UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

College of Liberal Arts & Sciences
Department of Microbiology
B103 Chemical & Life Sciences Laboratory, MC-110
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Urbana, IL 61801-3658

## Postdoctoral Researcher in Soil Microbial Metagenomics and Climate Change

The Department of Microbiology at the University of Illinois Urbana-Champaign (UIUC), an ASM Microbiology Milestones site with a long-standing tradition of excellence in microbial physiology and environmental microbiology, invites applications for a postdoctoral researcher position. The successful candidate will also be affiliated with the Carl R. Woese Institute for Genomic Biology (IGB), a world-class interdisciplinary research institute offering cutting-edge facilities, collaborative opportunities, and an outstanding intellectual environment.

The postdoctoral researcher will investigate the impacts of long-term climate change on soil microbial communities and their functional dynamics, with a focus on linking microbial diversity, genomic potential, and ecosystem processes.

**Research approaches may include:**

- Metagenomic sequencing and analysis of soil microbial communities
- Genome-resolved metagenomics (MAG reconstruction, binning, and annotation)
- Long-read sequencing and epigenomics to characterize DNA methylation and regulatory mechanisms
- Integration of multi-omics datasets (metagenomics, metatranscriptomics, etc.)
- Application of artificial intelligence and machine learning approaches to analyze large-scale environmental datasets

The successful candidate will join a dynamic and diverse research team at UIUC and benefit from active collaborations with leading research groups, including the Institute for Environmental Genomics (IEG, https://www.ou.edu/ieg, led by Dr. Jizhong Zhou) and the DOE Joint Genome Institute (JGI). These collaborations provide access to extensive multi-omics datasets, advanced computational infrastructure, and high-performance sequencing resources.

**Your profile:**

- PhD in microbiology, microbial ecology, bioinformatics, environmental science, or a related field (candidates expecting to defend before the start date are welcome to apply)
- Strong publication record
- Experience in metagenomics, bioinformatics, microbial ecology, and/or computational biology is highly desirable
- Familiarity with genome binning, MAG reconstruction, or long-read sequencing and epigenetics analysis is a plus
- Strong organizational and communication skills
- Ability to work independently as well as collaboratively in interdisciplinary teams
- Proficiency in written and spoken English

**To apply:**
Please contact **Wei Qin (weiqin@illinois.edu)** for informal inquiries and applications.

Applications should include:

- A cover letter (max. 1 page) outlining your research interests and relevant experience
- Your CV, including contact details for two references
- A copy of your PhD degree certificate (or expected defense date)

**Application deadline:** July 15, 2026
**Start date:** September 1, 2026