



The laboratory of PD Dr. Vera Schluessel  
(Department of Comparative Neurobiology, Institute of Zoology)  
at Bonn University (Germany) is offering a three-year

### PhD position (TV-L13, 65%)

starting in summer/fall 2019 (possibly later). The study will focus on:

*'Identification of neural substrates involved in cognitive information processing in fish using immediate early gene (IEG) analyses'.*

Using the expression of IEGs as metabolic markers, potential brain regions involved in visual discrimination and individual recognition learning as well as long-term memory functions will be evaluated in the Malawi cichlid *Pseudotropheus zebra*. Specifically, the up-regulation of *c-fos* and *egr-1* mRNA expression levels in various brain regions or nuclei will be compared between training and control groups, indicating any potential activation/involvement of these areas during various stages of learning and/or memory retrieval. The project is part of a larger DFG-funded study assessing detailed structure-function relationships of specific brain regions involved in the processing of cognitive tasks in fishes, located both within and outside of the telencephalon. The effects of selective lesion experiments used in combination with behavioral observations of spontaneous behavior as well as specifically designed training assays will be investigated in a concurrently advertised PhD project.

Ideally, you have:

- a Master degree in Neurobiology, Biology, Zoology or a related field
- experience with IEG analyses, histology and microscopy
- both experience and interest in statistical analyses
- the ability to work both independently and in a team
- good organizational and computer skills
- strong communication/writing skills in English

How to apply:

Please send your application by E-mail (attached as a single PDF) including your complete CV, a list of publications, a statement of research interests and description of expertise, the names and contact addresses of two referees (or two letters of recommendation), as well as your transcripts to **v.schluessel@uni-bonn.de**

**Application deadline is June 30<sup>th</sup> 2019;** for information about the lab see <https://www.zoologie.uni-bonn.de/abteilungen/bleckmann/arbeitsgruppen/dr.schluessel/dr.schluessel>