

Post Doctoral Position in RNA-Biology Impact of Filamin RNA-editing on mouse organ homeostasis

A 2-year post doctoral position is available in the Lab of Michael Jantsch, Medical University of Vienna from February 2021.

Research Background: Adenosine deamination by ADARs converts adenosines to inosines in structured regions of RNA. Inosines are recognized as guanosines during translation therefore leading to mRNA recoding. Editing of the Filamin mRNA leads to a Glu to Arg exchange in the highly interactive repeat 22 region of the protein.

Editing occurs in the mRNAs encoding Filamin A and Filamin B at the same position. To study the impact of these conserved editing events we have generated mice deficient in Filamin A or Filamin B editing, but also mice expressing constitutively edited Filamin A or Filamin B. So far, we could show that lack of Filamin A editing affects blood pressure control. Current work indicates that Filamin A editing also affects vascularization and tumor growth.

The project: In this FWF funded project, we aim to identify cellular pathways that are affected by Filamin A and Filamin B editing and will determine the interactome of the edited and unedited versions of these proteins. We also aim to determine the impact of altered Filamin B editing on mouse physiology.

Your profile: Background in Biochemistry or Biology, Experience in Cell Biology, RNA Biology, or work with mouse models.

If interested, send your CV and motivation letter to Michael.Jantsch@meduniwien.ac.at by Jan 15th 2021.

Background info:

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Webpage: <https://anatomieundzellbiologie.meduniwien.ac.at/en/divisions-science-research/division-for-cell-and-developmental-biology/epigenetics-and-rna-biology/group-jantsch/>

