



HelmholtzZentrum münchen
German Research Center for Environmental Health



Summer school 2019

28 August – 06 September 2019

Functions of microbial communities in soils :

Biotic interactions

The focus of the summer school lies on **Biotic interactions**. Major topics are:

- actual concepts and knowledge of microbial ecology in plant-soil-systems
- importance of microbial communities for maintenance and restoration of soil functions and plant health.

The topics cover diverse biotic interactions such as microbe-microbe, microbe-plant interactions and multitrophic relations. This includes mechanisms of interaction such as signalling and symbiotic regulation but also biodiversity functional relationships.

A **lecture series with invited experts** introduces and deepens knowledge in environmental microbiology and gives insights into actual research directions. The morning lectures are

complemented with afternoon **demonstrations** and **lab courses** on state of the art techniques (DNA- or RNA-based analyses, enzymatics, proteomics, NanoSIMS, Lascerscanning Microcopy (CLSM), and Isotope Ratio mass Spectrometry (IRMS)). Excursions to phenotyping and forest field experimental facilities accomplish the program. An important aim is to stimulate discussions about limits and chances of current methods and approaches.

The participants are encouraged to present and discuss their own research ideas during the workshop.

This new edition of the French–German Summer school is supported by the French–German University (DFH) and the Helmholtz graduate school for Environmental Health (HELENA).

Location:

Helmholtzzentrum München – National Research Center for Environmental Health (GmbH), Institute of Biochemical Plant Pathology, Ingolstaedter Landstrasse 1, 85674 Neuherberg, Germany.

Organisation committee:

Germany: Karin Pritsch, Corina Vlot, Maaria Rosenkranz, Fabian Weikl

France: Aurélie Cébron, Corinne Leyval, Thierry Beguiristain: Université de Lorraine, LIEC, Nancy, France

Fees and Costs:

Summer school registration fees are free. Travel and accommodation have to be organized and paid by the participants themselves.

Application:

Deadline 14/06/2019, information on acceptance 21/06/2019

Register on our website:

<http://www.helmholtz-muenchen.de/biop-summer-school/information/index.html>

Further information and assistance: pritsch@helmholtz-muenchen.de