

EPFL, the Swiss Federal Institute of Technology in Lausanne, is one of the most dynamic university campuses in Europe and ranks among the top 20 universities worldwide. The EPFL employs more than 6,500 people supporting the three main missions of the institutions: education, research and innovation. The EPFL campus offers an exceptional working environment at the heart of a community of more than 17,000 people, including over 12,500 students and 4,000 researchers from more than 120 different countries.

PhD student in soil microbiology

Mission

The Environmental Microbiology Laboratory (EML) studies microbial processes in the subsurface with a focus on contaminant transformations and the nitrogen cycle. The research performed at EML aims at understanding fundamental microbial and abiotic processes and at providing science-based solutions to environmental challenges including aquifer contamination, nuclear waste disposal, and greenhouse gas emissions.

Main duties and responsibilities

- Investigate the role of temperature and precipitation frequency on the soil microbiome and its greenhouse gas emissions
- Run laboratory experiments using large lysimeters and/or small soil columns
- Use meta-omic and geochemical tools to characterize microbial activity
- Use statistical methods to analyze the large amount of data generated by the lysimeter experiments
- Participate in general laboratory tasks
- Perform first-class scientific research
- Write publications
- Attend and present at international conferences

Profile

- Educational and research background in environmental microbiology and/or environmental science and engineering
- Computer skills: Word, Excel, Powerpoint, some experience with at least one programming language
- Language: fluent English
- Self-motivation, scientific curiosity, critical thinking and rigor in experiment work
- Good communication skills, enthusiasm and ability to work as part of an international team

We offer

- An opportunity to develop a scientific career in environmental microbiology an opportunity to learn high-end techniques and approaches
- The opportunity to build a scientific network in the field of microbiology research excellent research conditions and competitive remuneration
- A multi-cultural and stimulating scientific environment
- Be part of a consortium of microbiologists, the NCCR Microbiomes

Information

Your application should contain:

- Motivation Letter
- Detailed CV

- Contact information
- At least 2 references willing to write a recommendation letter.

Apply here: https://go.epfl.ch/soil_geomicrobiology

Start date: 01.09.2024

Duration: 1-year fixed-term contract that is renewable to 4 years according to EPFL rules

For questions or additional information, please contact: [Prof. Rizlan Bernier-Latmani](#)