A Master Thesis (M.Sc.) Project is available at the LIFE & BRAIN Center, University of Bonn Medical Faculty, Germany

We are looking for a Master student who is passionate about stem cells and their differentiation towards cells of the peripheral nervous system (PNS). Within a subordinated project, we aim to create stem cell derived cellular models resembling a human neuropathic pain condition originating in the PNS. Thereby, elucidation of the complex neuron–glia cell interaction as a prospective important contribution to disease onset and chronification is of key interest.

This Master thesis project aims to evaluate diverse strategies to accelerate the generation of stem cell derived peripheral glia cells in a robust and reproducible manner. Further characterisation of derived cells on a molecular and cellular level next to primary glia cells will be carried out before they will be finally incorporated in co-cultures with respective neurons. Work will include the cultivation of hiPSCs and neural fate specification using a combination of molecular genetics, molecular biochemistry, flow cytometry and microscopy. We offer the opportunity to work in an innovative field of science within a stimulating and supportive environment and provide training in latest cell culture techniques, genetic modification methods and cell differentiation protocols. In addition, our project is part of a research consortium funded by the by the EU and the State of NRW and will constitute an important part in established collaborations with outstanding specialists in the field.

If you are a highly motivated life science student with strong background in cell biology and lab experience, please apply by email and include a CV, your certificates and a brief ‘letter of motivation’. Applications in German and English language will be considered.

Prof Dr. Oliver Brüstle
Institute of Reconstructive Neurobiology
LIFE & BRAIN Center
University of Bonn
Sigmund-Freud-Strasse 25
53127 Bonn
Germany

Tel. +49-228-6885-500
Email: r.neuro@uni-bonn.de

References:

