Post-Doctoral Research Associate in Soil Microbiome / Ecosystem Genomics

Start date: Early 2020

The Soil EcoGenomics Laboratory at University of California – Davis is looking for a creative post-doctoral scientist with strong background in soil microbiome and metagenomics to join an interdisciplinary team working on on-farm groundwater recharge, agricultural management practices, and their effects on the nitrogen cycling.

Responsibilities: This researcher will assist the research team in conducting agricultural ground water recharge experiments in the field and assess soil nitrate fate and soil microbiological processes associated with nitrogen cycling. During these experiments farm fields will be flooded with water to infiltrate the water into the soil for groundwater recharge. The research team is interested in investigating how this practice is influencing nitrate leaching and nitrogen transformation processes in the soil and how these processes are enabled by microbial communities. The researcher is expected to be familiar with DNA extraction from deep soil cores, to quantify genes associated with N gaseous fluxes (N₂O and NOₓ) through quantitative PCR and metagenomic analysis pipelines to inform trait-based microbial models of N cycling.

Qualifications: Applicants should have the following qualifications to be considered:
1) PhD in microbial ecology, soils and biogeochemistry, microbiology or related field.
2) Experience in molecular biology, 16S rRNA and functional gene high throughput sequencing.
3) Evidence of scientific productivity in the form of peer-reviewed publications related to metagenomic analysis is required.
4) Evidence of excellency in communicating science.
5) Ability to take a leadership role for specific components of the project associated with soil sampling, processing, and analyses of metagenomic samples and ability to work independently as well as a productive member of a team.

Salary and Benefits: Salary is commensurate with experience. Health, dental, and life insurance benefits are provided. The appointment is for 1 year with possibility of extension for an additional year pending satisfactory progress.

Application: Interested applicants should send via e-mail (1) a cover letter detailing the applicant’s research experience and starting date availability, (2) curriculum vitae, and (3) name, telephone numbers and e-mail addresses of three professional references to Dr. Jorge Rodrigues (jmrodrigues@ucdavis.edu).
Please, include the following in the subject line of the e-mail: “Your Last Name - PD Application”

For more details about the Soil EcoGenomics Laboratory, please visit: http://rodrigues.ucdavis.edu/