

Postdoctoral 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 postdoctoral position in infection biology assessing the causal role of commensal members of the gut microbiota with their host.

Presentation

Are you fascinated by the microbiome? 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 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 projet builds on previous work from the group showing a causal role of the small intestinal microbiota in childhood undernutrition and environmental enteric disease (EED) 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.

We offer fully funded postdoctoral fellowship for up to three years and the opportunity to work in a young and dynamic team of microbiota experts and as part of the NCCR Microbiomes, a thriving initiative to strengthen research on the microbiome in Switzerland with excellent collaboration and network opporunities.

Job information

Expected start date: 01.08.2021

Contract length: 1 year, maximum 3 years

Activity rate: 100%

Workplace: University of Lausanne

Your responsibilities

The candidate will be responsible to study the interplay between different small intestinal bacteria with each other as well as with the human host, using clinical isolates and *in vitro* assays, cell culture assays as well as animal models. A strong background in infection biology is therefore a must.

Your responsibilities will include:

- Testing the pathophysiological effect of clinical, bacterial isolates from the human small intestine on their host using *in vitro*, cell culture and animal-model based approaches
- Study the molecular mechanisms underlying these pathophysiological mechanisms
- Assess for interactions between different members of the small intestinal microbiome and unravel the underlying molecular mechanisms

- Write reports and publications
- Disseminate your results at national and international conferences
- Other laboratory-based and analysis tasks as needed within the project

Your qualifications

- An excellent PhD in microbiology or infection biology (or planned defense at time of application)
- Experience in molecular work, as well as work using cell culture assays
- Experience in microscopy
- Excellent organizational skills and detail-oriented working style
- Personal motivation and the ability to work independently as well as a member of a team
- Excellent oral and written communication skills in English
- A strong interest in the microbiome and microbiome-host interactions
- Previous work with rodent models would be a plus but is not mandatory

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

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Your application

Application deadline: Until position is filled, at the latest until the 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&n avBarLevel=JOB%5fSEARCH&rcm%5fsite%5flocale=fr%5fFR&career_job_req_id=17423&selected_lang=en_US&jobAlertController_jobAlertId=&jobAlertController_jobAlertName=&_s.crb=x yqqQK%2f8uWRRxZTB2GnIR9Zm7%2bwrM2c1FT4ppaiig5c%3d