Postdoc position on soil warming and iron biogeochemistry in tropical forests

Description: We invite applications for a postdoc position across diverse skillsets that intersect with soil biogeochemistry. The successful candidate will conduct research into how soil warming impacts iron and carbon cycling in humid forests within the Luquillo Experimental Forest, Puerto Rico.

The candidate will conduct detailed laboratory experiments on iron oxidation/reduction kinetics coupled to carbon mineralization in warmed incubations, conduct detailed microbial analysis and interpretation using Stable Isotope Probing to identify active microbes responding to treatments, and interface with numerical modelers to develop integrated soil models for humid tropical soils. The project is jointly led by Aaron Thompson (U Georgia), Jennifer Pett-Ridge (LLNL), and Salvatore Calabrese (TAMU).

The selected candidates will conduct fieldwork in the Luquillo Experimental Forest, Puerto Rico, part of the NSF sponsored Long-term Ecological Research Program Critical Zone Observatory, and the DOE and USFS sponsored soil warming research site at TRACE (www.forestwarming.org). Laboratory incubations and experiments will take place at the University of Georgia, with several trips planned to Lawrence Livermore National Lab for collaborations. In addition, the postdoctoral fellow will be expected to generate original research questions related to the project. These may include complementary experiments or novel analytical avenues.

Required Qualifications: The postdoctoral fellow must have earned their Ph.D. by June, 2023. Applicants should hold a Doctoral degree in ecosystem ecology, biogeochemistry, chemistry, microbiology, geoscience, soil science or a related discipline. Publications in peer reviewed journals as a first author is mandatory. Candidates must demonstrate experience and expertise in soil carbon or iron cycling, microbial ecology, and have a broad perspective of ecosystem processes.

Desired Qualifications: Candidates should exhibit a strong ability to collaborate with an interdisciplinary team. Prior experience with a wide range of field and lab analytical techniques or microbial analysis is desired. Strong organizational and communication skills (both oral and written), and a high level of productivity should be demonstrated. Spanishlanguage fluency is helpful, but not required.

Application instructions:

Please send a single pdf-file including: (a) a cover letter outlining research interests; (b) a CV; and (c) the contact information for 2 referees. The pdf-file should be sent via email with [HotSoilIron-postdoc] in the subject line to AaronT@uga.edu and pettridge2@llnl.gov. Evaluation of the applications will start April 15, 2023 and continue until a suitable candidate is hired. Start date can be as soon as May, 2023 or as late as August, 2023.