Job Advertisements within the CRC/TRR 225

The Collaborative Research Centre/Transregio **CRC/TRR 225 "From the Fundamentals of Biofabrication towards Functional Tissue Models"** is an interdisciplinary research consortium of the Universities of **Würzburg, Bayreuth, and Erlangen-Nürnberg**.

The TRR225 aims to develop innovative biofabrication strategies - particularly automated 3D printing technologies - for processing living cells and biomaterials into complex tissue constructs. These advanced in vitro models provide new opportunities for pharmaceutical, cancer, and infection research, support the reduction of animal testing and offer long-term perspectives for regenerative medicine.

Since its establishment in 2018, the consortium has achieved substantial scientific progress and international visibility and will enter its third funding period in 2026.

The advertised position is part of the former subproject **B02**, titled: **Endothelialized perfusable microvascular networks for the biofabrication of standardized in vitro tissue models**, which will now continue as **C07**. Our project focuses on biofabrication of in vitro tissue models containing perfusable and fully pre-endothelialized microvascular networks, mimicking peripheral vessels. We will extensively investigate the network functionality, angiogenic processes and interactions with surrounding cells and spheroids in order to develop 3D models of healthy tissues and of tumor-peripheral vasculature interactions.

PhD candidate (f/m/d)

Your responsibilities

The position includes, but is not limited to:

- Culturing primary human cells and cell spheroids,
- Developing complex in vitro 3D models of tissues using human cells and biomaterials,
- Detailed analyses of network patency during model maturation, angiogenic responses, interactions with tumor cells and spheroids, etc.
- Presenting the data, writing the publications and supervising master students and /or medical doctoral students.

Job details

Salary based on TV-L E13 (67%)
Start date: from March 2026 – until December 2029
Place of work: ERLANGEN - Universitätsklinikum Erlangen | ENT Department | Section of Experimental Oncology and Nanomedicine (SEON)

Requirements

Required qualifications:

- Completed university degree (Master or equivalent) in biology, biotechnology, bioengineering, biochemistry, polymer chemistry or equivalent.
- Experience in cell culture and biomaterial cyto-compatibility testing

Additional desirable qualifications:

- Optional: Experience in microfluidic techniques, cell spheroids, microscopy
- Fluent knowledge of English and German
- Good writing skills

What We Offer

- Interdisciplinary, collaborative research environment
- Access to state-of-the-art equipment and facilities
- Structured PhD training programs (if applicable)
- Opportunities for conference attendance and research stays
- Support for career und personal development

Equal Opportunity & Diversity Statement

We are committed to equal opportunity and diversity and explicitly encourage women to apply. Candidates with disabilities will be given preference if their qualifications are equivalent. We offer an inclusive, supportive, and collaborative working environment.

Contact

For inquiries or to submit your application, please contact the person below. Please submit your documents by **December 20th, 2025** to:

Prof. Dr. Iwona Cicha
Universitätsklinikum Erlangen | ENT Department
Section of Experimental Oncology and Nanomedicine (SEON)
Iwona.Cicha@uk-erlangen.de
+49 9131 8543953

Attachments

Applications must include:

- a complete CV,
- an abstract (max. one page) of the master thesis
- MSc certificate (scan)
- a short motivation letter (max. 1 page) describing why you would like to join the project,
- names and addresses (postal and e-mail) of two or three persons willing to provide confidential letters of reference.

Only complete applications will be considered.