Life Sciences Seminars

BERKELEY LAB
Lawrence Berkeley National Laboratory

"Toward X-Ray Vision: Characterizing In-Situ Controls on Microbially-Mediated Ecosystem Behavior"

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Earth & Environmental Sciences Area
Berkeley Lab

Microbes in terrestrial environments play a critical role in water resources, contaminant remediation, agricultural sustainability and the cycling of carbon and other life-critical elements. Although needed for effective management of ecosystem resources, approaches to characterize and predict the complex interactions between microbes, minerals and migrating fluids that emerge within heterogeneous terrestrial environments are lacking. Developed as part of the Next Generation Ecosystem Experiment, this presentation will describe a geophysically-based functional zonation approach to quantify regions in an Arctic landscape that have similar microbially-mediated behavior. The presentation will also briefly describe the 'Genomes to Watershed' project, which is developing genome-enabled approaches to predict how the microbiome affects biogeochemical watershed functioning, how watershed-scale processes affect microbial functioning, and how these interactions co-evolve with climate and land-use changes.

Tues., Sept. 8th
4:00 p.m.

717 Potter Street
Room 141
Berkeley Lab

Host:
Susan Celniker

Schedule of Seminars: lsd.lbl.gov/News_&_Events/seminars.html
Non-LBNL attendees: please RSVP to FGuagliardo@lbl.gov or 510-486-6490