

**Research Assistant / Postdoctoral researcher position**  
in  
**Biomechanics / Infection Biology / Microtechnology**

The **Institute of Microtechnology** of the Technical University of Braunschweig is looking to fill a Postdoctoral Researcher position (Entgeltgruppe E 13, m/w/d) as part of Prof. Dr. Iordania Constantinou's research group. The earliest starting date for this position will be on 15.01.2021. The position is limited to a period of two years. Part time employment is possible.

**The research project**

The project seeks to understand the relationship between endothelial biomechanics and *Borrelia burgdorferi* infection using advanced organ-on-chip (OoC) platforms. The successful candidate is expected to establish epithelial/endothelial cell cultures in OoC platforms and use them to study the effect of endothelial biomechanics on *Borrelia burgdorferi* dissemination. Among others, the position involves the establishment of cell culture and infection protocols in our newly established facilities. The project is funded through the VW Stiftung initiative Kurswechsel – Project title: “Decoding Lyme Disease: From Microtechnology to Biomechanics”.

**Desired qualifications:**

- PhD in a related field of biology or biomedical engineering
- Experience in mammalian cell culture and bacterial infection of host cells - previous experience working with *Borrelia burgdorferi* would be highly desirable
- Experience working in biosafety level 2 (BSL-2) environments
- Interest in interdisciplinary research, especially in the combination of engineering and biology
- Interest in gaining teaching experience
- Flexibility and reliability
- Very good knowledge of English, good German beneficial

**The institute**

The Institute of Microtechnology (Institut für Mikrotechnik) is home to a dynamic team working on a range of interdisciplinary subjects in a collaborative environment. A state-of-the-art clean-room facility, in combination with additional associated laboratories, provides all necessary equipment and support for the fabrication and characterization of novel microsystems.

Part of the work mentioned above will be carried out in the newly founded Center of Pharmaceutical Engineering (PVZ) in Braunschweig. At PVZ, experts from pharmacy, biology, process engineering, and microtechnology work together towards the production of inexpensive, tailor-made medicines and medical devices.

TU Braunschweig aims to increase the number of women in science and technology. Women are therefore strongly urged to apply, as are qualified handicapped applicants. The university is multicultural and applications are welcome from all nationalities. Please note that personal data and

documents related to the application process will be stored electronically, and that application costs cannot be refunded.

### **Application Process**

Please prepare your application documents in English as a combined PDF document consisting of:

- a short cover letter
- a full CV - including a list of publications
- available academic performance records

Applications and/or questions regarding this position should be sent directly to Prof. Constantinou at [i.constantinou@tu-braunschweig.de](mailto:i.constantinou@tu-braunschweig.de). Application deadline: November 30<sup>th</sup> 2020.

We look forward to receiving your application!

