

## Thesis Opportunities

### Details of the thesis/topic

Type of thesis: Bachelor Thesis

Title of the thesis/topic:

**Investigation of UCP2 expression in bone marrow-derived macrophages isolated from C57BL/6J and -N mice**

Short description of the thesis/topic:

The group of Physiology and Biophysics is looking for a student who is interested in doing a research project in immunology. The project is a part of the SFB Immunometabolism, entitled "Investigation of UCP2 expression in bone marrow-derived macrophages isolated from C57BL/6J and -N mice". In this project the student will learn different cellular and molecular techniques including isolation of bone marrow-derived macrophages (BMDMs) from mice, differentiation of BMDMs towards macrophages, isolation of total protein from BMDMs, western blot analysis and qRT-PCR method. This subproject will investigate the correlation between expression of UCP2 as a mitochondrial transporter and different phenotypes of the macrophages sourced from bone marrow of the C57BL/6 mouse substrains (e.g., C57BL/6J or C57BL/6N). The work may be considered as an internship, bachelor thesis or master thesis with a financial support for the selected applicant as a student helper.

Requirements:

Working with mouse 6-8 months old (dead)

-Isolation of bone marrow from tibia and femur

-Protein isolation from cells

-Immunoblotting

Further information:

Interested applicants may send their CV and a motivation letter to Jila.Nasirzade-Rajiri@vetmeduni.ac.at or Elena.Pohl@vetmeduni.ac.at.

Duration of the thesis: 4 months

Start: July 2022-October 2022

Language of the thesis: English

### Contact details:

Name of the organisational unit (Institute/Clinic/Unit):

**Group of Physiology and Biophysics, Department of Biomedical Sciences, University of Veterinary Medicine Vienna**

Contact person for the thesis:

**Dr. Scient. Med. Jila Nasirzade, PhD**

E-Mail: [Jila.Nasirzade-Rajiri@vetmeduni.ac.at](mailto:Jila.Nasirzade-Rajiri@vetmeduni.ac.at)

Telephone: +43 1 25077-1234

Feedback from students requested by: 30.06.2022

**Please send the completed form to: [communications@vetmeduni.ac.at](mailto:communications@vetmeduni.ac.at).**

Thesis opportunities will be announced on our website [www.vetmeduni.ac.at](http://www.vetmeduni.ac.at). (on <http://www.vetmeduni.ac.at/en/teaching/study-phases/graduation/theses>; direct link from home page and also to <http://www.vetmeduni.ac.at/en/research/youngscientists>).