



# Immunometabolism – metabolic maintenance of tissue integrity by macrophages

Kick-off meeting of the FWF Special Research Program (SFB) F83

**Thursday, 4<sup>th</sup> November 2021, 10.00 am – 1.00 pm** Medical University of Vienna, 1090 Vienna

www.meduniwien.ac.at

### The special research program (SFB) "Immunometabolism" is a major research network and strategic grant funded by the Austrian Science Fund (FWF). It brings together a multidisciplinary team of research groups located in Vienna and Graz with a common interest in studying the importance of metabolism in the immune function of macrophages.

Immunometabolism is an emerging field dedicated to studying the role of metabolic processes within immune cells. Cells have many different metabolic pathways to convert proteins, lipids, or carbohydrates into energy or building blocks to generate new macromolecules. Recent findings highlight the importance of such metabolic pathways in the direct modulation of immune cell function; however, the exact molecular mechanisms remain to be elucidated.

The goal of the SFB program is to study the function of metabolic processes and nutrients specifically in macrophages. Macrophages are key players during inflammatory diseases, cancer, and obesity and maintain tissue integrity by phagocytosing aging, unhealthy tissue cells or pathogenic microorganisms.

The SFB team, comprising experts from the fields of metabolism, immunology, biochemistry, epigenetics, biophysics, bioinformatics, and the microbiome, will therefore investigate the metabolic functions of macrophages in the context of human diseases associated with the intestine and adipose tissue, with a central goal of identifying novel therapeutic targets for inflammatory bowel diseases, cancer, cachexia, obesity, and diabetes. Please register until 1<sup>st</sup> November 2021 by sending an e-mail to sfb\_immunomet@meduniwien.ac.at.

### Registration is mandatory. Access is only possible by adhering to the 2.5G ruling (vaccinated, recovered from infection, PCR-tested).



Van Swieten Saal, Medical University of Vienna Van-Swieten-Gasse 1a 1090 Vienna

#### In cooperation with



uiversität

vetmeduni Vienna

#### The SFB is funded by:



Der Wissenschaftsfonds.

Please be aware that photographs and/or video footage will be taken at the event. These may be used for the purpose of documenting or reporting the event and published in print and online media, on various social media platforms and on MedUni Vienna's website.

Immunometabolism – metabolic maintenance of tissue integrity by macrophages

Kick-off meeting of the FWF Special Research Program (SFB) F83

## Thursday, 4<sup>th</sup> November 2021

10.00 am – 1.00 pm

Van Swieten Saal Medical University of Vienna Van-Swieten-Gasse 1a 1090 Vienna

## Programme

10.00 – 10.10 am Welcome Michaela Fritz Vice Rector for Research and Innovation, MedUni Vienna, Austria

10.10 – 10.30 am **Presentation of the SFB** Thomas Weichhart, Coordinator of the SFB Center of Pathobiochemistry & Genetics, MedUni Vienna, Austria

10.30 – 11.20 am Moderation Christine Moissl-Eichinger, MedUni Graz, Austria

# Adipose tissue heterogeneity and its implications for metabolic control

Christian Wolfrum, Translational Nutrition Biology Laboratory, ETH Zürich, Switzerland

# Withering away: Molecular mechanisms of adipose tissue atrophy during cancer cachexia

Martina Schweiger Institute of Molecular Biosciences, University of Graz, Austria 11.20 am – 12.10 pm Moderation Gerda Egger, MedUni Vienna, Austria

### **Immunological anti-ferroptosis** Peter Murray Max Planck Institute of Biochemistry, Martinsried, Germany

The balance of glycolysis and the pentose phosphate pathway controls immune cell function Arvand Haschemi Department of Laboratory Medicine, MedUni Vienna, Austria

12.10 – 1.00 pm Get-together

Members of the SFB F83 are: Gerda Egger, Arvand Haschemi, Christine Moissl-Eichinger, Elena Pohl, Thomas Rattei, Gernot Schabbauer, Martina Schweiger, and Thomas Weichhart.