

**Reference file number
166/2017**

Leipzig, 10 July 2017

The German Centre for Integrative Biodiversity Research (iDiv) is one of the four National Research Centres funded by the German Research Foundation (DFG). Its central mission is to promote theory-driven synthesis and experiments and data-driven theory in this emerging field. The concept of iDiv encompasses detection and quantification of biodiversity, understanding its existence and emergence, exploring its consequences for ecosystem functions and services, and developing new strategies to safeguard biodiversity. Under one roof, 85 scientists and 45 support staff, associated with eight new chair professor positions, three junior research groups and central services (IT, eco- and bioinformatics, mechanics workshop, greenhouses) will collaborate in a highly integrated environment.

iDiv is located in the city of Leipzig and jointly hosted by the Martin Luther University Halle-Wittenberg (MLU), the Friedrich Schiller University Jena (FSU) and the Leipzig University (UL). It is supported by the Helmholtz Centre for Environmental Research (UFZ), the Max Planck Society, the Leibniz Association and the Free State of Saxony.

Integrated in iDiv, the Leipzig University offers the following position as soon as possible

Postdoctoral fellowship
**"Beyond the growth-survival trade-off: A global analysis of demographic
diversity and trade-offs in species-rich forests"**

(limited to 2 years)

Salary: Entgeltgruppe 13 TV-L

Background:

Life-history theory posits that organisms face allocation trade-offs underlying different demographic processes (growth, survival, reproduction). The PostDoc will develop a holistic understanding of the trade-offs between demographic rates that constrain the range of viable tree life-history strategies (demographic diversity) in species-rich forests differing in climate, disturbance regime and floristic composition. To achieve this goal, the PostDoc will combine inventory data from a global network of forest plots covering all three aspects of demography across all size classes with novel statistical methods that account for uncertainty of demographic information for rare species. She/he will quantify the contribution of different trade-offs to demographic diversity and test predictions of several proposed hypotheses. She/he will also identify how demographic trade-offs are constrained by functional traits of the species.

Topic/job description:

- communication with data owners/providers
- data analysis using advanced statistical methods (Bayesian models, weighted PCA) mostly in R
- writing-up research for scientific publications

Requirements/expected profile:

- PhD in a relevant field of research
- strong quantitative skills (statistics, programming) and proficiency in R
- excellent command of English
- good communication skills
- good writing skills and experience in scientific publishing
- experience in forest ecology and working with inventory data or plant demography is a plus

We offer you a two-year postdoc position at the **German Centre for Integrative Biodiversity Research (iDiv)**, which provides excellent facilities and an interdisciplinary work environment. The project is supervised by Dr. Nadja Rüger (Junior Leader of Forest Ecology group; https://www.idiv.de/en/groups_and_people/core_groups/niche_detector_for_hyperdiverse_tropical_forests.html) and carried out in collaboration with Prof. Christian Wirth, Prof. Helge Bruelheide, Prof. Stanley Harpole, Dr. Stuart Davies, Dr. Joseph Wright.

Applications are accepted **until 15 August 2017**.

Applications should include:

- cover letter (in English) describing motivation, research interests & relevant experience
- complete curriculum vitae including names and contact details of at least two scientific references
- digital copy of doctoral certificate
- PDF of one publication or thesis chapter

Applications with reference file number 166/2017 are accepted via our application portal under apply.idiv.de. We prefer applications via our application portal, hard copy applications can be sent to German Centre for Integrative Biodiversity Research – iDiv; Dr. Joanna Hanzel; Deutscher Platz 5e; 04103 Leipzig. For queries on the application process, please contact Joanna Hanzel (joanna.hanzel@idiv.de); for research project questions, contact Dr. Nadja Rüger (nadja.rueger@idiv.de).

Applying via email is questionable under data protection law. The sender assumes full responsibility.

Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability.