

Postdoctoral Position Available Metagenomics Diversity Analysis



**Research Group of Steven Brenner
University of California, Berkeley**

Project background

The microbes that inhabit human bodies outnumber the human cells by an order of magnitude, and impact many aspects of health and disease. Understanding this endogenous microbiota is a key extension of efforts to understand the human genome and the role of genetic variation on health and disease. The Human Microbiome Project is characterizing these microbial communities using metagenomic sequencing.

Project description

The successful applicant will develop new methods to understand microbial community composition and dynamics, and to describe how human microbial communities vary over time and space, through health and disease. To accommodate the vast disparities in abundance and phylogenetic distinction found in different environments, the new diversity measures used will need to be more complex than those traditionally used by ecologists, while still being simple enough to easily understand and apply. This project unites disciplines including microbiology, ecology, evolutionary biology, and applied mathematics.

Position requirements

Candidate should have Ph.D. or M.D. with a strong publication record and strong professional references. The ideal applicant will have strong quantitative and computational skills, and experience with environmental microbiology and with genome analysis. The development of new microbial diversity measures also requires mathematical sophistication and excellent scientific judgment. Excellent communication skills are required for effective interaction with the multidisciplinary cohort of researchers in our laboratory and with collaborators.

The Berkeley academic environment

The Brenner lab is an interdisciplinary research group, at the University of California, Berkeley, one of the world's premiere research universities. We are associated with the Department of Plant and Microbial Biology, the Department of Bioengineering, the Department of Molecular and Cell Biology, the Biophysics Graduate Group, and Lawrence Berkeley National Lab. Key collaborators for this project include Rob Knight at the University of Colorado at Boulder, as well as many metagenomics researchers at the University of California, Berkeley. The University of California, Berkeley is committed to diversity in its staff, faculty, and student body, and invites all qualified people to apply, including minorities and women, veterans and individuals with disabilities.

The University of California is an Equal Opportunity/Affirmative Action Employer.

Interested applicants should send CV, letters of reference, and statement of interest to
jobs@compbio.berkeley.edu

For more information, see <http://compbio.berkeley.edu/>