Veterinärmedizinische Universität Wien
University of Veterinary Medicine Vienna

Department für Pathobiologie
Department for Pathobiology

Institut für Parasitologie
Institute of Parasitology

http://www.vetmeduni.ac.at/parasitologie/

Practical Training Opportunities
On the Topic of
"Recombinant Expression and Purification of Parasite Antigens"

Ideal for students involved in

- **Bachelor's Programme in Biomedicine and Biotechnology**
- **Master's Programme in Comparative Biomedicine**

Dr. Shi Yan is seeking for highly motivated students to work on a compelling research project at the University of Veterinary Medicine Vienna. Find more project details here:
https://www.vetmeduni.ac.at/en/top-vet-science/haemonchusvaccine

General background:

Protein glycosylation is one of the most important post-translational modification events occurring in all biological systems. Helminth cells are covered with special sugarcoats, which are targets of the host immune system. We engineer the glycan PTM pathways of insect cells and use them to express recombinant antigens of parasites. Purified antigens will be used to study host-parasite interactions *in vitro* and their vaccine potentials will be assessed in an animal trial.

Your tasks:

Maintain insect cell culture, express different *H. contortus* glycoproteins and perform affinity chromatography to purify the recombinant proteins using an ÄKTA purifier.

Your opportunities:

- Learn new skills from enthusiastic team members
- Work with non-infectious genetic material
- Hands-on experience on cell culture
- Perform automated protein purification workflow
- Possible to conduct a Bachelor/Master thesis after the internship

Minimal know-how:

- Fluent English
- Molecular biology
- SDS-PAGE and Western blotting

Start: June 2023   **Duration:** 6 to 8 weeks
Location: Institute of Parasitology at Vetmeduni Vienna (Veterinärpl. 1, 1210 Wien)
Contact: Dr. Shi Yan (team leader)
shi.yan@vetmeduni.ac.at
Tel: 01250772218

@mryanshi