DBMR Research Conference

Langhans Auditorium Murtenstrasse 31, 3008 Bern

Date: Monday, December 2, 2024, 5pm – 6pm

Title: New concepts of neutrophil maturation – a matter of location

Speaker: Prof. Dr. Dr. Oliver Soehnlein, Institute for Experimental Pathology / Center

for Molecular Biology of Inflammation (ZMBE), University of Münster

Bio: Oliver Soehnlein, MD, PhD, is Professor of Inflammation Research and since 2021 head of the Institute of Experimental Pathology at the Münster University. He obtained his MD from the University of Erlangen in 2005 and his PhD from the Karolinska Institute in Stockholm in 2008. From 2008 to 2013 he was group leader at the RWTH in Aachen, the LMU in Munich and the AMC in Amsterdam. Between 2013 and 2021 he was Professor for Vascular Immunotherapy at the German Center for Cardiovascular Research and Guest Professor at the Karolinska Institute in Stockholm. He served as European coordinator for a Leducq Transatlantic network from 2019-2024. Prof. Soehnlein has authored numerous high-impact publications focusing on the intersection of the vasculature and immunity. With particular focus on neutrophils, he recently founded a DFG-funded consortium to dissect their phenotypic and functional heterogeneity.

Abstract: Neutrophils have traditionally been viewed as bystanders or biomarkers of cardiovascular disease. However, studies in the past decade have demonstrated the important functions of neutrophils during cardiovascular inflammation and repair. Traditional cardiovascular risk factors have been shown to increase circulating neutrophil counts and our unpublished work reveals a novel granulopoiesis pipeline in the spleen. Neutrophils produced in the spleen appear phenotypically immature but functionally outperform their bone marrow counterparts. In this talk, I will discuss details of extramedullary neutrophil production and connect the appearance of immature granulocytes with survival and recovery after myocardial infarction.

Host: Prof. Dr. rer. nat. Yvonne Döring, Cardiovascular Diseases, Department for BioMedical Research, University of Bern.

Next DBMR Research Conference: Monday, February 3, 2025, 5pm-6pm

Speaker: tba Title: **tba**

