About the SFB

The special research program (SFB) “HDACs as regulators of T cell-mediated immunity in health and disease” constitutes a major strategic grant, consortium and research network newly funded by the Austrian Science Fund (FWF). It comprises an interdisciplinary team of eight research groups, of which seven are located in Vienna and one in Salzburg, Austria.

Histone deacetylases (HDACs) are key epigenetic and genetic regulators during development and cell differentiation. The 18 members of the HDAC protein family control the acetylation status of histones and non-histone proteins, thus modulating chromatin function and the activity of non-histone protein targets, respectively. Pan-HDAC inhibitors (HDACi) are clinically used for the treatment of certain types of cancer.

Preclinical data indicate that HDAC modulation might be also beneficial for the therapy of immunological diseases, although the use of existing pan-HDACi for these indications is limited by their side effects. We hypothesize that the usage of isoform-selective HDACi will avert limiting side effects and thereby broaden the clinical application spectrum of HDACi far beyond cancer.

The goal of this SFB is to provide a mechanistic molecular rationale for the development and application of isoform-selective HDACi for the treatment of T cell-mediated autoimmune diseases and host defense responses, and to test essential regulatory roles of reversible lysine acetylation beyond histone modifications and epigenetic gene regulation in T helper cells.
HDACs as regulators of T cell-mediated immunity in health and disease

Kick-off Meeting of the FWF Special Research Program (SFB) F70

Friday, 8th November 2019
2 – 6.30 pm

Programme

2.00 – 2.10 pm
Welcome
Michaela Fritz, Vice Rector for research and innovation, MedUni Vienna, Austria
Wilfried Ellmeier, Center for Pathophysiology, Infectiology and Immunology, Institute of Immunology, MedUni Vienna, Austria, Speaker of the SFB

2.10 – 2.55 pm
Proteomic exploration of lysine acetylation signaling
Chunaram Choudhary, Department of Proteomics, The Novo Nordisk Foundation Center for Protein Research, Faculty of Health Sciences, University of Copenhagen, Denmark

2.55 – 3.40 pm
Lysine acetylation as a novel regulator of stress granules formation
Patrick Matthias, Friedrich Miescher Institute for Biomedical Research, Novartis Research Foundation, Basel, Switzerland

3.40 – 4.10 pm
Coffee break

4.10 – 4.55 pm
In the Lego box of the TCR signaling network ... from the list of parts to the assembly instructions
Bernard Malissen, Centre d'Immunologie de Marseille-Luminy and Centre d'Immunophénomique, Aix Marseille Université, INSERM, CNRS, France

4.55 – 5.40 pm
Regulation of human T cell responses by the microenvironment in health and disease
Christina Zielinski, TranslaTUM & Institute of Virology, Technical University of Munich, Germany

5.40 – 6.30 pm
Get-together