Faculty of Environmental Sciences

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

**Research Associate / Postdoc in Microbiology (Antimicrobial resistance)**
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting as soon as possible. The position is initially limited until the end of the project on August 31, 2024. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

**Tasks:** The work in the cooperative projects focuses on the dissemination of antibiotic resistance in the environment. An explicit characterization of the transmission pathways of antimicrobial resistance on the French Caribbean island of Guadeloupe will be carried out. Transmission of resistance will be analyzed across a continuum ranging from hospitals (hospital wastewater) to the environment (sea and animals), taking into account regionally prevailing environmental and social conditions as well as effects of tourism. In addition, the potential of decentralized wastewater treatment facilities to prevent the spread of antibiotic resistance, organic micropollutants, pathogens and viruses is to be analyzed. Finally, anthropogenic effects on the spread of antibiotic resistance are to be compared in view of humans as a source of active substances and pollutants, as well as humans as social beings who constantly interact with one another.

**Requirements:** university and PhD degree in life sciences or environmental sciences with a strong background in theoretical and applied microbiology and a general understanding of microbial ecology and evolution; knowledge and experience in working with molecular and microbiological techniques, including DNA/RNA isolation, quantitative PCR and the genetic modification of microorganisms; skills in analyzing the corresponding data with state-of-the-art statistical software; high level of motivation for independent research with innovative and interdisciplinary thinking; ability to conduct and coordinate research within the project with little external supervision; willingness to actively participate in the work group, as well as in collaborations on a local and international level; excellent skills in English, oral and written. The ability to conduct and present high-quality research is to be proven by a strong publication record in reputable journals. Basic knowledge of the German language will be advantageous. Previous work in the field of antimicrobial resistance, experience with metagenomic sequencing techniques and the implementation of bioinformatic analysis pipelines and knowledge of 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 and your CV with the full list of publications. These are to be submitted by October 14, 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 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.

**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