraced region to the desert lower elevation environments that are under intensive irrigation. The research will emphasize - a) measurement and modelling of the speciation and transport of metals from legacy mines and naturally eroded ore deposits; b) metal organic matter interactions in water, soil, and sediment, and; c) the biogeochemical, with an emphasis on organic and stable isotope geochemistry, controls on soil organic matter stabilization/destabilization in desert, flood plain, and terraced systems.

Candidates for this position should have recently completed their PhD, or should expect to complete their degree requirements by the negotiated start date, in either soil science, geochemistry, biogeochemistry, soil ecology, agriculture, terrestrial ecosystem science, or environmental engineering. Scientific or technical fields providing training in environmentally-related remote and ground-based sensing, as well as data visualization and mapping of soil and landscape properties are also desired. Candidates interested in this position should have a record of scientific achievement, excellent verbal and written communication skills, and an interest in working in an international and interdisciplinary environment geared toward investigating problems related to environmental sustainability. Past participation in international research projects and Spanish language skills are highly desirable. While the postdoctoral positions are based at Purdue University, West Lafayette, IN, USA the successful candidates will be expected to engage in field and laboratory work in Peru, primarily in the Arequipa region, for extended, multi-week periods of time.

Applicants should supply (a) a curriculum vitae (b) a statement of research interests and goals (maximum 2 pages) and (c) e-mail address of three references to: Timothy Filley - [Filley@purdue.edu](mailto:Filley@purdue.edu). Application review will begin immediately with appointments beginning as early as Jan 7, 2019.

Note: I will be at AGU and can set up interview times there.

Arequipa Nexus Institute <http://purdue.edu/dp/arequipa-nexus> (Twitter - arequipa\_nexus)

Center for the Environment - <http://www.purdue.edu/discoverypark/environment/index.php>

PSI-Lab - <http://eaps.purdue.edu/psi/>

Soilexplorer - <https://soilexplorer.net/>