

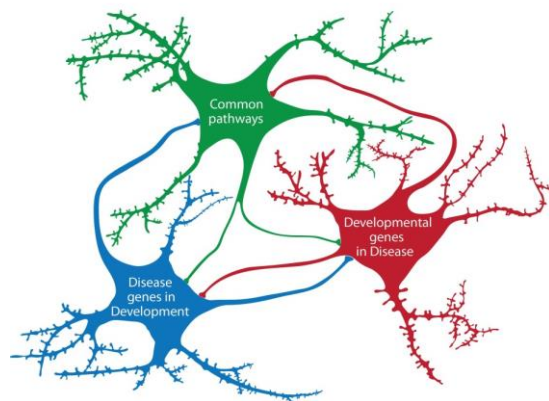
# PhD student positions in Neuroscience

offered by

**RTG 2162**

**“Neurodevelopment and CNS vulnerability”**

**in Erlangen-Nürnberg, Germany**



A PhD position is available in the laboratory of **Prof. Marisa Karow** at the **Institute of Biochemistry** FAU Erlangen-Nürnberg.

In the lab we are focusing on aspects of human neuron formation in health and disease by using stem cell-based model systems, in particular the brain organoid model of early human brain formation. For this project we are seeking a highly motivated student who is willing to embark on studying the underlying processes of the formation of the human corpus callosum, the largest white matter tract connecting the two hemispheres in the brain. In this highly collaborative project with the labs of Profs. Winner and Lie, we will use the Crispr/Cas9 system to create a human reporter iPSC line which allows tracking of cells undergoing differentiation towards callosal projection neurons. We then plan to use these reporter iPS cells to establish a model system allowing to study the formation of callosal projections. State-of-the-art techniques such as single cell RNA-sequencing as well as continuous live imaging will be used.

We are looking for a curious and knowledge-driven student with a Diploma/Master degree in Molecular Medicine, Biology or related fields. Candidates should have a strong background in Neurobiology, Bioinformatics or Developmental Biology.

The doctoral researcher will be part of the DFG-Research Training Group 2162 “Neurodevelopment and CNS Vulnerability”, which provides a structured curriculum and a wide range of scientific and soft-skill training.

## How to Apply

### A) Please submit as a single pdf file:

- (1) Letter of motivation
- (2) Curriculum vitae
- (3) Transcript of Records
- (4) Summary of Research Experience and Master Project
- (5) List of publications
- (6) Names of two potential supervisors

### B) Two letters of reference:

to be sent directly by the referees to:

[grk2162@fau.de](mailto:grk2162@fau.de); Subject: GRK2162-PhDstudent/YOUR NAME

Please submit applications via email: [grk2162@fau.de](mailto:grk2162@fau.de)

Application closing date is **November 30th 2020**.

Start date: late winter / early spring 2021.

For further information please contact [grk2162@fau.de](mailto:grk2162@fau.de) and visit our websites

<https://www.grk2162.med.fau.de/> and <https://www.karowlab.org/>