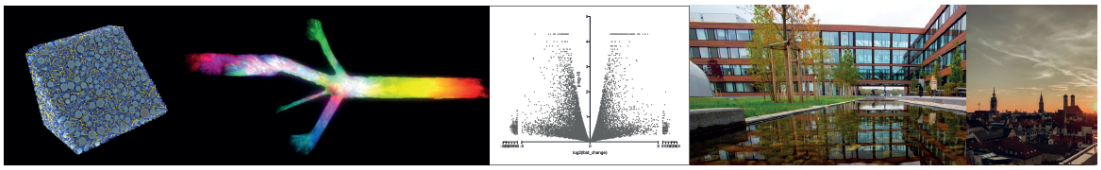

Master Thesis in Immune Cell Biology (Cell Migration)

Do you know that there are at least 500 billion immune cells constantly migrating through your body? In your lifetime, their cumulative distance would make it roughly once across our solar system! Interested in how cells perform these miraculous tasks? Then join our team efforts to decipher the underlying mechanisms!

We are a young and newly established research group using immune cells (e.g. dendritic cells, macrophages & neutrophils) as model cell types to discover novel cell biological principles in cell motility (macropinocytosis, cell migration, leukocyte trafficking). We **interdisciplinary combine advanced live-cell microscopy, genetic-engineering (e.g. CRISPR), custom-made microenvironments (e.g. microfluidics), system-wide approaches (e.g. screening) and immune cell culture** (see e.g. Renkawitz et al, Methods Cell Biology 2018, Hons et al, Nature Immunology 2018, Renkawitz & Sixt, 2016, Renkawitz et al, Nature Cell Biology 2009).

In your Master Thesis project you will use different cellular models of immune cells (mammalian cell lines and primary mouse cells) to characterize the spatiotemporal dynamics of cell migration through tissue-mimetic 3D microenvironments by fluorescent live cell imaging. In parallel, you will establish molecular, genetic and screening approaches (e.g. CRISPR mini-screening) to identify the molecular factors and mechanisms of cell motility. Thereby, your Master Thesis project will provide an important contribution to the understanding of how immune cells navigate through 3D microenvironments to regulate immune responses in physiology and disease.

Are you open-minded, self-driven, interested in science, and a team-player? Do you have an interest in molecular biology, cell biology or immunology with first experiences in imaging, cell culture, or molecular approaches (cloning, CRISPR)? We are looking for a talented and motivated Master student **to join our team at the next possible date**. Our group is located in the modern building of the Biomedical Center Munich (BMC) of the LMU Munich, integrated into the stimulating environment of the SFB914 “Trafficking of Immune Cells in Inflammation, Development and Disease”. **We provide an excellent supervision, environment and facilities in a young, motivated team.**

For further information see:
Homepage: http://www.wbex.med.uni-muenchen.de/pages/principal_j_renkawitz.htm
***Twitter*:** @renkawitzteam
Publications: https://www.ncbi.nlm.nih.gov/pubmed/?term=renkawitz+j
SFB914: https://www.sfb914.med.uni-muenchen.de/index.html
***Biomedical Center Munich*:** https://www.en.bmc.med.uni-muenchen.de/index.html

Please send your application including your motivation letter and CV to Joerg.Renkawitz@med.uni-muenchen.de. We are looking forward to your application!

Prof. Dr. Jörg Renkawitz
Endowed Hofschneider Professor for Molecular Medicine
Biomedical Center Munich (BMC), Ludwig-Maximilians Universität München