



iDiv

German Centre for Integrative
Biodiversity Research (iDiv)
Halle-Jena-Leipzig

External Job Announcement Reg.-Nr. 4-9407/23-D

Modern, interconnected, conscious of tradition: Martin Luther University Halle-Wittenberg (MLU) is the oldest and largest university in the State of Saxony-Anhalt with a history dating back more than 500 years. Today more than 20,000 students are enrolled at the university. MLU's core research areas are in the nanosciences and biosciences, the Enlightenment, as well as in social and cultural research. The university is also home to a range of small disciplines, some of which can be found nowhere else in Germany. The university has excellent national and international ties, and works closely together with leading research institutes, industry, and more than 250 universities around the world.

The Martin Luther University Halle-Wittenberg, in cooperation with the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, offers the following two positions in Leipzig, starting as soon as possible (preferably 1 January 2024) and until 30 September 2024 with the possibility of prolongation:

Post-doctoral Researcher (m/f/d) – Biodiversity Synthesis

as full-time employment:

The salary will be up to Entgeltgruppe 13 TV-L, if the personal requirements and tasks are fulfilled. The workplace will be in Leipzig in the Biodiversity Synthesis research group.

The project and research group:

The German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig is a National Research Centre funded by the German Research Foundation (DFG). Its central mission is to promote theory-driven synthesis and data-driven theory in integrative biodiversity research. It is located in the city of Leipzig and it is a central institution of the Leipzig University, jointly hosted by the Martin Luther University Halle-Wittenberg (MLU), the Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research (UFZ). More information about iDiv: www.idiv.de.

This position is affiliated with the **Biodiversity Synthesis** Professorship of Prof. Jonathan Chase. The overarching research mission of the Biodiversity Synthesis group is aimed towards developing a cohesive framework for understanding the patterns of biodiversity and its heterogeneous distribution across multiple scales, as well as the underlying ecological drivers that influence those patterns. For more information, please visit our lab website: <https://www.idiv.de/en/groups-and-people/core-groups/synthesis.html>.

These two postdocs will work together with others in the research group towards the development of conceptual and analytical pipelines for the 'Detection' of Biodiversity Change and its 'Attribution' to potential drivers. The postdocs will use a growing compiled database of metacommunity biodiversity surveys for detection, and use a series of geospatial products for attribution. Key will be the development of FAIR, updatable and reproducible pipelines for biodiversity change and attribution analysis. Strong coding skills, particularly with geospatial data, are essential for these positions.

Tasks:

- Develop and implement research approaches consistent with the core research aims, including publishing scientific papers in internationally peer-reviewed journals
- Develop scripts for downloading, wrangling, and structuring the geospatial data with a focus on interoperability and updatability for biodiversity driver analysis



- Data analysis and preparation of manuscripts
- Publish open access materials
- Integrate biodiversity and global change data both conceptually and logistically, focusing on potential mechanistic links within and across scales as well as methodological considerations regarding metrics of change and spatiotemporal modeling
- Regularly participate in group-based activities (meetings, workshops) and other activities as a member of the iDiv community (seminars, events)

Requirements:

- A completed scientific University degree (Diploma/ M.Sc.) in a field related to the work
- At least three years' experience in independent scientific research or a PhD in Biodiversity and/or Geospatial sciences
- Extensive programming skills (especially in Python, R)
- Experience using a High-Performance Computing Cluster (HPC)
- Experience working with gridded spatiotemporal data on biodiversity drivers (land-use, climate, etc. via Google Earth Engine and other data portals)
- Expertise in statistical modelling in the context of biodiversity-change data; ideally, experience in project-relevant techniques such as spatiotemporal modelling, predictive modelling, hierarchical Bayesian modelling, and/or causal analysis
- Fluent in English (speaking and writing)
- Excellent communication skills and the ability to work in a team

The Martin Luther University Halle-Wittenberg gives priority to applications from severely disabled candidates with equivalent qualifications. Women are particularly encouraged to apply. Applicants with a degree that was not obtained at a German higher education institution must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) to prove equivalence. This Statement can also be submitted after successful completion of the hiring process.

Queries concerning the application process should be directed to hr@idiv.de. For queries about the research project please contact jonathan.chase@idiv.de.

Please submit your full application dossier in English with registration number 4-9407/23-D by 27/09/2023. Applications should be submitted on the website <https://apply.idiv.de>. Applications should include a motivation letter tailored to the research project, a curriculum vitae, university certificates and a publication record. Application portfolios submitted by post will not be returned, application costs will not be reimbursed.

This announcement is subject to possible budgetary restrictions.

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds.