



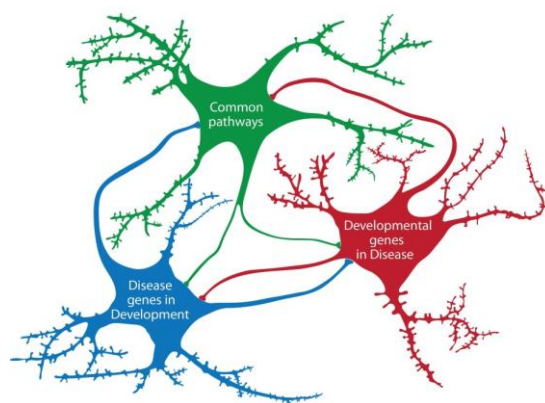
# Ph.D. student position in Neuroscience

offered by the

## RTG 2162

### “Neurodevelopment and CNS vulnerability”

in Erlangen-Nürnberg, Germany



A PhD position is available in the laboratory of **PD Dr. Christiane Mühle** working on “**Biomarkers of Neuropsychiatric Diseases / Translational Psychiatry**” at the Department of Psychiatry and Psychotherapy at the Universitätsklinikum Erlangen and the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany.

The objective of our work is the identification and characterization of biomarkers, risk factors and underlying mechanisms of neuropsychiatric diseases with a focus on sphingolipids and sphingolipid metabolizing enzymes. Thereby, we aim to improve the understanding of the pathogenesis, prevention, diagnosis and personalized therapy. In this translational PhD project, you will assess the utility of the enzyme species of sphingomyelin synthase (SMS) as biomarkers for depression and therapeutic response including the new phenotype of "male depression", and study their regulation at different levels using biomaterial from several clinical studies and paying attention to sex-specific effects. You will then validate the findings from human patients in mouse models of depression of a complementary basic project on SMS as a candidate target for fast-acting antidepressants.

We are looking for a curious and highly motivated student with an excellent Diploma/Master degree in Molecular Medicine, Biology, Biochemistry or related fields. Candidates should have a strong background in Neurobiology or Molecular Biology. We offer state-of-the-art facilities in a very collaborative environment and interdisciplinary team.

The doctoral researcher will be part of the DFG-Research Training Group 2162 “Neurodevelopment and CNS Vulnerability” at the FAU, which offers a 3-year structured, international PhD program in basic and translational neurobiology with mentorship, scientific and soft-skill training and support.

For further information, please visit our websites [www.grk2162.med.fau.de/](http://www.grk2162.med.fau.de/) and [www.psychiatrie.uk-erlangen.de/forschung/arbeitsgruppen/biomarkertranslationale-psychiatrie/](http://www.psychiatrie.uk-erlangen.de/forschung/arbeitsgruppen/biomarkertranslationale-psychiatrie/)

#### How to Apply

**A) Please submit as a single pdf file** via email to [grk2162@fau.de](mailto:grk2162@fau.de):

- (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

Application closing date is **January 15<sup>th</sup>, 2021**  
Start date: **March/April in 2021**