



The Collaborative Research Center SFB 1076 “**AquaDiva** – Understanding the Links between Surface and Subsurface Biogeosphere” is funded by the Deutsche Forschungsgemeinschaft (DFG). AquaDiva is an ambitious research center with more than 70 researchers and Institutes at four faculties of the Friedrich Schiller University Jena (FSU) and three non-university research institutes in Jena or Leipzig. The integrated Research Training Group AquaDiva is educating doctoral researchers in a structured, interdisciplinary training program. AquaDiva combines different research areas, such as ecology, microbiology, hydrogeology, soil science, geomorphology, geochemistry, geology, geophysics, chemistry, and information science, to a comprehensive picture of subsurface research (www.aquadiva.uni-jena.de).

The Integrated Research Training Group AquaDiva invites applications for a
Doctoral Researcher Position (m/f; Ref.No. ufz12/2017)
at the Group Microbial Systems Ecology, Department of Environmental Microbiology,
Helmholtz Centre for Environmental Research – UFZ

Phages as Vectors and Indicators of Biological Information: Subproject Phage-Host Interactions, Natural Infection Networks, and Viromics

This subproject is part of a twin project, which aims to study the consequences of viral (phage) transport processes for virus-host interactions, bacterial communities, and functions in the subsurface. More specifically, we will address if transported viruses result in changes of distant bacterial communities and their functions and if natural chemical compounds stimulate bacterial activity and consequently trigger virus production. The PhD student will run cross-infection and induction lab experiments using assembled phage-host pairs as well as field samples comprising the naturally occurring viruses and bacteria. Qualitative and quantitative analyses will include phage isolation and TEM, induction assays, viral tagging, viromics, and Illumina-based 16S rRNA gene analyses of bacterial communities.

Requirements:

- A **Master's degree** (or equivalent) in Natural, Life, or Environmental Sciences (e.g., **microbiology, virology, molecular biology**, or related discipline); candidates expected to earn their degree by September 2017 are welcome to apply.
- **Solid knowledge** of microbial ecology; additional skills in virology, network analyses, or bioinformatics are a plus.
- **Excellent technical skills** in molecular biological tools, microbiological methods, organizing and running lab experiments, statistics (e.g., R).
- Enthusiasm to play an active role in the **interdisciplinary research team** of AquaDiva.
- Highly motivated and creative personalities, with an interest to shape their own thesis project.
- Excellent written and oral communications skills in **English**.

We offer:

- A doctoral researcher position (remuneration in accordance with the TVöD public-sector pay grade 13, 65%) with funding from Sep 1, 2017, until Jun 30, 2021, as well as generous research funding with the possibility of a three-months research stay abroad.
- Opportunity for research on an innovative and unique Critical Zone research platform.
- A comprehensive mentoring program with supervision by a team of advisors.
- A communicative atmosphere within a scientific network providing top-level research facilities and training program, including participation in international and national conferences and workshops.
- The place of work is Leipzig, Germany, a big and lively city with a vibrant cultural scene, dynamic business activities, and successful scientific centers of innovation, such as UFZ and iDiv, around the Leipzig University.

Severely disabled applicants with equal qualification and aptitude are given preferential consideration.

Applications should be written in English. The **application deadline is June 16th, 2017**.

Applications are submitted exclusively via an online application tool: <https://apply.jsmc.uni-jena.de>

Selected applicants will be invited to a recruitment symposium in Jena, Germany, presumably in August, 2017.

For more **information on the position**, feel free to contact Dr. Antonis Chatzinotas (antonis.chatzinotas@ufz.de). For more **information on the application process**, please contact the coordinator, Dr. Maria Fabisch (maria.fabisch@uni-jena.de). More **project details**: <http://www.aquadiva.uni-jena.de/Graduate+school/Open+positions-p-213.html>.