

The Lofgren Mycology Lab in the Dep. of Plant & Microbial Biology at the University of California Berkeley (opening January 2025), invites applications for two postdoctoral scholar positions

Position 1:

This three-year project aims to quantify the impact of fungal competition on the primary and secondary metabolomes of plant-associated fungi and the downstream impacts of competition and antagonism on symbiosis. Using the model ectomycorrhizal genus *Suillus*, the project uses controlled in vitro experiments, metabolomics, and stable isotope analysis to identify metabolite pools, quantify the cost of metabolite production, and characterize metabolite bioactivity. Applicants with experience in chemical ecology, stable isotope analysis, and LC or GC-based metabolomics should highlight these skills in their cover letter.

Position 2:

This three-year project aims to utilize and advance the utility of newly developed transformation platforms for filamentous fungi, allowing us to link ecological frameworks to genetic mechanisms. Project goals include the manipulation of primary and secondary metabolic pathways and the characterization of nuclear migration and nuclear regulation in dikaryotic basidiomycetes. Applicants with experience in fungal tissue culture, microscopy, and fungal molecular biology including transformation, protoplasting, and RNA-Seq should highlight these skills in their cover letter.

About us:

Our group works at the intersection of computational and experimental mycology to explore the ecological and evolutionary mechanisms of symbiosis. We value diverse perspectives, deep-thinking, engagement, mentorship, communication, respect, and collaboration. All lab members contribute to group-wide and project-specific research goals and have the opportunity to develop independent research trajectories within the framework of the lab. If you are interested in fungal ecology and biology, ecological theory, comparative genomics and bioinformatics, and exciting tools for studying symbiosis (e.g., metabolomics, isotope tracing, transformation), we want to hear from you.

Both positions are full-time, and planned for a total of three years. The start dates are flexible but will ideally be between January and March 2025. Both projects will be conducted in-person on the UC Berkeley campus in Berkeley, California, USA. UC Berkeley is the top-ranked public university in the US, and postdocs enjoy a competitive salary, access to campus housing, child care benefits, and numerous career development opportunities. The Department of Plant and Microbial Biology provides a vibrant and supportive academic environment with a long history of producing groundbreaking research in mycology. Additionally, there will be opportunities to interact and collaborate with other local units including the Joint Genome Institute, the Innovative Genomics Institute, and Lawrence Berkeley National Laboratory.

To apply:

Please send the following as a single PDF to Lotus Lofgren at LotusLofgren@gmail.com:

- 1. A 1-2 page cover letter that outlines your research interests, experience, professional goals, and motivation for applying.
- 2. A current CV.
- 3. The names and contact information for three references (reference letters are not needed during the initial stage).

Please include the subject line and document title "Postdoc Application Position <1 or 2> <your last name>". Applications will be reviewed on a rolling basis, using a holistic approach to assess the unique strengths of each applicant. For more information see www.lotuslofgren.com