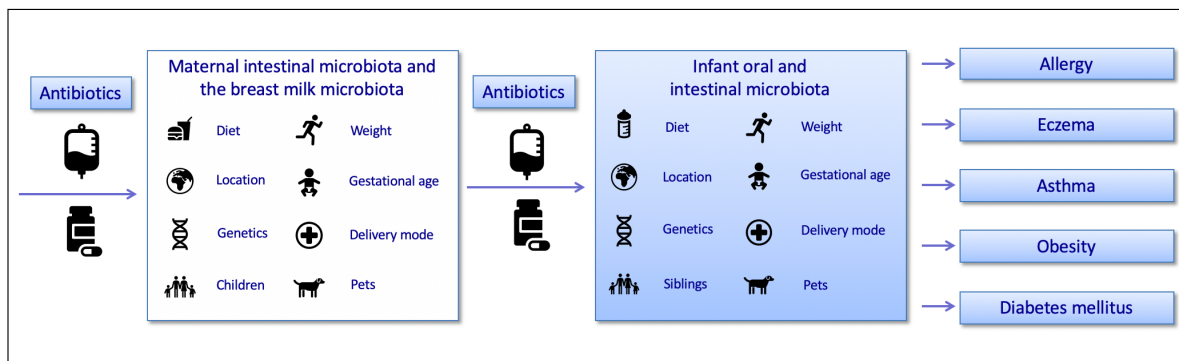


Antibiotic-induced disruption of the maternal and infant microbiota and adverse health outcomes – The ABERRANT study

A combined laboratory and bioinformatic PhD position is available at the University of Fribourg from February 2022.

- Would you like to learn how to prepare and analyse different human samples using whole genome sequencing?
- Are you interested in developing pipelines and analysing microbiome data?
- Do you want to learn how to correlate microbiome with clinical data?

In this cohort study, we will use metagenomic sequencing to determine the effect of (i) *intrapartum antibiotics* on the composition of the breast milk, and the infant oral and intestinal microbiome (including the development and persistence of antibiotic resistance); (ii) *antibiotic exposure in the first year of life* on the composition of the infant oral and intestinal microbiome (including the development and persistence of antibiotic resistance); and (iii) disruption of the infant oral and intestinal microbiome on health outcomes. (iv) We will also determine the compositional overlap between the maternal intestinal microbiome, the breast milk microbiome and the infant oral and intestinal microbiome.



What we offer

- National and international collaborations with experienced researchers in the field of microbiome and bioinformatics
- Access to the Swiss Institute of Bioinformatics (SIB) PhD training network
- Extensive support and mentorship
- Free French and German classes

Required skills and qualifications

- Msc in Bioinformatics or equivalent
- Programming fluency in Python/Perl and R
- Experience in laboratory work
- Previous publication experience is an advantage
- Fluency in English and French
- High interest in microbiota research including laboratory work and bioinformatic analysis

Contact: Please contact Dr. Petra Zimmermann on petra.zimmermann@unifr.ch or Laurent Falquet on laurent.falquet@unifr.ch for more information or send your CV and motivation letter to the same addresses.

Deadline: November 30, 2021