PhD Thesis in Cutaneous Immunology

At the Department of Dermatology of the Heidelberg University Hospital in the group of Dr. Florian Kurschus

Topic: The pathogenic role of EBI2 in skin inflammation

In inflammatory skin diseases, such as atopic dermatitis or allergic contact dermatitis, immune cells infiltrate the skin and orchestrate the disease pathogenesis. The G-Protein coupled receptor, Epstein-Barr virus-induced gene 2 (EBI2) and its ligand 7α,25-dihydroxycholesterol form a chemotactic system acting in fine-positioning of immune cells in lymphoid organs in homeostasis and inflammation. In EAE, the mouse model for multiple sclerosis, we showed that EBI2 and its ligand promote the transmigration of T cells into the inflamed CNS.

Recently, it was shown that EBI2 and its ligand also play an important role in the formation of so-called tertiary lymphoid structures (TLS). Similar structures, called inducible Skin-Associated Lymphoid Tissues (iSALT), have previously been described in the skin. Therefore, we want to investigate the pathogenic role of EBI2 in models of contact hypersensitivity. Defining a crucial role of EBI2 in skin inflammation may help to understand the pathogenesis and in the development of new future drugs.

Requirements:

♦ Master’s degree or equivalent in life sciences such as: immunology, molecular medicine, biology, molecular biology or similar
♦ High interest and intrinsic motivation for basic research in the field of immunology
♦ Experience in mouse handling, flow cytometry, cell culture and histology are highly welcome

We offer employment as a research assistant (m/f/d) according to the German TV-L 13 (65%) for 3 years funded by the German Research Foundation (DFG). The PhD thesis will be embedded in the graduate program of the Heidelberg university, The Heidelberg Biosciences International Graduate School (HBIGS) and in training opportunities by the SFB Transregio 156.

For further information regarding this vacancy, please contact Dr. Florian Kurschus, E-mail: Florian.Kurschus@uni-heidelberg.de. Interested candidates can send their electronic application in English, including a letter of motivation, Curriculum Vitae, credentials & qualifications, and reference contact information, in a single pdf document.

Publications: