



## **Graduate program (Master, Doctoral level) Systems Biology of Brain and Behaviour**

**Web-link:** [http://www.uni-bielefeld.de/biologie/Index/Studium/Graduate\\_Programme/index.html](http://www.uni-bielefeld.de/biologie/Index/Studium/Graduate_Programme/index.html)

### **Aims and Scopes**

Brains belong to the most complex systems in nature. They control perception, cognition and eventually behaviour of animals and humans. Understanding the mechanisms that allow animals and humans to behave adaptively in complex environments is one of the most challenging, scientific tasks.

The graduate program Systems Biology of Brain and Behaviour provides a solid education in the relevant concepts, experimental techniques and theoretical approaches that are required to perform excellent research in this ambitious scientific field.

The study program aims to provide a comprehensive understanding of the fundamental principles underlying autonomous adaptive behaviour of animals and humans. Brain morphology and function, including learning ability as well as innate behaviours in humans and animals have been shaped by evolution. Our study program bridges the gap from neurophysiology to behavioral ecology. It includes courses on the production of behaviour by neuronal circuits as well as courses on the evolution of behaviour. As a distinguishing characteristic, this study programme integrates computational and experimental approaches and focuses on the neuronal as well as on the evolutionary aspects of behaviour.

### **Admission**

Applicants interested in the Master program must hold a Bachelor's degree (or equivalent) in a field related to the program. Applicants interested in the PhD program must hold a Master's degree or a Bachelor's degree. Students with a Bachelor's degree will participate in a one year preparatory program, before they start their three-year doctoral research project. For students with a Master's degree the preparatory year of the doctoral program can be omitted. Excellent Master's students may also change directly to the doctoral program after the successful completion of their first year.

### **Bielefeld University**

Bielefeld University was founded in 1969 and offers to its ~ 18 000 students a wide variety of options in the internationally recognized Bachelor and Master degree courses. The 13 faculties comprising the Natural Sciences, the Humanities and the Social Sciences are housed under one roof which provides an excellent opportunity for interdisciplinary research. Despite its short history, Bielefeld University has been able to win considerable recognition as a centre of research. It is top in many national rankings of research and teaching among Germany's universities. Only recently, Bielefeld University has been successful to receive substantial funds to establish a so-called Cluster of Excellence in the cognitive and behavioral sciences as well as an Excellence Graduate School in History and Sociology.

### **City of Bielefeld**

Bielefeld, with its 330 000 inhabitants, is the economic, cultural and scientific centre of the region East-Westphalia-Lippe which is located in the North Western part of Germany. Though Bielefeld is a modern and big city, it is surrounded by nature as it is located directly next to the wonderful Teutoburg Forest and provides a safe and familiar atmosphere. As a student city Bielefeld offers a great variety of shops, bars and clubs. Because of the central location in Western Germany and the well-developed public transport system, Bielefeld provides a great opportunity for weekend trips to metropolitan cities as Berlin, Cologne, Düsseldorf and Hamburg.