Postdoc and student opportunities in the Amend Lab, University of Hawai'i at Mānoa

The Amend lab at University of Hawai'i at Mānoa amendlab.com is recruiting 2 postdoctoral researchers and one graduate student to work on projects funded by the National Science Foundation, and the Gordon and Betty Moore Foundation, focused on the diversity, evolution and ecology of Basidiomycete yeasts in Hawai'i. In all cases, the trainee would have substantial latitude to develop independent lines of inquiry tailored to their specific skillset and interests.

Salary for Postdocs is contingent on experience, but will exceed NIH guidelines. Initial appointment is for one year, with the possibility for renewal.
Student salary will be paid at step 20 https://manoa.hawaii.edu/graduate/compensation-tax-withholding/, and includes tuition waiver.

Potential applicants should contact Anthony Amend Amend@hawaii.edu with a cover letter, CV, and contact information for three references.

Project 1: Phylogenomics of Pucciniomycotina Yeasts in divergent Hawaiian habitats.

The main goals of this project are to 1) develop novel and high-throughput isolation strategies to characterize novel yeast diversity from divergent and unusual Hawaiian habitats, 2) examine yeasts in animal guts, and the potential for co-cladogenesis between yeasts and hosts, 3) leverage the environmental heterogeneity of Hawaiian climates to understand the evolution of yeast environmental specificity/generalism, and larger global diversity patterns.

Yeast mutualisms play critical and documented roles in conservation of Hawaiian plants and animals, and there is the opportunity for project personnel to develop conservation research pursuits leveraging yeast systems. We also have ongoing research into yeast degradation of plastics. There are three years of funding for a graduate student, and up to three years of funding for a Postdoc on this project. Graduate students would likely apply via the Botany Department at UHM https://manoa.hawaii.edu/lifesciences/graduate/

- Genomics, phylogenomics, excellent sterile technique, and facility with macro-ecological and biogeographic analyses will be useful for personnel on this project.

Start date for the Postdoc is January 2025, with some flexibility pending circumstances.
Start date for the graduate student is Fall 2025.

Project 2: Developing a marine fungal model system focused on the Basidiomycete yeast *Malassezia*.

This fungus is frequently detected in marine fungal datasets, and may play a critical role in marine fungal C cycling. Attempts to further understand the ecology and evolution of this yeast

have been hindered by the difficulty involved in its cultivation. The Postdoc on this project will leverage existing visualization and molecular tools to develop novel cultivation and metagenomic strategies to better understand the functional role of this yeast. This postdoc is part of a large collaborative project, and will have the opportunity for extended stays colleagues in Woods Hole, Duke, University of Michigan, and/or University of Washington to participate in training and research activities. The postdoc will be able to make use of our marine lab, research cruise infrastructure, and global collaboration network to contribute to other pressing questions in marine fungal biology. There are two years of funding for a Postdoc on this project.

- Comparative genomics, fluorescence microscopy, experience isolating fastidious micro-organisms, and microfluidics-engineering/fabrication will serve this researcher well.

Start date for the Postdoc is November 2024, with some flexibility pending circumstances.