

Postdoctoral Scholar in Marine Microbial Genomics and Fungal Ecology

PI: Dr. Xuefeng (Nick) Peng

Department: Evolution, Ecology and Organismal Biology (EEOB)

Location: The Ohio State University, Columbus, OH (in-person only)

Appointment: Full-time; one year, renewable based on performance and funding

Salary: Starting at \$62,232, commensurate with experience

Start date: Flexible within 2027

Application review: Begins January 11, 2027; open until filled

Position Summary

The Peng Lab at The Ohio State University seeks a postdoctoral scholar to investigate how marine fungi degrade complex organic matter and interact with bacteria to influence ocean carbon cycling. The postdoc will develop and lead research using existing metagenomic, metatranscriptomic, and fungal genomic datasets from the ocean water column and marine sediments. We seek a researcher with strong computational skills, experience translating sequence data into biological insight, and an interest in developing mechanistic explanations for microbial processes. Wet-lab and field experience are welcome but not required.

Position Description

- Analyze environmental metagenomes and metatranscriptomes to characterize fungal and bacterial metabolic potential and gene expression associated with organic matter degradation and nitrogen cycling.
- Conduct comparative genomic analyses of marine and terrestrial fungal genomes to identify key evolutionary adaptations and ecological distinctions.
- Lead manuscript preparation and conference presentations, mentor students, and contribute to grant proposals.
- Opportunities for research cruises and laboratory work will be available according to the postdoc's interests and project needs.

Qualifications

Required

- Ph.D. by the start date in oceanography, geosciences, microbiology, molecular biology, bioinformatics, computational biology, marine science, or a related field.
- Experience taking metagenomic, metatranscriptomic, and/or genomic data from raw reads to biological insight.
- Proficiency in R or Python and in Linux-based high-performance computing.

- First-author, peer-reviewed publications commensurate with career stage.

Preferred

- Experience annotating fungal or other eukaryotic genomes and transcriptomes.
- Excellent written and verbal communication skills.
- Wet-lab skills (e.g., cultivation, geochemical measurements of nitrogen and carbon) and/or field experience.

Living in Columbus

Home of the Buckeyes, The Ohio State University is located in the capital and largest city of the Buckeye State, Columbus, OH, also known as the “Arch City.” Ohio State is a silver-rated Bicycle Friendly University recognized by the League of American Bicyclists, and the Olentangy Trail runs right through campus. Columbus is a vibrant, fast-growing city known for its welcoming community and diverse culture. From the historic brick streets of German Village to the galleries and restaurants of the Short North, the city features a thriving food scene, world-class art museums, music festivals, and top-tier public park systems like the Scioto Mile downtown.

How to Apply

Applicants should submit: 1) A cover letter describing research interests and relevant experience; 2) Curriculum vitae; and 3) Contact information for three references. Applicants should submit all materials via email to Dr. Xuefeng (Nick) Peng (peng.1371@osu.edu) with the subject line “Postdoc Application”.

The Ohio State University is an equal opportunity employer.