

The **Institute of Sport and Exercise Sciences** is seeking to fill the position of a

Student Assistant (SHB) **Studentische Hilfskraft mit Bachelorabschluss**

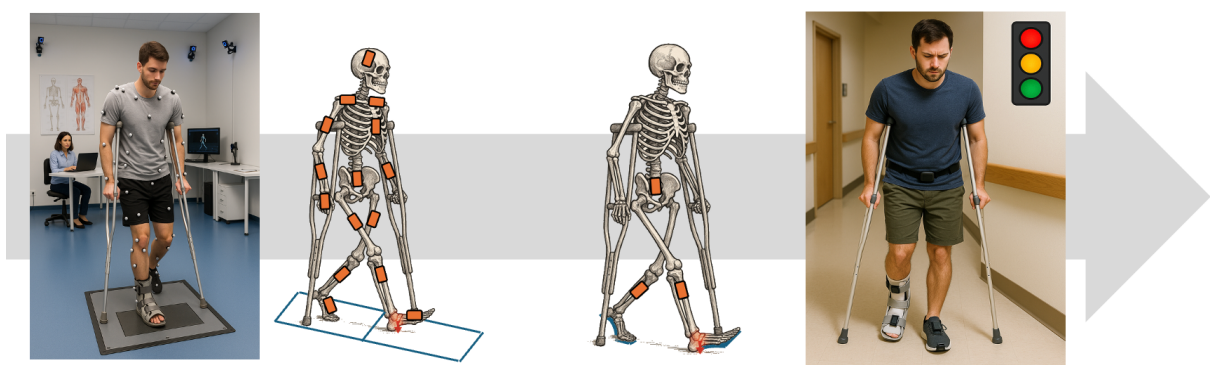
for the externally funded project Ankle ReLoad commencing on 1 April 2026.

We are offering a part-time position (6 hours per week) for 1 year.

Project background

Every year, approximately 105,000 patients in Germany and the Netherlands are treated for ankle fractures, most of them between 35 and 65 years old. In addition to the personal impact, these injuries lead to considerable societal costs due to lost workdays. Clinical evidence shows that active ankle joint loading significantly improves recovery. However, the optimal loading intensity is still unknown: excessive loading may delay healing, while insufficient loading limits functional recovery.

The Interreg collaboration project Ankle ReLoad aims to develop a wearable measurement system capable of assessing ankle joint loading in home-based rehabilitation using a minimal number of sensors. High-precision laboratory measurements of full-body movement and external forces will serve as the foundation for training predictive models. Using machine learning, these models will estimate joint loads from wearable sensor data and provide personalised feedback to patients and clinicians via a digital application.



Your tasks include

- Participate in the execution of the motion-capture experiments in the OpenLab.
- Integrate kinematic and kinetic data into a musculoskeletal computer model.
- Perform inverse-dynamics analyses to calculate internal ankle-joint forces and moments
- Perform data processing and data analysis activities.

Our expectations:

- Bachelor's degree (BSc) in Human Movement Science, Sports Science, Biomedical Engineering, Mechanical Engineering, or a related discipline.
- Good programming and data-processing skills (e.g., Python, MATLAB).
- Excellent communication and organisational skills.
- Proficiency in English (written and spoken). German language skills are desirable.
- Interest in clinical rehabilitation contexts, hands-on data collection and data analysis.
- Interest in linking curricular research (e.g., research project, thesis) to the project is desirable.

We offer:

- A Student Assistant position (SHB), 6 hours per week for 1 year, within an international and interdisciplinary research consortium under the Interreg Germany–Netherlands program, with the possibility of extension for an additional year based on performance and mutual agreement.
- Opportunities for international collaboration, scientific publications, and conference participation.
- Contribution to an applied research project with direct clinical and societal relevance, improving recovery after ankle fracture.

Are you interested?

Then we look forward to receiving your application by January 16th, 2026. Please send us your application electronically in PDF format to:

- Rosemary Dubbeldam (r.dubbeldam@uni-muenster.de) and
- Anne Dalhaus (a.dalhaus@uni-muenster.de).

If you have any questions, please contact Dr. Rosemary Dubbeldam.