

# UNIVERSITÄT LEIPZIG

## Job Market 203/2012

Leipzig, December 12, 2012

The **German Centre for Integrative Biodiversity Research (iDiv)** is one of the seven National Research Centres funded by the German Research Foundation (DFG). It is located in the city of Leipzig and jointly hosted by the Martin Luther University Halle-Wittenberg (MLU), the Friedrich Schiller University Jena (FSU), the University of Leipzig (UL), and the Helmholtz Centre for Environmental Research (UFZ). It is supported by the Max Planck Society, the Leibniz Association, the Klaus Tschira Foundation and the Free State of Saxony. Its central mission is to promote theory-driven synthesis and data-driven theory in this emerging field. The concept of iDiv encompasses the detection of biodiversity, understanding its emergence, exploring its consequences for ecosystem functions and services, and developing strategies to safeguard biodiversity under global change. The University of Leipzig offers as from March 1, 2013 the following position:

### **Doctoral fellowship**

(initially limited to 3 years, 65 percent of a full-time employment) Salary: Entgeltgruppe 13 TV-L

on

#### Accelerated Evolution in Chromosomal Rearrangements and Speciation in Lacertid Lizards

Embedded in the active research environment of iDiv, the **Young BioDiversity Research Training Group (yDiv)** will be established. Its goal is to educate a new generation of scientists in transdisciplinary biodiversity research, who will have gained expertise both in experimental as well as theoretical fields of research. Fellows will attend lectures and seminars on a broad range of topics in the field of biodiversity science and conduct their research in a modern, international and integrative working environment.

#### Topic/job description:

The project focusses on the role of chromosomal rearrangements (CRs) in speciation. The hypothesis will be tested that CRs are associated with accelerated evolution driving speciation through suppressed recombination. We will study two closely related species of lizards in the core of their respective distribution range and in a hybrid zone.

- genomes of Lacerta viridis and L. bilineata will be sequenced
- specialized computational tools for assembly of the genomes and detection of chromosomal rearrangements will be developed
- protein coding and non-coding genes in the respective species will be annotated and their evolutionary significance analysed
- transcriptome and expression patterns of the two lizard species and their hybrids will be analysed and compared to investigate if genes within CRs are more likely to change in expression between species than genes outside CRs

#### <u>Requirements / expected profile:</u>

- an excellent master's degree in a relevant field of research (Biology, Bioinformatics, Computational Biology, Genomics) with a strong background in evolution is preferred
- computer programming skills
- prior experience with the computational analysis of high-throughput data is desired
- interest in research on speciation and species divergence
- interest in interdisciplinary research
- good use of spoken and written English and ambition to publish in international journals
- creativity, enthusiasm and endurance
- proficiency in advanced statistical methods is a plus

**We offer you** a PhD position in the first cohort of yDiv PhD students. All doctoral fellows will study together at iDiv and will be affiliated with one of the three universities. This position will be affiliated with the University of Leipzig and jointly supervised by Prof. Schlegel, Institute for Biology (<u>http://www.uni-leipzig.de</u>) and Prof. Stadler, Department of Computer Science, at the University of Leipzig (<u>http://www.bioinf.uni-leipzig.de</u>).

**Applications** are accepted until **January 18**, **2013**. All applications should make reference to the file number 203/2012, include a cover letter describing research interests and relevant experience, curriculum vitae, one letter of recommendation and MA/BA/Diploma certificates. Applications should be directed to **both**:

University of Leipzig Faculty for Biosciences, Pharmacy, and Psychology The Dean Professor Dr. Andrea Robitzki Brüderstraße 32, 04103 Leipzig, Germany

and in electronic form to Prof. Dr. Schlegel (schlegel@rz.uni-leipzig.de), Prof. Dr. Stadler (studla@bioinf.uni-leipzig.de) and the yDiv coordinator Dr. Jula Zimmermann (jula.zimmermann@idiv-biodiversity.de) in a single PDF file with reference file number in the subject line.For **queries** on the application process please contact <u>jula.zimmermann@idiv-biodiversity.de</u>. Applying via email is questionable under data protection law. The sender assumes full responsibility.