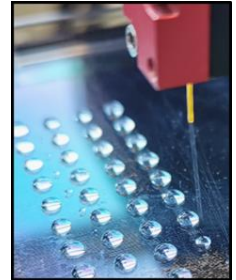


The Department of Microsystems Engineering (IMTEK) is one of the world's largest and leading academic research centers in the field of microsystems technology. The Laboratory for MEMS Applications (Prof. Dr.-Ing. Zengerle) develops tools for diagnostics, microfluidics and life-science research. For a research project we are looking for a

Research Assistant (m/f/d)

in the area of Microfluidics / Laboratory Automation

Automated fabrication of multicellular tumor spheroids using animal-free methods



The scientific and technical goal of the present project is to further develop and validate an automated platform for handling three-dimensional microtumors. Such microtumors can be derived as organoids directly from the patient and used in the clinical setting for personalized therapy. In this context, the individual deposition of viable microtumors in multiwell plates enables the targeted acquisition of growth kinetics and drug responses. The main goal of this work is to establish additional microtumor models in the form of multicellular tumor spheroids for validation of the platform and their adaptation to animal-free cell culture conditions.

Your tasks

- Establishment of standard cell culture of different tumor cell lines
- Adaptation of cell lines in serum-free culture conditions
- Fabrication and handling of tumor spheroids with the automated platform
- Testing of animal-free extracellular matrices as an alternative to Matrigel for the propagation of tumor spheroids

Your profile

- Student of biology, biotechnology, molecular medicine or similar
- Strong experience with standard cell culture methods
- Good teamwork, creativity and solid communication skills in English

We offer

- Young, dynamic and interdisciplinary team and environment
- Attractive workplace in modern, excellently equipped laboratories with the opportunity to gain insights into many exciting work areas such as microfluidics and automation
- Opportunity to prepare a Bachelor/Master thesis based on the project results

If you are interested, please contact us for further information:

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