EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

Department of Geoscience
Faculty of Science

The Soil Microbial Interaction Group at the University of Tübingen offers an open

PhD position (f/m/d, E 13 TV-L, 65%)

'Biophysics of phage dispersal and their biogeochemical fate in soil'

We are recruiting a PhD candidate with experience and interest in soil microbiology and geochemistry to investigate the interactions between soil properties and bacteriophage mobility. This position is embedded within the larger project "The devil in the details: Phage microhabitats as drivers of soil biogeochemistry". There is growing recognition that phages are key players in soil ecology and organic matter cycling, but the environmental factors that drive phage traits and their influence on microbial function are unknown. The successful candidate will establish a collection of characterized soil phages and investigate their interactions with the geochemical and physical properties of their habitats. This will combine microbiological and molecular techniques (e.g., genomic sequencing, electron microscopy) with tools of soil physics and geochemistry (e.g., X-ray µCT imaging, isotope labelling). The goal will be to identify phage and habitat properties that govern phage ecology, thereby contributing to the larger aim of understanding how soil carbon, nitrogen and phosphorus cycles are influenced by phages.

This position involves cutting-edge experimental work in a young and growing research group, embedded in a leading faculty for geoscience and environmental microbiology. The project will provide extensive possibilities for collaboration both internally and with local and international scientists (Germany, Netherlands, United States).

Requirements:

- MSc with background and clear interest in soil science, biogeochemistry and/or environmental microbiology/microbial ecology
- Creativity, self-motivation and enthusiasm for experimental science
- Ability to work independently and in a team
- Strong English communication skills

Start date will be in May or June 2024 (negotiable). Applications including a CV, motivation letter and overview of experience in relevant methods and techniques should be sent by email before 31 March 2024 to bewerbung@geo.uni-tuebingen.de. For further information please contact Dr. Kyle Mason-Jones at k.masonjones@nioo.knaw.nl. Employment will be arranged by the administration of the University of Tübingen. Equally qualified candidates with disabilities will be given preference in the hiring process. The University of Tübingen is committed to equal opportunities and diversity. Women are explicitly encouraged to apply.