

## DEPARTMENT OF MICROBIOLOGY AND PLANT PATHOLOGY FACULTY RECRUITMENT CANDIDATE SEMINARS:

### Assistant Professor in Fungal Biology

**In-Person Seminar Location:**  
Genomics Auditorium 1102A



**ZOOM Link for Seminar:**  
<https://ucr.zoom.us/j/91264925918>  
**Meeting ID:** 912 6492 5918

**Vayu Hill-Maini, Postdoctoral Fellow, UC Berkeley**

**Research Seminar:**  
**Thursday, March 7, 2024 | 12:00 p.m. – 1:00 p.m.**

**Seminar Title: “From lab to table: harnessing filamentous fungi for a sustainable food system ”**

**Abstract:** The food system contributes approximately a third of global greenhouse gas emissions. Transitioning food production from resource-intensive industrial animal agriculture towards microbial processes is critical for minimizing these planetary impacts and feeding a growing population. Filamentous fungi, a diverse group of microorganisms that includes molds and mushrooms, are uniquely positioned to lead this shift towards a more sustainable food system. Here we will discuss our work bridging approaches from gastronomy, synthetic biology, and systems biology, to unlock the potential of filamentous fungi for sustainable and delicious foods. Working between the lab, restaurant kitchens, and traditional producers, we have uncovered mechanisms for efficiently upcycling food waste into human food, created new synthetic biology tools that enabled fungal bioengineering for enhanced nutrition and sensory appeal, and translated lab discoveries to new dishes at Michelin-starred restaurants. Long-term, this work should enable efforts to design fungal foods for health, sustainability, and flavor.

**Seminar Host: Dr. Hailing Jin**