



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 6,000 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 16,000 people, including over 12,000 students and 4,000 researchers from more than 120 different countries.

The [Swiss National Centre of Competence in Research \(NCCR\) Microbiomes](#) brings together a unique and interdisciplinary research program with experimental and clinical microbiome studies. Combining computational, modeling, engineering and synthetic approaches, the Centre aims to understand the unifying principles of microbiome functioning, to develop tools to diagnose microbiome status, and to devise strategies to intervene and restore imbalanced microbiomes. Its scope encompasses microbial communities in human, animals, plants, as well as in natural and industrial environments. The NCCR Microbiomes comprises 20 research teams from across Switzerland with the University of Lausanne as leading house and ETH Zurich as co-leading house.

In this context, the Laboratory for Environmental Biotechnology (LBE) of EPFL offers a

Postdoctoral position in microbiome research

In the framework of the NCCR Microbiomes, a postdoctoral position is available at LBE to complement the existing team that is studying the microbiome of granular biofilm involved in wastewater treatment. The team is composed of one scientific collaborator, one postdoctoral researcher, one PhD student, two technicians, and three technician apprentices. We study the transition from biomass in suspension to granular biofilms in well-defined bioreactors operated as sequencing batch reactors. We apply a multi-omics approach combined with genome-scale metabolic models of the main populations involved.

Main duties and responsibilities include:

- Performing experiments to assess gene expression with different techniques and/or metabolic activity during a reactor batch cycle (see your profile below)
- Performing analyses on the gene expression and metabolomics data

Your profile:

We search candidates with a track record on the analyses of gene expression (e.g. RNA sequencing or (meta-)proteomics), or on the analyses of metabolic activity with metabolomics approaches, and with some bioinformatic skills. Experience with applying these techniques to microbial communities would be an asset.

The qualified candidate should have a PhD and able to work independently, but also in collaboration since this study is a team effort.

We offer:

- Excellent working conditions and competitive remuneration.
- A multi-disciplinary, multi-cultural, and stimulating environment at EPFL.
- Work will be performed within the NCCR Microbiomes that gathers more than twenty research groups with different expertise. Regular meetings and seminars assure close interactions and collaboration.

Start date:

Earliest January 1, 2022

Term of employment:

Fixed-term (CDD)

Duration:

1-year, renewable up to 3 years.

Contact:

Interested candidates should send a SINGLE PDF including: CV, motivation letter and the contact details of 3 reference persons to: Prof. Christof Holliger (christof.holliger@epfl.ch)

Applications will be reviewed from September 1, 2021, and search will continue being open until position is filled.