

In the Department of Biogeography, Department of Environmental Sciences at Trier University, the following position is available at the next possible date.

PhD student (m/f/d) in Ecological Genomics (TV-LE13, 50%, 36 months)

We offer a 36-month PhD position in the lab of [Susan Kennedy](#) and [Henrik Krehenwinkel](#) in the Department of Biogeography at Trier University in Germany. The project "Monitoring metaorganisms across space and time – Eco-evolutionary responses of the earthworm holobiont and soil biome to environmental" is funded by the Bauer-Stiftung zur Förderung von Wissenschaft und Forschung. You will be working on a project aimed at identifying biodiversity change in soil ecosystems over the past four decades, using eDNA metabarcoding, metagenomics and metatranscriptomics. The project is based on highly standardized time series samples of earthworms and earthworm gut content, which have been collected as part of a long-term German biomonitoring project, the [German Environmental Specimen Bank](#). Storage of these samples at ultra-low temperatures guarantees excellent preservation of the sample-associated nucleic acids and survival of some strains of soil microbes. Earthworms can serve as natural eDNA samplers, whose gut content represents the biodiversity of the surrounding soil. In this project, we will analyze the assembly of the earthworm's microbiome and the surrounding soil community using 40-year time series from across Germany and identify drivers of community change. In addition, selected strains of microbes will be resurrected and cultivated to trace evolutionary change in the soil biome in real time.

Applicants should hold a university master's degree in biology (or comparable) and have a keen interest in evolutionary biology and ecology. Ideally, you should also have experience with DNA metabarcoding and metagenomics. This is a research position and does not require teaching.

Severely disabled applicants who are equally qualified for the position will be given preference. Details on the use of personal data can be found in the data privacy statement in Article 13 DSGVO on our homepage.

Please send your application (letter of motivation, CV, transcripts and the names of two references) as a PDF document in English or German language to Henrik Krehenwinkel (krehenwinkel@uni-trier.de) by February 20th, 2023. Any project-related questions can also be addressed to Henrik Krehenwinkel.