

The Charité – Universitätsmedizin Berlin is a joint institution of the Freie Universität Berlin and the Humboldt-Universität zu Berlin. The Charité is one of the largest university hospitals in Europe. Here, 3700 doctors and scientists treat patients, perform research and teach at the highest international level. The Charité also has an international reputation for excellence in training, with certifications in the medical, clinical and management fields.

The following position is currently available in the workgroup “Musculoskeletal Biomechanics” **within the Julius Wolff Institute (JWI)** under the direction of Prof. Dr. Georg Duda:

PostDoc

“Advancing soft tissue biomechanical characterization”

The Julius Wolff Institute focuses on applied and basic research in orthopedics and traumatology with special focus on regeneration of the musculoskeletal system after injury or degenerative diseases. Our aim is gain a better understanding of the loads and strains acting in a human body and the resulting biological consequences of such mechanical conditions. For our biomechanics lab we are searching for a PostDoc that is scientifically interested to develop unique approaches for biomechanical characterizations, specifically in soft tissues. We think that combining histological observations with structural characterizations will enable our understanding of the role of mechano-biology in soft tissues in general. While being very open in the scientific focus for the candidate, we would like to follow the tradition of Julius Wolff in aiming to unravel the linkage between loads and resulting biological consequences.

Your tasks would be:

- to further develop existing and invent new technologies for soft tissue characterization of various soft tissues across various length scales
- merge mechanical matrix characterization with histological and immun-histological imaging of the same tissue, ideally towards a 3D understanding of extracellular matrix properties in different soft tissues
- employ the new testing strategies for soft materials also for synthetic materials ex vivo and for life imaging

Your profile:

- master or diploma in mechanics, mechanical engineering, physics or material sciences
- solid understanding of mechanical testing, incl. existing measurement software tools
- a PhD in biomedical sciences or similar fields with a publication track record illustrating independent working capabilities

highly appreciated:

- experience in biomechanical testing and development of devices
- communication skills in English
- you are team oriented, enthusiastic and flexible

Salary will be according to the TV-Charité structure (E13 scale) with 39 hours/week. The position is offered for a duration of 36 months, with an option for extension.

The Charité – Universitätsmedizin Berlin hires based on the suitability, competence and professional performance of applicants. We actively promote equality of all employees. We therefore welcome applications from women and men, regardless of their cultural and social background, age, religion, belief, disability or sexual orientation. Applicants with a disability are given preferred consideration if equally qualified.

Please send your complete application including a motivation letter with what you would find especially interesting on this job within 14 days, with reference to the ID above to the following address:

**Charité – Universitätsmedizin Berlin,
Julius Wolff Institute, Sekretariat, Augustenburger Platz 1, 13353 Berlin, Germany**

You can also submit your application via email: georg.duda@charite.de



The application material will be returned only if a stamped addressed envelope is enclosed. Unfortunately, travel costs for an interview cannot be covered.