

PhD position

"The role of the Treg:Th17 ratio in OA - restoring the balance by epigenetic and metabolic reprogramming "

Project

Osteoarthritis (OA) is the most common chronic musculoskeletal disease and a leading cause of disability. It represents a significant health and welfare problem, both in humans and in horses. In OA, the synovium displays a CD4+ T-cell infiltration, characterized by a proinflammatory Th1 and Th17 cell predominance. This project will take a novel approach to address the chronically inflamed articular environment by modulating the pro-repair regulatory T-cell lineage commitment by epigenetic and metabolic reprogramming, utilizing microRNA mimics, probiotic supernatants or EGCG as potential therapeutic factors.

The Vetmeduni PhD Programme "One Health"

The University of Veterinary Medicine, Vienna (Vetmeduni), Austria is calling for applications for the first cycle (academic year 2023/2024) of its new One Health PhD Programme.

The Programme is designed for students who wish to undertake research at the intersection of animal and human health, food safety and environmental sustainability. Our curriculum covers a broad range of topics including epidemiology, infectious and non-communicable diseases, microbiology, data science, food safety, ecology and conservation medicine. The faculty members are experts in their fields and will provide students with a high-quality education and hands-on research experience. Students will have the opportunity to conduct research on human, animal and environmental health, contributing to innovative solutions to current and future health problems. The One Health Programme will be taught in English. Further information on the "One Health" PhD Programme may be found on our [home page](#).

The successful candidate will be expected to start working on the project 04.09.2023.

Specific Requirements

- Master degree (or equivalent) in biomedical sciences, molecular biology or biotechnology, veterinary or human medicine or in another field of life sciences
- English fluently written and spoken (B2)

Desired skills

- Practical laboratory experience
- Experience with cell culture
- Experience with molecular biological analyses
- Practical experience in the isolation and culture of chondrocytes, synoviocytes and T cells
- Experience with qPCR, NGS, ELISA, cytokine arrays, IHC
- A cooperative attitude and the ability to work in a team
- A high level of organizational skill
- A structured and accurate way of working

Job details

Grade: B1 pre-doc

Level of employment: 30 hours per week

Duration of contract: limited to 3.5 years

Deadline for applications: 14.5.2023

Reference number: 2023/0128

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

Applications

We are looking forward to your application! To apply, please send an email with the following documents to bewerbungen@vetmeduni.ac.at quoting **reference number 2023/0128**:

- a letter of intent
- a curriculum vitae including a short description of scientific experiences
- name and contact details of 3 referees
- Graduation certificate/Masters diploma.

As an alternative to a graduation certificate, you may submit an official declaration from your institution giving the date you are expected to graduate. If you are selected for the position, you must provide your graduation certificate when you take up employment.