SFB-F70 Seminar:

The impact of apoptotic cells on macrophage function:

Tell me what you eat and I will tell you who you are

Lidia Bosurgi, PhD

Principal Investigator, University Medical Center Hamburg Eppendorf & Bernard Nocht Institute for Tropical Medicine Hamburg, Germany

Monday, October 7, 2024, 3:00 pm

Location: VCC seminar room, Lazarettgasse 19 (1st floor), 1090 Vienna

Host: Rafael de Freitas e Silva and Wilfried Ellmeier

The mechanisms that control macrophage responses during infections or in reaction to sterile damage are the main area of study in Dr. Lidia Bosurgi's laboratoy. Her research focusses on analysing the effects of dying cells' phagocytosis, a crucial task performed by macrophages in all tissues of the body, on the initiation of tissue remodelling. These results have led Lidia Bosurgi's lab to investigate tissue-specific factors that contribute to the transcriptional and functional heterogeneity of phagocytic macrophages in a variety of settings, such as homeostasis, infection with the parasite *Schistosoma mansoni*, and murine models of autoimmune liver diseases, colitis, inflammation-driven cancer, and metabolic challenges. By exploring the complex nature of macrophage phagocytosis mechanisms and their consequences for immune responses, tissue homeostasis, and disease progression, she aims to help in the development of novel approaches that can enhance the management and treatment of a variety of diseases.
Visit Lidia Bosurgi website

Selected recent publications:

- Liebold et al. "Apoptotic cell identity induces distinct functional responses to IL-4 in efferocytic macrophages." Science. 2024 Apr 5;384(6691):eabo7027. doi: 10.1126/science.abo7027. Epub 2024 Apr 5.PMID: 38574142
- Hamley et al. "Nmes1 is a novel regulator of mucosal response influencing intestinal healing potential". Eur J Immunol. 2024 Feb;54(2):e2350434. doi: 10.1002/eji.202350434. Epub 2023 Nov 28. PMID: 37971166
- Zhao et al. "Efferocytosis fuels malignant pleural effusion through TIMP1". Sci Adv. 2021 Aug 13;7(33):eabd6734. doi: 10.1126/sciadv.abd6734. Print 2021 Aug. PMID: 34389533