Masters Project in Molecular Neuroscience

Institution: Keays Lab, Biozentrum, Großhaderner Str. 2

Start date: Open

Deadline for application: 1st January 2024

Project duration: 6 months

keay**S** lab

Description:

An opportunity exists for a passionate neuroscientist to join the Keays laboratory to undertake a masters project investigating how mutations in MAST1 cause neurodevelopmental disease. We have previously shown that gain of function missense mutations in this uncharacterised microtubule associated kinase cause cortical malformations with an enlarged corpus callosum (Tripathyd et al, Neuron 2018). MAST1 has been further implicated in the pathology of autism and microcephaly. This project will focus on the impact of MAST1 mutations on microtubule assembly, stability and dynamics. The student will exploit state-of-the-art imaging, molecular methods, and cell culture.

The Keays laboratory is located in Munich within the division of Neuroscience at the Biocentrum Campus at Martinsried. We are supported by sequencing, proteomic and microscopy facilities. Members of the lab originate from around the globe, English is the working language, and we foster an egalitarian atmosphere. Previous students form the lab have then embarked on PhD programs at Harvard, Oxford, Cambridge, FMI, and Cold Spring Harbour.

The ideal applicant will have a background in neuroscience and/or cell biology. Passion, perseverance and creativity are essential attributes.

Tasks:

- Imaging
- Neuronal cell culture
- Immunohistochemistry
- Molecular methods.



Our offer:

- The opportunity to work in a young, vibrant team on an emerging topic in neuroscience.
- The chance to learn advanced neuronal cell culture and imaging methods.

Please send your application with a cover letter, CV, and the names of two referees to Prof. Dave Keays (keays@bio.lmu.de) and his secretary Daniela Billenstein (billenstein@biologie.uni-muenchen.de).