**Martinez lab**

**Master’s Thesis: “Gene expression analyses of zebrafish angels”**

**About the Martinez lab**

We study the processing of RNA molecules, a series of reactions that turn a precursor RNA into a mature, functional RNA. In other words, we are interested in “RNA’s puberty”! We have identified ANGEL proteins as the first mammalian family of enzymes opening 2’,3’-cyclic phosphates at RNA 3’ ends (Pinto P. et al. Science, 2020). The beauty of this finding is that the amino acid sequence of ANGELs predicts a role in poly(A) removal, which is not the case! Knowing their biochemistry better, we want to know what they do *in vivo*. For this, we use zebrafish, and here is where you come in…

**About the position/ the research project**

There are 2 angels in zebrafish (and other vertebrates): *angel1* and *angel2*, and very little is known about them! We aim to study the expression pattern of *angel* genes during early embryogenesis in zebrafish. This task entails analyses of promoter regions driving endogenous expression, qPCRs, *in situ* hybridisations (ISH) and more. With us, you will learn a wide range of techniques in molecular biology, biochemistry and cell & developmental biology, and get trained to think, write and present like a scientist. All this in a super fun, cooperative and quirky lab atmosphere!

**Candidates**

Successful candidates should have finished their Bachelor and have experience at the bench. We are looking for motivated and hard-working students, with a passion for science, who are ready to go the extra-mile.

**Contact**

Please contact us until the end of November if you are interested in joining this RNAventure!

**Ameya Khandekar**, Recipient of a Doc Fellowship of the Austrian Academy of Sciences. ameyar-rakesh.khandekar@univie.ac.at

**Javier Martinez**, Group Leader. javier.martinez@meduniwien.ac.at

Please enclose a CV and a short letter of motivation. We will then conduct a short interview.

**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 around 50 research groups, involving more than 450 scientists and staff from 40 nations. www.maxperutzlabs.ac.at