The newly established Interfaculty Research Cooperation (IRC) “One Health” of the University of Bern investigates cascading and microbiome-dependent effects on multitrophic health. For the next project phase, we are looking to fill 7 PhD positions.

**Background:** One Health is an important emerging framework which emphasizes the connection between the wellbeing of the environment, animals and humans. Within this IRC involving the faculties of Science, Veterinary Medicine and Medicine, we will investigate how environmental perturbations affect the microbiomes and microbiome-mediated health at the interfaces between soils, plants, animals and humans. Successful candidates will work within this exciting and highly interdisciplinary project by benefiting from and connecting the expertise of different research groups that specialize in microbiomes, environmental factors, health and bioinformatics.

We look for enthusiasts with a strong interest in environmental, plant, animal and human health. Applicants should have an educational background in one or several of the following disciplines or their equivalents:

Geosciences, geology, chemistry, environmental sciences, soil science, microbial ecology, plant biology, plant molecular biology, plant biochemistry, bioinformatics

Furthermore experience in one or several of the following fields is advantageous:

Element speciation, experience with arsenic, analytical chemistry, stable isotope methodology, community analysis of high-throughput sequencing data, molecular biology, biochemistry, microbiomics, metagenomics

Applicants should have a strong interdisciplinary interest coupled with good communication skills and willingness to integrate into and interact with different laboratories. We expect excellent University grades at the MSc. level. Fluent spoken and written English are prerequisites for this position.

We offer an inspiring research environment, including state-of-the-art research facilities, enthusiastic scientists from different nationalities and scientific backgrounds, intensive supervision and an exciting interdisciplinary project of considerable fundamental and applied relevance. We are committed to excellent science and to fostering the careers of promising junior scientists.

**How to apply:** Send a single pdf including a letter of motivation mentioning the primary research group with which you would like to be affiliated (marked with an * below), a complete CV and the names and addresses of two referees to zoe.bont@ips.unibe.ch until 31. October 2017. The positions are available from February 2018. Initial interviews will be conducted via Skype. Selected applicants will be invited to a recruitment symposium in early December 2017.

**Involved research groups:** Biotic Interactions (Prof. Matthias Erb)*; Gastroenterology / Mucosal Immunology (Prof. Andrew Macpherson); Group of Soil Science / Trace Element Speciation and Environmental Chemistry (Dr. Moritz Bigalke / Prof. Adrien Mestrot)*; Paleolimnology (Prof. Martin Grosjean); Plant-Microbe Interactions (Dr. Klaus Schlappi)*; Veterinary Physiology (Prof. Rupert Bruckmaier)*; Immunology of Mucosal Infection Group (Prof. Siegfried Hapfelmeier-Balmer); Interfaculty Bioinformatics Unit (Rémy Bruggmann); Clinical Microbiology (Prof. Stephen Leib / Dr. Alban Ramette).

*Groups accepting PhD students within this program