

PhD student position

Vascular Toxicology and Extracellular Vesicles

The Ludwig Boltzmann Institute for Traumatology, the Research Center in Cooperation with AUVA, has the goal of developing and advancing diagnostic, therapeutic and regenerative strategies to enable the full and sustained recovery of trauma patients. Currently, the institute employs around 80 people, consisting of biologists, chemists, biochemists, doctors, veterinarians, physicists, medical and electrical engineers. This multidisciplinary team makes it possible to cover an exciting range from basic to applied research.

The LBI Trauma is seeking to hire a **PhD student** (30 hours/week) within its Vascular Biology Group. The student will be enrolled in the PhD Program (N094) “Vascular Biology” at the Medical University of Vienna (MUW) and supervised by the group leader Dr. Wolfgang Holnthoner. The group is located at the Ludwig Boltzmann Institute for Traumatology in the “Traumazentrum Wien - Standort Lorenz Böhler” and at the Institute of Molecular Biotechnology, BOKU – University of Natural Resources.

Project description

Several chemical compounds exert toxic effects on the human vasculature. In this project some of these will be analyzed regarding their effects on artificially engineered vascular networks (Tissue Engineering). In addition to basic read-outs including cell viability, the length of vascular tubes and the degree of interconnectivity (“junctions”), the release of extracellular vesicles (EVs) and their cargo will be analyzed in order to identify early biomarkers of vascular dysfunction and potential mode of action of the toxicants.

The PhD student will acquire all major techniques in cell and molecular biology with a specific focus on EV methods including established techniques, such as nanoparticle tracking analysis (NTA), or fluorescence-triggered flow cytometry (FT-FC).

Your Profile

- A completed master degree in a cell and molecular biology-related field of study
- Excellent oral and written communication skills in English
- Experience with eukaryotic cell culture and molecular biological techniques (PCR, flow cytometry, Immunoblotting, ...).
- Experience in the field of extracellular vesicles and/or vascular biology is desirable.
- Broad scientific curiosity and good social skills

Terms of employment

We offer a 3-years contract, including a one-month probation period, starting February 1st, 2023 or whenever possible after that date. The offered gross annual salary follows the FWF employment guidelines (<https://www.fwf.ac.at/en/research-funding/personnel-costs>) and approximates EUR 2.300,30 for 30 hours/week. Five weeks of paid vacation time are included. The successful candidate will be eligible for career development support from the LBG's career service (Career Center; <https://cc.lbg.ac.at/>). We encourage applications by women and international candidates.

Application

Applications must be submitted by e-mail to Dr. Wolfgang Holnthoner (wolfgang.holnthoner@trauma.lbg.ac.at) and must include a letter of motivation, CV and the names and contact details of two references. The application deadline is December 31, 2022, 08:00 CET. We look forward to receiving your application and getting to know you personally!