Faculty of Environmental Sciences

At the **Department of Hydro Sciences, Institute of Hydrobiology**, the **Chair of Limnology** offers, within the framework of a DFG project a position as

**Research Associate / PhD Student in Microbiology (Antibiotic Resistance)**

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position comprises 60 % of the full-time weekly hours and is initially limited until the end of the project on June 30, 2024. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position offers the chance to obtain further academic qualification (e.g. PhD).

**Tasks:** The work within the cooperation project focuses on the analysis of antibiotic resistance in the environment, more precisely on the effects of wastewater discharge on surface water. Specifically, the effects of sewer overflows - caused by heavy rainfall and storm events during summers - are to be examined with regard to their effect on the abundance and dissemination of antibiotic resistant bacteria and antibiotic resistant genes. The project aims to create knowledge about the effects of this anthropogenic pollution, caused by the regularly discharge of WWTP effluents and raw sewage (e.g. by sewer overflows), on the water quality, the frequency and spread of antibiotic resistance of urban streams.

**Requirements:** very good university degree (Master, diploma, or equivalent) in life sciences or environmental sciences with a focus on theoretical and applied microbiology and a general understanding of microbial ecology and evolution; a general knowledge of and experience in working with molecular and microbiological techniques, such as DNA-RNA isolation, quantitative PCR and the genetic modification of microorganisms; skills for analyzing corresponding data with state-of-the-art statistical software; a high level of motivation for independent work and research, innovative and interdisciplinary thinking, a willingness to integrate into an existing international research team and to take on responsibility; very good skills in English, oral and written. Basic knowledge of the German language will be advantageous. Previous work in the field of antimicrobial resistance and Experience with metagenomic sequencing techniques, the implementation of bioinformatic analysis and previous knowledge in writing scripts in R (or similar) and the Linux command line are also advantageous.

Applications from women are particularly welcome. The same applies to people with disabilities. The application documents should include a short motivation letter, your CV with the full list of publications and a one-page abstract of your master thesis/final year research project. These are to be submitted by **October 8, 2021** (stamped arrival date of the university central mail service applies) to: **TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Hydrowissenschaften, Institut für Hydrobiologie, Professur für Limnologie (Gewässerökologie), Herrn Prof. Thomas Berendonk, Helmholtzstr. 10, 01069 Dresden** or via the TU Dresden SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf document to **limnologie@tu-dresden.de**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: [https://tu-dresden.de/karriere/datenschutzhinweis](https://tu-dresden.de/karriere/datenschutzhinweis)