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 subproject **B11 (PI: Leonid Ionov),** which focuses on the fabrication of fiber-reinforced tissue models using a combination of 3D printing and fiber spinning, incorporating embedded 4D-biofabricated vascular elements.

PhD candidate (f/m/d)

Your responsibilities

The position includes, but is not limited to:

- Development and characterization of bioink
- Fabrication of fiber-reinforced gel structures with living cells
- Fabrication of vascular elements using shape changing materials
- Investigation of cell behavior
- Writing papers and participation in conferences

- Employment level and contract duration: PhD student; up to 4 years.
- Expected starting date and place of work: 01.01.2026; University of Bayreuth, Biofabrication Group

Requirements

Required qualifications:

- Completed university degree (Master or equivalent)
- Experience in cell culture, biomaterials, additive manufacturing, fiber spinning

Additional desirable qualifications:

- Experience in mechanical and rheological characterization of materials

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 to:

Prof. Leonid Ionov
University of Bayreuth
leonid.ionov@uni-bayreuth.de
www.ionovlab.uni-bayreuth.de

Attachments

Please include:

1. Letter of motivation
2. Curriculum vitae and copies of diplomas
3. Transcript of university grades
4. Other relevant documents
5. One or two letters of recommendation