



Project B04 - T helper cell balance in chronic neuroinflammation – influence by antigen-presenting cells

Subcluster: Immune-regulatory networks and disease initiation

Project Summary: The interaction of antigen-presenting cells (APC) and T cell populations within the central nervous system is crucial for damage and repair in the target organ of Multiple Sclerosis (MS). We aim at understanding functional consequences of local T cell plasticity and subset diversity to identify novel therapeutic targets and explain side-effects of chronic therapies in MS. To do so, it is necessary to identify role of APC subtypes in kinase CK2-steered plasticity and subset diversity of encephalitogenic TH and neuroprotective TREG cells and to understand development of APCs in chronic neuroinflammation and to understand the role of ILT3+ TREG cells in disease. Besides this, our goal is to translate our pre-clinically relevant data to human MS patients and to understand the therapeutic potential of CK2-modulation in MS therapy.

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