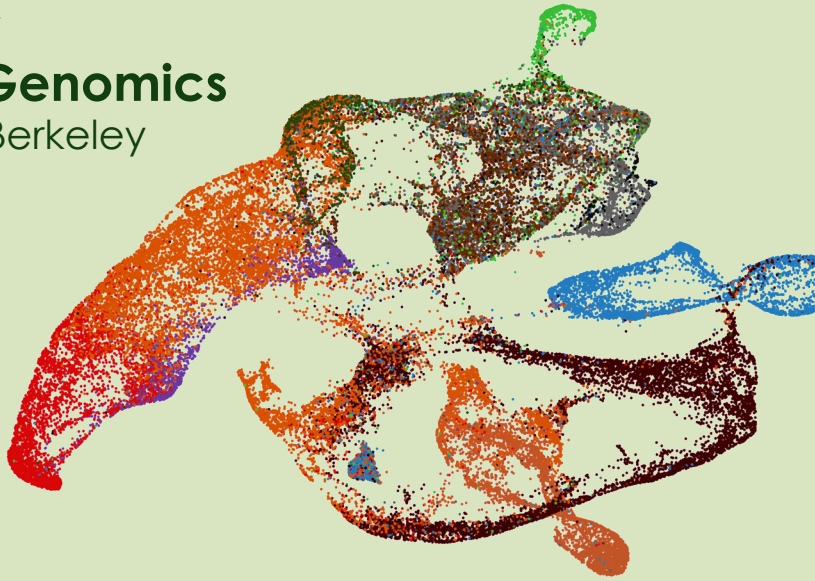


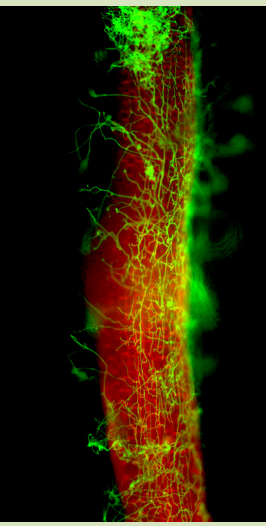
Postdoc Opportunity

Plant/Microbe Functional Genomics

DOE Joint Genome Institute, Berkeley
Visel Lab



The Joint Genome Institute (JGI) has an exciting postdoctoral opportunity to participate in ongoing research directed at understanding complex plant-microbial interactions at their most fundamental level. Under the supervision of Axel Visel, and in collaboration with Diane Dickel, Ronan O'Malley, and external academic groups, the selected candidate will be involved in a project utilizing functional genomics and single-cell transcriptomics strategies to understand how microbes discover, assemble within, and impact their plant hosts. The candidate will use established model species (e.g. *Arabidopsis thaliana, Brachypodium distachyon*) and plant-colonizing microbial species (including commensal bacteria and plant growth-promoting fungi) to study various facets of plant-microbial interaction, including colonization, growth promotion, and stress responsiveness. These efforts will ultimately inspire bioengineering strategies for bioenergy crop improvement. The project will leverage the varied sequence-based science and computational capabilities at JGI, as well as new or existing collaborations with JGI scientists and users. The position will be located at the Integrative Genomics Building, a brand new 81,000 sqft research facility on the Lawrence Berkeley Lab campus opened in November 2019.

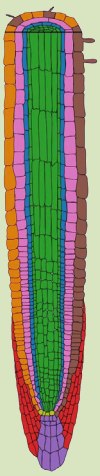


Responsibilities

- Develop sequencing-based high-throughput screens and single-cell transcriptomics approaches for examination of plant/microbial processes
- Develop strategies to assess phenotypic impact of various microbial mutants and/or engineered microbes on host
- Work with other JGI scientists on functional genomics analyses on bioenergy-relevant crops
- Analyze and summarize data and present findings at internal lab meetings and scientific conferences
- Develop and coordinate downstream experimental studies derived from this work with outside collaborators
- Publish in peer-reviewed journals and contribute to scientific research papers and reports

Qualifications

- Ph.D. in biology, microbiology, botany, genetics, genomics, computational biology or a related field
- Solid understanding of general plant biology, preferably including plant/microbial interactions
- Experience with model plant systems and/or single-cell transcriptomic analyses a plus
- Experience in computational sequence data analysis
- Experience with molecular biology techniques, such as DNA/RNA extraction and analysis methods
- Strong interest in genomic and functional genomic questions and in the use of computational strategies to derive biological insights from sequence data
- Demonstrated scientific productivity through publications in relevant peer-reviewed journals
- Effective oral and written communication skills



This is a 2 year postdoctoral appointment with the possibility of renewal. Work will be performed at the DOE Joint Genome Institute (JGI) – Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, CA 94720.

Informal inquiries regarding this position should be directed to Axel Visel: avisel@lbl.gov

For additional details and applications, go to http://m.rfer.us/LBLTZx2Di

Berkeley Lab addresses the world's most urgent scientific challenges by advancing sustainable energy, protecting human health, creating new materials, and revealing the origin and fate of the universe. Founded in 1931, Berkeley Lab's scientific expertise has been recognized with 13 Nobel prizes. The University of California manages Berkeley Lab for the U.S. Department of Energy's Office of Science.

Berkeley Lab is an Equal Opportunity / Affirmative Action Employer.

