

The University of Arizona Biosphere 2 is seeking a postdoctoral scientist for a position in Geobiology: Microbial Ecology of the Landscape Evolution Observatory. The successful candidate will join an interdisciplinary team of Earth surface scientists conducting NSF-funded experiments at the Landscape Evolution Observatory (Biosphere 2, University of Arizona, Tucson, AZ).

The Landscape Evolution Observatory (LEO) contains three, highly-instrumented, convergent hillslope models (each 30 x 12 m) with 1m depth of granular basaltic porous media that will be subjected to controlled climatic forcing. The goal of this work is to quantify the structural 'soil' and hillslope evolution that accompanies microbial colonization of the geological substrate, and the associated biogeochemical weathering and hydrologic flow path development. The research team is a collaborative group of hydrologists, geochemists, and microbiologists.

Current extramural support for LEO research is for interdisciplinary efforts to unravel feedbacks among hydrologic flow, microbial colonization, and geochemical reactions in the weathering basalt by combining direct observations (collected densely in time and space) with reactive transport theory (simulations of fluid flow coupled to biogeochemical reaction). The system is unprecedented in its combination of environmental control and spatial scale (see <http://b2science.org/leo>).

The microbial ecology postdoc will be responsible for assessing the ecological assembly, phylogenetic, and functional diversity of microbial communities colonizing the rock surfaces, and their change over the course of the experiment.

The candidate will be provided space in well-equipped microbiology and biogeochemistry laboratories (associated with the research groups of Profs. Jon Chorover, Raina Maier and Rachel Gallery) and provided full access to supporting analytical core facilities.

Qualifications for this position include a Ph.D. in microbial ecology or a related field with a strong background in molecular microbiological tools (e.g., genomics, proteomics, transcriptomics). This is one year position with possible renewal for a 2nd year based on availability of funds and performance.

Outstanding UA benefits include health, dental, vision, and life insurance; paid vacation, sick leave, and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; access to UA recreation and cultural activities; and more!

Please direct questions to Peter Troch (patroch@email.arizona.edu) and submit a CV, letter of interest, and statement of research through:

www.uacareertrack.com/applicants/Central?quickFind=215000