PostDoc position (m/f/d) on biofabrication of perfusable, freestanding vasculature for tissue engineering

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:

Postdoc position (m/f/d) available as a DFG-funded research project "Biofabrication of perfusable, freestanding and interconnected vasculature for tissue engineering"

The project

Vascularization is still one of the key challenges in biofabrication and tissue engineering. The project aims to develop freestanding, prefabricated and fully matured vascular structures, which can be independently cultivated from surrounding tissue. It is an interdisciplinary project utilizing sophisticated materials, 3D-printing and vascular biology. It is partially based on utilizing freeform printing of sacrificial materials to generate complex vascular structures in hydrogels. The goal is to generate a freestanding, interconnected, and multilayered microvessel system, which can be perfused and is based on biocompatible hydrogel materials like modified gelatin. The application-oriented research will be performed in laboratories located at the Department of Biomaterials at the University of Bayreuth.

Your profile

We are looking for an excellent, highly motivated early-career researcher to join our research team. The ideal candidate has a PhD and is experienced in cultivation and characterization of vasculature regarding 3D cell culture. Furthermore, experience and interest in 3D-printing, hydrogel preparation, co-culture of cells and artificial tissue maturation are most welcome. Good communication skills, independent thinking, creativity and fluency in English are 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 December 2023. The salary and working hours are in accordance with the funding guidelines of the University of Bayreuth for scientists. The salary is based on the public salary scale TV-L E13 (100%). The positions funding is secured until end of 2025. The successful candidate will work in an international lab focusing on 3D printing and the biofabrication of natural and interconnected multi-layered vascular structures.

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 our **application portal** of the University of Bayreuth **by 30th November, 2023** indicating the password "**PostDoc Tissue Regeneration**". 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. Matthias Ryma (email: matthias.ryma@uni-bayreuth.de)