Bachelor's thesis at the Department of Neurology

Question:
Curious about unlocking the mysteries of pain? Be part of our cutting-edge research as we develop innovative models to study pain. Join us in generating organoids from induced pluripotent stem cells (iPSC) derived from patients suffering from neuropathic pain syndromes, and help uncover the underlying pathophysiology!

Our goal:
Generation and characterization of human-derived neuro-mesodermal assembloids.

Some background:
In pain research, traditional animal models have long been used to study how sensory neurons transmit signals to the brain. However, with the development of organoid technology, there has been a shift from animal models to more human-related organoid systems. Utilizing an innovative organoid model of the somatosensory nervous system, we aim to advance the discovery of new druggable targets against neuropathic pain.

Your tasks and learning opportunities:

- **Cell culture**: Culture of iPSCs and generation of neuro-mesodermal assembloids from patient-derived iPSCs
- **Expression analysis**: Immunohistochemistry, fluorescence microscopy

It is you, because:
You are eager to join our passionate research team and contribute to this project! You are a student of Life Sciences or related faculty. Preferably, you already have some experience in cell culture.

Start and duration: 11/24, 3 months

Team of supervisors:
Prof. Dr. N. Üçeyler, Ann-Sophie Schnell, M.Sc. (schnell_a1@ukw.de)
Please contact Ann-Sophie Schnell if you have any questions about the project

Contact us: Ready to make a difference? We would love to hear from you—apply now and be part of the future of pain research! Please send your application documents (CV and motivation letter) to Prof. Dr. N. Üçeyler: ueceyler_n@ukw.de