

## Laboratory technician/ Scientific research assistant position in infection biology/ microbiology

### Introduction

The University of Lausanne is a higher teaching and research institution composed of seven faculties where approximately 14,300 students and nearly 3,800 collaborators, professors, and researchers work and study. Ideally situated along the lake of Geneva, near Lausanne's city center, its campus brings together over 120 nationalities.

The Department of Fundamental Microbiology offers a position as research assistant/ technician in infection biology assessing the causal role of commensal members of the gut microbiota with their host.

### Presentation

Are you fascinated by the microbiome? Do you care about our health and how the microbiome is contributing to both, disease as well as our well-being? And are you interested in the molecular mechanisms underlying the interplay between commensal gut bacteria and their host and how this affects health far beyond the gut?

This is your chance to join our young group at the University of Lausanne, be part of the NCCR Microbiomes and participate in an exciting project in translational infection research aimed at understanding the interplay of the small intestinal microbiome with inflammation and nutrient absorption.

The project builds on previous work from the group showing a causal role of the small intestinal and colonic microbiota in childhood undernutrition and environmental enteric disease (EED). The project aims at isolating bacteria from human samples, elucidating the molecular interplay between the different bacteria as well as the human host in more detail and will thus have important implications for children's health world-wide.

The Vonaesch lab is moving as of August 2021 from Swiss TPH to the DMF in Lausanne, where we will join the NCCR Microbiomes. Our work is centered on the role of the microbiota and the gut ecosystem in different forms of malnutrition in order to contribute to the understanding of the syndromes and harness then this knowledge to develop powerful interventions strategies and treatments. We are also more generally interested in the role of the microbiota in the triad linking gut health, infection and nutrition. To this purpose, we perform clinical/translational projects, especially in low-and middle income countries (LMIC) and analyze the underlying molecular mechanisms using *in vitro* and *in vivo* models.

### Job information

Expected start date: 01.08.2021

Contract length: 1 year

Activity rate: 100%

Workplace: University of Lausanne

### Your responsibilities

The candidate will be responsible to develop new strategies to isolate bacteria from human samples and study their function. For this position, we request solid experience with bacteriology and cell culture techniques. Previous experience with rodent models would be a plus, but is not mandatory.

*Your responsibilities will include:*

- Testing and comparing different methods to process human stool samples for the best recovery of a wide range of bacteria
- Isolating bacteria from human samples

- Perform *in vitro* and *in vivo* assays to assess for the biological functions of these bacteria
- Being responsible and organize the strain and sample biobank of the group
- Participate in instructing other lab members in techniques of microbiology, molecular biology and cell culture
- Organizing within the group administrative and technical tasks as needed
- Writing reports and contribute to publications
- Other laboratory-based and analysis tasks as needed within the project and the larger group

### **Your qualifications**

- A MSc in microbiology or cell biology or any other relevant domain or a diploma as laboratory technician and several years of experience
- Previous experience in cell culture techniques
- Previous experience with bacterial culture, including anaerobic culture would be an asset
- Previous work with rodent models would be a plus
- Excellent organizational skills and detail-oriented working style
- Personal motivation and the ability to work independently as well as a member of a team

### **What the position offers you**

We offer a stimulating position in a highly international and interdisciplinary environment both, within the DMF at the University of Lausanne and the NCCR Microbiomes. Our lab is located on the University of Lausanne campus, only a few hundred meters from the shores of beautiful lake Geneva and less than an hour from the mountains. Lausanne also has a rich cultural life to offer. Please visit our website for more information on our group, research interests and publications: <https://www.unil.ch/dmf/home/menuinst/research-units/vonaesch-pascale.html> and <https://www.swisstph.ch/fr/about/eph/human-and-animal-health/microbiota-targeted-interventions/>

### **Contact for further information**

Prof. Pascale Vonaesch: [pascale.vonaesch@swisstph.ch](mailto:pascale.vonaesch@swisstph.ch)

### **Your application**

Application deadline: Until position is filled, at the latest until 30.05.2021

Please include your full application in Word or PDF format (motivation letter, CV, list of publications and the contact details of two referees).

Only applications through the below website will be taken into account. We thank you for your understanding.

[https://career5.successfactors.eu/career?career%5fns=job%5flisting&company=universitdP&navBarLevel=JOB%5fSEARCH&rcm%5fsite%5flocale=fr%5fFR&career\\_job\\_req\\_id=17425&selected\\_lang=en\\_US&jobAlertController\\_jobAlertId=&jobAlertController\\_jobAlertName=&\\_s.crb=xyqqQK%2f8uWRRxZTB2GnIR9Zm7%2bwrM2c1FT4ppaiig5c%3d](https://career5.successfactors.eu/career?career%5fns=job%5flisting&company=universitdP&navBarLevel=JOB%5fSEARCH&rcm%5fsite%5flocale=fr%5fFR&career_job_req_id=17425&selected_lang=en_US&jobAlertController_jobAlertId=&jobAlertController_jobAlertName=&_s.crb=xyqqQK%2f8uWRRxZTB2GnIR9Zm7%2bwrM2c1FT4ppaiig5c%3d)