

We are looking for a highly motivated Predoc student (1 year, with the option to extend) at the intersection of single cell proteomic method development and autophagy research.

## Predoc Student

### Our Groups

At the Dagdas Group our goal is to employ a multidisciplinary approach to study the role of selective autophagy in cellular quality control at a cell type-specific resolution. At the Proteomics Technology Hub headed by Karl Mechtler, we aim to develop new and powerful proteomic methods focusing on comprehensive strategies for in vivo crosslinking mass spectrometry and single cell proteomics.

### The Project

Autophagy is a highly conserved quality control pathway that is involved in cellular reprogramming underlying development and stress tolerance. Despite recent advances in identification of the molecular players that carry out selective autophagic recycling processes, how autophagy tailors the proteome in different cell types remain unknown. Here, we will use single cell proteomics to dissect proteome remodeling via autophagy at cell type specific resolution.

Single-cell proteomics by mass spectrometry is emerging as a powerful and unbiased method for the investigation of cellular heterogeneity and thereby complementing transcriptomics and genomics data. Proteins are the main driver of cellular functionality and understanding their regulation is crucial to understand cellular development and pathogenesis.

This project is a collaborative effort of the Dagdas Group at the Gregor Mendel Institute and the Proteomics Technology Hub of IMP, IMBA and GMI headed by Karl Mechtler

### The Candidate

The successful candidate should hold a MSc degree in the fields of chemistry, biochemistry, molecular biology, or a related field. Experience in mass spectrometry as well as in the wet lab are desirable. Fluency in English is required, and English is used as working language.

The candidate should be curious, creative, and excited about learning new topics and skills! Despite the emphasis on technology development, a candidate with experience, knowledge, or curiosity at the intersection of analytical chemistry and biochemistry will make a perfect match.

### Our Environment

The successful candidate will work in the vibrant environment of the Vienna biocentre – one of Europe's largest science hubs with including four research institutes, three universities and ~24 biotech companies.

This 1-year predoc position can be extended to a PhD position associated with the Vienna BioCenter PhD program. The review of applications will begin on July 15th and will continue until the position is filled. The expected starting date is September 1st.

Please send you application (motivation letter, CV, contact details of at least one reference) by mail to [yasin.dagdas@gmi.oeaw.ac.at](mailto:yasin.dagdas@gmi.oeaw.ac.at) and [karl.mechtler@imp.ac.at](mailto:karl.mechtler@imp.ac.at).

### About the Gregor Mendel Institute

The Gregor Mendel Institute is an international research institute founded by the Austrian Academy of Sciences. Its main goal is to promote excellent curiosity driven research within the field of plant molecular biology. The Gregor Mendel Institute is located at the Vienna BioCenter, one of Europe's hotspots for Life Sciences.

[www.oeaw.ac.at/gmi/home](http://www.oeaw.ac.at/gmi/home)