

Open position for a PhD candidate to work on the role of galectins in osteoarthritis

Within a research project funded by the **Ludwig Boltzmann Gesellschaft (LBG)**, we have a vacant position at the **Medical University of Vienna** with start date on **September 1st, 2022** for a PhD candidate.

Participating in the Ludwig Boltzmann Institute for Arthritis and Rehabilitation (LBIAR), the Karl Chiari Lab for Orthopaedic Biology' at the Department of Orthopedics and Trauma Surgery (Medical University of Vienna) and the Division of Rheumatology at the Department of Internal Medicine III (Medical University of Vienna) work together to explore the glycobiology of degenerative joint diseases such as osteoarthritis (OA).

OA ranks among the most prominent debilitating joint diseases that still lacks effective therapeutic treatment. Based on our pioneering work, galectins (a family of carbohydrate-binding proteins) have emerged as novel mediators of inflammatory and degradative processes in human cartilage. The advertised PhD project will investigate the role of galectins in clinical specimens of synovial and meniscus tissue, as well as in mouse models of OA.

The project includes work with

- (1) diverse in vitro culture models comprising 2D and 3D cell cultures, explant cultures, as well as microfluidic and Lab-on-a-Chip systems.
- (2) OA animal models, breeding, genotyping, various surgical and injection techniques, organ preparation, histopathological and μ CT analysis
- (3) transcriptomics, proteomics, glycomics, histology, immunohistochemistry, FACS analysis and confocal microscopy.

Your profile:

- Master degree in life sciences (biology, biochemistry, pharmacy, medicine or similar)
- Previous laboratory experience is essential
- Experience in primary cell culture, histology, molecular biology techniques or animal research is a plus
- Excellent communication skills in English
- Enthusiasm for basic research, interest in musculoskeletal disorders
- Great team player

We offer:

- PhD salary from the LBG for **3 years** (2,300 €/month gross)
- Participation in an international PhD program at the Medical University of Vienna
- Highly supportive and collaborative environment
- (Inter)national collaborations, networking and exchange opportunities

Application documents (cover letter describing your research interests and ambitions, Curriculum Vitae, abstract of master thesis, and contact information of 2 references) should be sent **until August 1st, 2022** to Assoc.Prof. Priv.Do. Mag. Dr. Stefan Toegel (stefan.toegel@meduniwien.ac.at; subject: 'Application PhD Position LBG')

Contact: stefan.toegel@meduniwien.ac.at; www.meduniwien.ac.at/ortho-biology