



181 Longwood Avenue  
Boston, Massachusetts 02115-5804

Department of Medicine  
Channing Division of Network Medicine

## Channing Microbiome Seminar

April 28 (Friday), 2023, 9AM (ET)

Zoom: <https://us02web.zoom.us/j/81070959105?pwd=RFJNd3dSZmR6dXJZNjJiYVVzQ3NEQT09>

Meeting ID: 810 7095 9105

Passcode: 984617



### Karoline Faust, PhD

Associate Professor  
Microbial Systems Biology Group  
KU Leuven

## Lessons from synthetic human gut bacterial communities

**Abstract:** In my talk, I plan to present our work on synthetic human gut communities. We selected representative gut bacterial species to study how reproducible their dynamics is in controlled conditions and whether we can predict it from monocultures. To efficiently count gut bacteria in communities, we also tested an alternative counting technique based on flow cytometry. Our work shows that the behaviour of even small gut bacterial communities can be surprisingly complex.

**Bio:** *Karoline Faust is a biologist who graduated at the Humboldt University in Berlin and earned a bioinformatics-oriented PhD at the Université Libre de Bruxelles under the supervision of Prof. van Helden. During her postdoc in the group of Prof. Raes at KU Leuven, she worked on the inference and analysis of microbial networks from sequencing data. She is currently an Associate Professor, heading the group of Microbial Systems Biology at KU Leuven. Her research focusses on the investigation of microbial community dynamics in silico and in vitro. In addition, her group develops new tools for the analysis of microbiome data. Her work is thus situated at the intersection of bioinformatics, systems biology and microbial ecology.*

Hosted by Yang-Yu Liu

