

The Ramundo lab at the Gregor Mendel Institute of Molecular Plant Biology employs the unicellular green alga *Chlamydomonas reinhardtii* to identify and characterize the molecular machines and signaling pathways involved in chloroplast biogenesis, signaling, and quality control. Currently, we are offering a:

JOINT MASTER'S THESIS

About the labs

The Ramundo lab investigates the chloroplast unfolded protein response (cpUPR). This signaling pathway allows photosynthetic eukaryotes to sense the accumulation of damaged proteins in their chloroplasts and mitigate the resulting stress by reprogramming nuclear gene expression.

The Martinez lab studies the conversion of precursor RNAs into mature, functional RNAs. This process entails phosphorylation and dephosphorylation of RNA termini, the ligation of RNA exons during pre-tRNA splicing and the "unconventional" cytopla smic splicing of the Xbp1-mRNA to encode a critical transcription factor for the orchestration of the UPR.

About the position and the research project

You will characterize the function of RNA processing factors during the chloroplast UPR in the single-celled organism *Chlamydomonas reinhardtii*. You will have the opportunity to master state-of-art techniques in molecular biology and biochemistry and develop critical thinking in a creative Lab atmosphere within the vibrant Vienna BioCenter.

Candidates

Please apply if you love gene expression and RNA Biology! We are looking for bright and energetic students with a passion for science and good organizational skills. A substantial experience at the bench is highly preferred (but not strictly required).

Contact

Please get in touch with us by November 30, 2022 enclosing a CV and a short motivation letter. We will conduct interviews during December.

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About the Max Perutz Labs and the Gregor Mendel Institute

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 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 Max Perutz Labs and the Gregor Mendel Institute are both located at the Vienna BioCenter, one of Europe's hotspots for Life Sciences.

www.maxperutzlabs.ac.at www.oeaw.ac.at/gmi/home

