Welcome to Jena University Hospital!

Being the largest employer in the region, our around 5,600 employees working in 26 departments and clinics provide ambulatory care for around 280,000 patients and inpatient treatment for more than 55,000 patients each year.

Duties and Responsibilities:

Mutations in different genes expressed in rod cells trigger an inherited degenerative disease of photoreceptors, known as “Retinitis pigmentosa (RP)”. This disease leads typically to severe impairment of vision and very often to blindness. The purpose of this study is to examine one important step in the pathophysiological mechanism of Retinitis pigmentosa: the cyclic nucleotide-gated (CNG) ion channels (Vighi et al. 2019, PNAS). By means of novel cGMP analogues we aim toward a novel pharmacological approach to slow down or even stop the cascade of events leading to rod photoreceptor death, preserving in this way the normal retinal function.

One of our objectives is to understand the process of ligand binding and to identify strategies for achieving selectivity among channel isoforms. The retinal CNG channels will be investigated by electrophysiological and optical techniques.

This project has a great potential to initiate and develop novel therapeutic strategies for RP-patients and is part of a highly competitive research field since, so far, there is no cure for this disease.

This position is financed by the German Research Foundation (DFG).

Requirements:

Applicants must have a M. Sc. degree in a natural scientific field (e. g. biology, biochemistry, molecular biology, pharmacology, chemistry) and great enthusiasm for basic scientific research. Additional knowledge in fluorescence microscopy and/or molecular modelling technique will be appreciated. Applicants are expected to be able to conduct independent research as well as to work successfully as part of the research team at the Institute of Physiology II. Our institute is excellently equipped and provides many opportunities for further qualification.

The applicants must be fully proficient in English. Knowledge of German language is not required.

Highly motivated and creative candidates are invited to send a cover letter, briefly describing their motivation and career goals, a current CV and copies of pertinent documents to Dr. V. Nache (Vasilica.Nache@med.uni-jena.de).

Become part of our team in the Institute of Physiology II as

PhD student (m/f/d)

in part time (26 hours per week, reference number: DM12/2020)
initially for 3 years

Please apply till 06.03.2020 via email to vasilica.nache@med.uni-jena.de