

PhD position (m/f/d) on engineering and bioprinting of diaphragm muscle tissue

PhD position (m/f/d) on engineering and bioprinting of diaphragm muscle tissue

The University of Bayreuth is a research-oriented university with internationally competitive and interdisciplinary profile fields in research and teaching. The Chair of Biomaterials (research group of Biomaterials for Tissue Regeneration) has the following vacancy:

PhD position (m/f/d) available as a DFG-funded research project “In vitro model for tissue engineering of diaphragm”

The project

We are currently developing interdisciplinary research projects focused on tissue engineering and regenerative medicine. The projects aim to develop an *in vitro* model for a diaphragm using 3D bioprinting, and composite fibrous materials. The project is highly interdisciplinary and requires collaboration with researchers from engineering, medicine, and chemistry. The application-oriented research will be performed in laboratories located at the Department of Biomaterials at the University of Bayreuth. Furthermore, this interdisciplinary project will be performed in close collaboration with muscle and tendon biologists in Austria and Italy as well as biomechanics experts towards characterizing and tuning the mechanical properties of tissue-engineered constructs.

Your profile

We are looking for an excellent, highly motivated early-career researcher to join our research team. The ideal candidate should have a Master's Degree in one of Materials Engineering, Mechanical engineering, Biomedical Engineering, Chemistry, Polymer, or Biology. Basic knowledge of cell culture, polymer chemistry, 3D printing, is beneficial. Experience in hydrogel preparation and various physical and mechanical properties characterization, co-culture of cells, analysis the cell behavior with different assays, and Abaqus software are most welcome. Fluency in German or English is expected.

Our offer

We offer excellent working conditions in an international research team at the beautiful campus of the University of Bayreuth. The earliest starting date is March 2023. The salary and working hours are in accordance with the funding guidelines of the University of Bayreuth for early-career scientists. The salary is based on the public salary scale TV-L E13. The PhD position (75%) is limited to **three** years. The successful candidate will work in an international research lab focusing on the development of biomaterials for bioprinting and microfabrication of skeletal muscle tissue (<http://www.fiberlab.de/>, <http://trr225biofab.de/>). The regular exchange with the cooperation partners at the universities of Bayreuth, Friedrich-Alexander-University Erlangen-Nürnberg, Paracelsus Medical University, and the University of Padova is a further advantage of the offer.

The University of Bayreuth values the diversity of its employees and is explicitly committed to the goal of gender equality. Women are strongly encouraged to apply. Applicants with children are very welcome. The University of Bayreuth is a member of the Best Practice Network “Familie in der Hochschule e.V.”, and has successfully participated in the HRK audit “Internationalization of the University”. Persons with severe disabilities will be given preferential consideration if equally qualified.

Your application

Please apply **online** via the [Application Portal Uni Bayreuth](#), selecting “**bioprinting of diaphragm tissue**” from the drop-down menu. Your application should contain a cover letter (describing your past and current research interests), your CV, your publication list as well as the contact information of two references.

The documents will be deleted after the position has been filled, in accordance with data protection requirements.

For further information, please contact **Dr. Sahar Salehi-Müller**
(email: sahar.salehi-mueller@bm.uni-bayreuth.de)