



*Detailed programme*

# Microbiomes in soil, plant, animal and human health. International One Health Symposium

14 August 2019, University of Bern

The symposium features leading scientists investigating soil, plant and gut microbiomes and their links to host and environmental health. Speakers: Thomas Clavel (DE), Viviane Cordovez (NL), Noah Fierer (US), Corné Pieterse (NL), Paul Schulze-Lefert (DE), Emma Wetter Slack (CH), Qendrim Zebeli (Au)

[www.onehealth.unibe.ch/symposium](http://www.onehealth.unibe.ch/symposium)

**u<sup>b</sup>**

## General information

### WELCOME !

The Interfaculty Research Cooperation «One Health: Cascading and Microbiome-Dependent Effects on Multitrophic Health» unifies nine research groups from the Faculties of Natural Sciences, Medicine and VetSuisse of the University of Bern. Together we investigate how environmental chemicals and microbiomes impact the health of soils, plants, animals and humans (see [www.onehealth.unibe.ch](http://www.onehealth.unibe.ch)).

On the topic of Microbiomes and One Health, we organize an International Symposium taking place on August 14<sup>th</sup> 2019 in Bern. This public event is targeting researchers that investigate soil, plant, animal and human gut microbiomes and their links to host and environmental health.

The one-day program consists of four sessions highlighting how soil, plant, animal and human microbiomes impact the health of each biome or host and how they contribute to environmental health. Each session consists of keynote presentations from leading scientists of soil, plant, animal and human microbiome fields.

**Klaus Schlaeppli, Alban Ramette, Siegfried Hapfelmeier, Adrien Mestrot, Matthias Erb**

### Contacts:

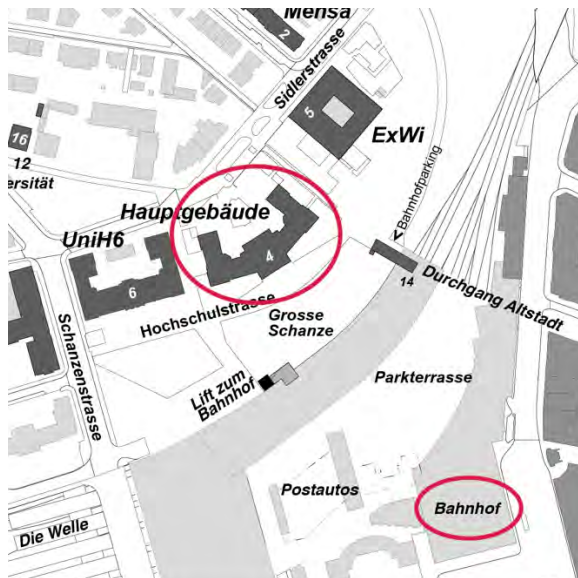
...for questions concerning content: **Zoe Bont**, [zoe.bont@ips.unibe.ch](mailto:zoe.bont@ips.unibe.ch)

...for questions concerning organization: **Nichole Wetter**, [nichole.wetter@ips.unibe.ch](mailto:nichole.wetter@ips.unibe.ch)

 @OneHealthUniBe @unibern #symposium #microbiome #onehealth

# Venue

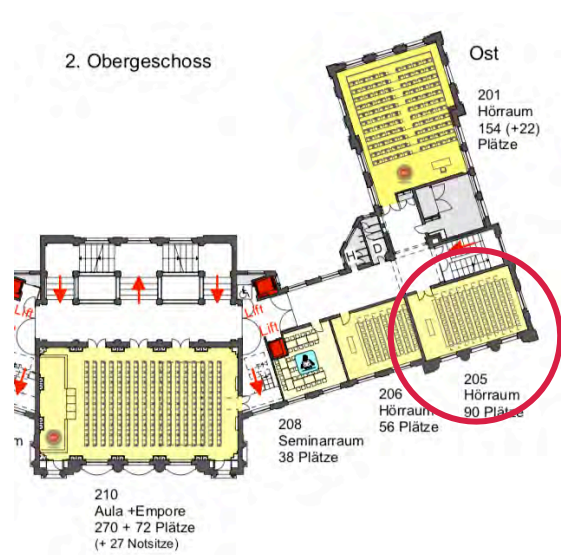
The symposium takes place in the main building of the University of Bern (=Hauptgebäude; indicated on the map below). The address of the main building is Hochschulstrasse 4 in 3012 Bern. It can be reached in a 5 min walk from the train station (=Bahnhof).



Please note that **registration, coffee and lunch breaks** will take place on the **ground floor**, whilst the **scientific program in the lecture hall 205 (second floor)**.



ground floor



second floor

## Keynote speakers

**Dr. Matthew Agler**

Friedrich Schiller University Jena, DE

**Prof. Thomas Clavel**

University Hospital Aachen/TU Munich, DE

**Dr. Viviane Cordovez**

Netherlands Institute of Ecology, NL

**Prof. Noah Fierer**

University of Colorado, US

**Prof. Paul Schulze-Lefert**

Max Planck Institute for Plant Breeding Research, DE

**Prof. Emma Wetter Slack**

ETH Zurich, CH

**Prof. Qendrim Zebeli**

Vetmeduni Vienna, Au

## Program

The conference program may be subject to smaller changes.

8:00 Registration and coffee

8:30 **Prof. Matthias Erb** – University of Bern, Director IRC One Health  
*Welcome note and introduction to One Health*

### The SOIL microbiome and its links to One Health

Chair: Dr. Klaus Schlaeppi

9:00 **Prof. Noah Fierer** – University of Colorado, US  
*Environmental exposures to mycobacteria and their impacts on human health*

9:30 **Dr. Viviane Cordovez** – Netherlands Institute of Ecology, NL  
*Microbiome of disease suppressive soils: microbiology and chemistry at the plant soil interface.*

10:00 **Prof. Sandra Spielvogel** – University of Kiel, D  
*Microbial community composition – a key to rhizosphere functions*

10:30 Coffee break

### The PLANT microbiome and its links to One Health

Chair: Dr. Alban Ramette

11:00 **Prof. Paul Schulze-Lefert** – Max Planck Institute for Plant Breeding Research, D  
*Structure and Functions of the Plant Microbiota*

11:30 **Dr. Matthew Agler** – Friedrich Schiller University Jena, D  
*Microbe-microbe interactions in microbiota-mediated disease resistance in plants*

12:00 **Dr. Klaus Schlaeppi** – University of Bern, Institute of Plant Science  
*Soil microbial feedbacks to plant health*

12:30 Break with buffet lunch

Chair: Dr. Francesca Ronchi

### The ANIMAL microbiome and its links to One Health

- 13:30 **Prof. Qendrim Zebeli** – University of Vienna, Au  
*Dietary modulation of the gut microbiome in farm animals: more than an animal health issue*
- 14:00 **Dr. Stefanie Wetzels** – University of Vienna, Au  
*The bacterial community in the rumen simulation technique (RUSITEC) system*
- 14:30 **Prof. Siegfried Hapfelmeier** – University of Bern, Institute for Infectious Diseases  
*Surveilling trillions - pathogen control by the intestinal immune system*

15:00 Coffee break

Chair: Prof. Siegfried Hapfelmeier

### The HUMAN microbiome and its links to One Health

- 15:30 **Prof. Emma Wetter Slack** – ETH Zurich, CH  
*Using oral vaccines to manipulate bacterial evolution in the gut*
- 16:00 **Prof. Thomas Clavel** – University Hospital Aachen/TU Munich, DE  
*Population-based gut microbiota profiling: From artifacts to prospective insights*
- 16:30 **Dr. Francesca Ronchi** – University of Bern, Department for BioMedical Research  
*Impact of the intestinal microbiota at the maternal-feral interface*

17:00 **Prof. Matthias Erb** – University of Bern, Director IRC One Health  
Closing note

17:05 Apéro

## Practical Information

### Registration

Registration functions through the online registration form and starts by May 2019. Registration includes personal details, payment and eventual upload of an abstract. Please indicate any specific allergies or dietary requests on the registration form.

The number of participants is limited to 150 and will be filled on a first-come-first served basis. Participants, accepted to give a presentation, will be notified by email.

### Fees

The fees include the scientific program and catering (breaks, lunch and Apéro).

Students and Postdoctoral scientists: 40 CHF

Professionals: 80 CHF

The participation fees are owed upon registration and it is strongly recommended to pay at the same time, as there are limited spaces and participation is not guaranteed until payment is received and registration will close when the symposium is full.

### Terms and conditions

The registration of participation is binding. If you have to cancel the registration, you will get your registration fees back minus any transaction costs, up till 10 days before the start of the event (including the 4th August). There will be no refunds for cancellations from the 5th August onwards due to booked catering costs. Payments will be refunded if the conference has to be canceled by the organizer. In that case, the organizer will have no further liability to the client.

### Travel to Bern

Bern is easily accessible by train and has its own airport ([www.bernairport.ch](http://www.bernairport.ch)). In addition, there are direct trains from Zurich and Geneva Airport to Bern's main station. For those travelling via Basel Airport, there is a bus to Basel's central railway station. The train ride from Basel to Bern takes roughly one hour. There is no airport pickup service available.

## Sponsors

We acknowledge the generous support by:

**AND**  
BIOPHARMA

 **eurofins** | Genomics

**KOPPERT**  
BIOLOGICAL SYSTEMS

**Microsynth**  
THE SWISS DNA COMPANY

 Oxford  
**NANOPORE**  
Technologies™