



## Funded Master thesis in the field of autoimmunity (Immunology, Rheumatology)

We are looking for a highly motivated and curiosity-driven Master student to join our research team to explore the potential of epigenetic drugs as a novel treatment strategy for patients with rheumatoid arthritis (RA). Despite significant advances in the field for the past years, many RA patients remain unresponsive to currently available treatments and suffer from dire quality of life and socio-economical consequences. This underscores the need for new and innovative therapeutic strategies. The project we are proposing aims precisely to answer this need by elucidating the precise mechanisms of epigenetic drugs and advancing their potential as innovative treatment approaches.

The project will be conducted under the co-supervision of Marie Brinkman and Michael Bonelli at the Division of Rheumatology, Medical University of Vienna as part of the FWF SFB-F70 program, “HDACs as regulators of T cell-mediated immunity in health and disease” (<https://www-new.meduniwien.ac.at/HIT/>).

### Your Tasks

- Characterization of drug effects in an *in vitro* model of rheumatoid arthritis.
- Cell culture of primary cells, differentiation of osteoclasts.
- Multi Color Spectral Cytometry.
- Integration of findings with NGS-data to identify key affected pathways.

### Your Profile

- Bachelor degree in a relevant life science subject such as molecular biology, biochemistry, biotechnology or related studies.
- Experience in sterile cell culture techniques and molecular biology methods (PCR, Western Blot, qRT-PCR,...).
- Accuracy and diligence in scientific work and its documentation.
- Collaborative mindset, good communications skills, motivation to work in an international and interdisciplinary environment.

### Our Offer

- Close collaboration with a multidisciplinary team, providing valuable training in experimental design, data analysis and scientific communication.
- Access to a cutting-edge research environment with state-of-the-art technologies and methodologies.
- Participation in regular lab meetings, seminars, and workshops, offering exposure to the latest research in the field.
- Research stipend provided.

### Application

If you are interested to join our team, please submit a CV indicating technical skills and a letter of motivation to: [marie.brinkmann@meduniwien.ac.at](mailto:marie.brinkmann@meduniwien.ac.at) (Deadline: 31.09.2024)

Further information: <https://innere-med-3.meduniwien.ac.at/en/unsere-abteilungen/rheumatologie/research/group-of-michael-bonelli/>