

The Department of Molecular Neurology at the University Hospital Erlangen (Head: Prof. Dr. J. Winkler) is seeking a highly motivated PhD student for a project focusing on the immunological interactions between the gastrointestinal and the central nervous system entitled “Neuroinflammation and synucleinopathy in inflammatory bowel disease”.

Project Description:

Parkinson Disease (PD) is a progressive neurodegenerative movement disorder without causal therapies at present. Mounting evidence shed light on inflammatory processes, both in the central nervous system (CNS) and the periphery, as an important driver for the underlying pathogenesis in PD. In line with this, inflammatory bowel disease (IBD) predisposes for PD in later life. The project focuses on the impact of chronic gastrointestinal inflammation on PD-linked neuropathological changes including the accumulation of α -synuclein and degeneration of dopaminergic neurons. We aim to counteract these changes by genetic targeting of microglia, the brain resident myeloid cells. The project is funded by the Interdisciplinary Center for Clinical Research (IZKF) of the University Hospital Erlangen.

Experimental Methods:

- Protein and gene expression analysis
- Next-generation sequencing
- Working with genetically modified mice
- Confocal microscopy

Our Offer:

- PhD-position, initially limited to 2.5 years, with the possibility of extension
- Salary according to German civil service tariff (TV-L 13, 65%)
- A structured education and mentoring programme by the IZKF
- An interdisciplinary working environment at the interface of neuroscience, immunology, and gastroenterology
- State-of-the-art lab facilities at the Department of Molecular Neurology, access to core facilities for cell sorting and next generation sequencing

Your Qualifications:

- Research-based master’s degree or equivalent (e.g. diploma) in biology, neuroscience or a related subject
- Excellent English language skills in spoken and written form
- Self-motivation, pro-active working ethics, good communication skills and ability to work independently
- A background in cellular neuroscience, immunology and experience in confocal microscopy and animal handling (FELASA) will be considered an asset, but are not mandatory

How to Apply:

Applications will be accepted until the position is filled.

Please send the required documents (English or German) in one PDF:

- A detailed CV
- A letter of motivation
- Degree certificates and grade transcripts (Master’s and Bachelor’s Degrees)

Start of the project: October 1st, 2021.

Contact information:

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