Master's Thesis: Tissue Vascularization

Our Mission:
The newly established Institute for Tissue Engineering and Regenerative Medicine (iTERM) develops and implements 3D-imaging technologies to generate the highest resolution views of whole mouse bodies and human organs. At iTERM, we bring together cutting-edge science from biology, chemistry, engineering, and computer applications. Our overarching aim is to obtain a holistic view of interconnected biological systems in health and disease. We develop clearing technologies for cellular level imaging and deep learning algorithms (AI) to analyze large imaging and molecular data in a robust and an unbiased way. The lab is now moving forward to use the cell-level data for biofabrication. Our research received high attention from high-profile scientific journals (Nature Methods Pan Cai…Ertürk, 2016, Nature Neuroscience Cai Pan…Ertürk 2018, Cell, 2019, Pan Schoppe…Ertürk, Cell Zhao…Ertürk, 2020, Nature Methods Todorov Paetzold…Ertürk, 2020) and media including New York Times, Wall Street Journal and Süddeutsche Zeitung. You can find more about us at www.erturk-lab.com.

iTERM is growing rapidly and to further strengthen the setup of our young institute we are looking for highly motivated individuals**.** We care about **diversity**, and welcome applications from any background.

Job Description:
We are seeking a highly motivated and talented student with experience in working with cell culture and biomaterials. The candidate's task will be growing cells required for multiple tissue fabrication projects. The thesis work will aim at manufacturing cardiac tissue sample and generating perfusable vascular constructs. The effects of different matrices and soluble factors on the tissue will be thoroughly scrutinized.

Your profile:

- Master's student in Biology/ Tissue Engineering/ Biomedical Engineering or similar
- Experience with biofabrication/bioprinting processes
- Confident in the wet lab
- Prior experience with cardiac tissue or cells is a plus
- Structured and independent working style and ability to work in a team

Our Offer:

- Work in an innovative, well-equipped and scientifically stimulating surrounding
- Combine theory and practice and get to build a complete product
- Gain insight into cutting edge technologies from biology to artificial intelligence
- Refine your personal development with further training opportunities

We are looking forward to receiving your comprehensive online application including your letter of motivation, CV, academic transcripts and the name and contact of a referee until **28.02.2021**.

Hiring manager:
Dr. Ali Ertürk, Director,
Institute for Tissue Engineering and Regenerative Medicine (iTERM), Helmholtz Munich

Please e-mail your application to:
Furkan Öztürk
Email: furkan.oeztuerk@helmholtz-muenchen.de
Phone number: +49 089-3187-49712

Dr. Süheda Erener
CC: sueheda.erener@helmholtz-muenchen.de