



Pacific Northwest
NATIONAL LABORATORY

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Pacific Northwest National Laboratory

Earth Systems Scientist

PPNL Job ID: 308570

Description

The Ecosystem Science Team at the Pacific Northwest National Laboratory (PNNL) is seeking an Earth Systems Scientist with expertise in understanding how microbial communities impact systems ranging from soil and wetlands to human and animal health. A key emphasis is on achieving a systems-level understanding of the interactions between community members and those members and their environment that contribute to community properties and processes. Multi-disciplinary research should link advanced genome-informed, multiomic science with biogeochemistry and ecology to address Department of Energy mission areas in fundamental biology and earth and environmental sciences.

Topics of research focus should include, but are not necessarily limited to, primary Department of Energy (DOE) mission areas of microbial cycling of carbon, response of microbial processes and communities to predicted climate disturbances and other environmental perturbations and how environmental gradients (e.g., geochemical) impact the structure and function of microbial communities. The candidate's research strategies should emphasize a systems approach utilizing (meta)genomics to reconstruct the metabolism of members of microbial communities, especially organisms we know little about and/or lack representative cultures.

This position features opportunities for collaborative research with PNNL scientists whose expertise spans a broad range of environmental, material, and computational sciences. The successful candidate will have access to extensive research capabilities including controlled microbial cultivation for a broad range of phenotypes, systems biology analytics (e.g., proteomics, transcriptomics, metabolomics), molecular biology and protein purification/characterization, advanced imaging, bioinformatics, and computational modeling. The successful candidate is expected to further develop scientific leadership skills within the BSD Ecosystem Sciences Team.

The successful candidate will have domain expertise in below-ground biogeochemistry and hydrology, and will be expected to pursue team-based multi-disciplinary science. The scientist will have access to extensive research capabilities including lab- and field- research systems, multiomic analytics (e.g., proteomics, transcriptomics, and metabolomics), bioinformatics, advanced imaging, and computational modeling. The successful candidate is expected to have a strong publication record and leadership qualities, and demonstrated ability to work effectively and independently within a

diverse group of investigators. S/He will also have opportunities to contribute to the mentoring and development of junior scientific staff. The candidate will have the opportunity to participate in setting national and/or international research agendas and will have obtained recognition via publications, awards, citations, or other honors.

This position is located in Richland, WA

Minimum Qualifications:

- BS/BA with 7 years of experience, MS/MA with 5 years of experience, PhD with 3 years of experience

Preferred Qualifications:

- Ph.D. in an area of microbiological or environmental science with at least 7 years' experience.
- Demonstrated ability to attract and carry out R&D programs as evidenced by funding and publication record.
- The ideal candidate will have a strong publication record and have the potential and interest to further develop strong leadership qualities; s/he will also have opportunities to contribute to the mentoring and development of junior scientific staff.

Technical Expertise:

Ability to lead integrated research activities in support of existing and future projects, with responsibility for overall technical approach and execution. The ideal candidate will demonstrate an interest in multi-disciplinary research; experience in the empirical and theoretical study of Earth systems; an interest in applying new approaches; and knowledge to DOE missions.

Level of Responsibility:

Operates independently to design and oversee tasks, responsible for meeting task scope, schedule and budget in cooperation with project manager. The candidate will also be expected to lead or co-lead proposals for externally funded projects, and engage in client interactions and project reviews.

Special/Hazardous Working Conditions or Environment:

Complexities related to the position, working environment, special challenges, etc.

For more information and to apply please visit: <https://pnnl.iibeapply.com/jobs/308570>

For additional questions please contact: Cheryl Bruun, cheryl.bruun@pnnl.gov