

PhD position

"Tendon-on-a-chip: a biomimetic tendinopathy model"

Job Summary

The Vetmeduni Vienna's Veterinary Regenerative Medicine lab invites applications for a 3-year PhD position (start: 4.9.2023). The project aims to develop a microphysiological tendon model that emulates in vivo tendon biology by incorporating the key cellular, mechanical and biochemical cues characteristic of tendons under physiological, injurious and pathological conditions. The PhD student will establish and optimize the culture conditions for tenocytes, macrophages and synoviocytes of different species for the intra- and extrasynovial tendon-on-a-chip (hydrogel selection and tuning, co-culture (on-chip), biomechanical and chemical stimulation) and participate in the evaluation of the effects of mechanical (over-)loading on cell signaling and the validation of the microfluidic tendon models. The successful candidate will enjoy the benefits of a collaborative scientific environment, and will have access to state-of-art experimental and analysis tools and interdisciplinary supervision.

Specific Requirements

- Master degree (or equivalent) in biomedical sciences, molecular biology or biotechnology or related disciplines
- English fluently written and spoken (B2)
- Practical laboratory experience
- Experience with cell culture
- Experience with molecular biological analyses

Desired skills

- Practical experience with cell culture of tenocytes, synoviocytes and macrophages
- Experience with data analysis (Mass Spec, RNA Seq)

Informal enquiries may be made to florien.jenner@vetmeduni.ac.at.

We look forward to your application! To apply please send the email the following document to florien.jenner@vetmeduni.ac.at by 15.6.2023:

- a letter of intent
- a curriculum vitae including a short description of scientific experiences
- name and contact details of 3 referees