Postdoctoral fellow (m/f/d) and **Ph.D. students (m/f/d) in the field of iPSC research and primary cancer *in vitro* models.**

The department of **Molecular and Experimental Surgery (MEC/ U. D. Kahlert) at the Clinic for General, Visceral, Vascular and Transplantation Surgery Medicine** at the University Hospital of Magdeburg, **(R. Croner)** is offering the following positions for enthusiastic and motivated individuals.

Postdoctoral position is for scientists aiming to build their independent careers with a long-term perspective on translational oncology. The clinical field of research is gastrointestinal and hepatocellular oncology. Through the internal cooperation with the surgical clinical team, the primary focus of this position is to build a versatile *in vitro* disease model platform using stem cell technologies, esp. tumor tissue-derived human organoids. Besides, the candidate is expected to establish co-culture system on tumor cells and iPSC-derived neuronal cells. Ultimately, these pathophysiological relevant disease model systems present a unique fundament for application-oriented research such as the development of new medical devices or molecular targeting pharmaceutics. Therefore, the position is calling for a team-oriented, open character allowing the strong interaction with dedicated expert groups in Magdeburg (i.e. medical systems technology, chemistry, tumor immunology) and beyond. The Post-Doc will be supported by the technician of the lab and is expected to supervise one doctoral student in the described research field. The post-doc candidate will be encouraged and supported to write their grant applications and teaching at the medical campus to define the career path, such as via habilitation. Moreover, the successful candidate will be provided with SOPs on established procedures and lab tools, but is expected to bring in new concepts and optimization of stem cell culturing protocols. The PI will provide a personal exchange network with international forefront stem cell research such as at NIH, Johns Hopkins or Chinese Academy of Sciences to further stimulate cutting edge science-oriented mindset.

Ph.D. position is for young and enthusiastic students who want to build their early career in the poorly studied field of Cancer Neuroscience in the context of gastrointestinal and hepatocellular oncology. The student will be trained with all of the prerequisite techniques. The theme of this project is to investigate how the tumor cell – neuron/immune cell interactome dictates resistance to clinical applied pharmacotherapies. By doing so, we aim to identify molecular networks that allow the improved diagnosis or provide potent entry points for new combination treatment regimes. We offer close supervision.

The laboratory is known for translating basic stem cell biology to clinically relevant questions with a publication-oriented track record (Prof. Kahlert will relocate to Magdeburg in October, refer to the PI publications list or unpublished data 1 or 2). As of now, the lab consists of additional Post Doc and a technician, as well as we are currently recruiting an additional position as part of BMBF funded project. Moreover, international guest scientists and surgical clinician scientists are members of the department ensuring transdisciplinary research and ethnic diversity. The spacious Magdeburg lab itself is extremely well equipped with a wide collection of instruments allowing general molecular and cell biology but – facilitated through the cooperation with neighboring four labs located in same research building - also rather specialized instruments such as FACS sorter, time-lapse microscope, different spectrometers, digital pathology system to mention only a few. **The Clinic of General Surgery** is one of the largest surgical treatment centers in the wider area, allowing high frequency access to heterogeneous, high quality patient samples. The successful candidate will have full access to the assorted MEC biobank, that includes tissue and blood samples from different patient cohorts. Moreover, the clinic is a renowned center for innovative surgical technologies, especially robotic surgery that provides additional ground for innovative wet lab experiments (such as medical device development to improve robotic precision guided by molecular signatures of target areas).

Towards this mission, we are looking for a full-time postdoctoral fellow, Lab manager/ TA, and a doctoral student as soon as possible. The position is available for minimum of three with a possible extension. The salary will be according to TV-L scale.

Your profile:
- Excellent University degree in biology/biomedicine/biochemistry/cell biology or related fields
- Strong publication record (Post-Doc)
- Demonstrated record in doing cell biological experiments and microscopy.
- Solid knowledge about pluripotent stem cells

- Excellent experience in microscopy and genomic tailoring
- Practical experience about the generation of cultures from fresh tissues

Application documents to be send electronically only, assembled as one PDF to **ulf.kahlert@med.uni-duesseldorf.de** .