

Karagöz Lab

Master's Thesis Project

About the Karagöz lab

The Karagöz Lab combines cell biology with bottom-up reconstitution to dissect cellular protein-quality control pathways. Our team consists of a group of talented PhD and Master students and research technicians working on diverse topics to reveal how cells respond to proteotoxic stress.

About the project

Perturbations to endoplasmic reticulum (ER) homeostasis activate highly conserved signaling cascades called the unfolded protein response (UPR). While several ER chaperones were proposed to regulate the activation and deactivation of the UPR signaling, we lack mechanistic and functional insights into those interactions. We seek a highly motivated Master's Student interested in structural and biophysical approaches to reveal how ER chaperones regulate the UPR. To answer these open questions, you will use NMR spectroscopy and other biophysical methods to uncover the nature of the interactions between the UPR sensors and chaperones and their functional consequences. You will work in a team with PhD student Grzegorz Ścibisz, who has extensive structural biology and biochemistry expertise and has established fundamental steps toward the project.

Candidates

Successful candidates will:

- Learn recombinant protein expression and purification
- Set up assays to study protein-protein interactions
- Learn to set up NMR spectroscopy experiments and analyze the data

Required Skills

- Basic knowledge in biochemistry, structural biology, and molecular biology
- Motivation to learn and establish assays and methods
- Fluency in English and good communication skills

Application

Please send your **CV and motivation letter** by email to Elif.karagoez@univie.ac.at. The initial deadline for the application is 01/02/2025. If not filled, the review of the applications will continue after that until the position is filled.

The position is **open from March 1, 2025**. An initial contract will be for nine months or a year with the possibility of extension if required.

MAX PERUTZ LABS

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Contact

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About the Max Perutz Labs

The Max Perutz Labs are a research institute established by the University of Vienna and the Medical University of Vienna to provide an environment for excellent, internationally recognized research and education in the field of Molecular Biology. Dedicated to a mechanistic understanding of fundamental biomedical processes, scientists at the Max Perutz Labs aim to link breakthroughs in basic research to advances in human health. The Max Perutz Labs are located at the [Vienna BioCenter](#), one of Europe's hotspots for Life Sciences, and host 43 research groups, involving around 450 scientists and staff from more than 50 nations.

www.maxperutzlabs.ac.at