



Project B10 - Dynamics, local specification and adaptive regulation of phagocyte phenotypes in the course of neuroinflammation

Subcluster: Immune-mediated damage and repair

Project Summary: Phagocytes, such as blood-borne macrophages and resident microglia, can contribute to both lesion formation and lesion resolution in neuroinflammatory conditions. They can exert these divergent functions due to their capability to assume different cellular phenotypes. We want to understand:

- I. when and where mononuclear phagocytes acquire, adapt, and shift their phenotypes in neuroinflammatory lesions
- II. how T cells-phagocyte interactions instruct and are instructed by phagocyte phenotypes in vivo

To do so, we have developed an in vivo microscopy approach that allows us to follow the phenotype of phagocytes and their interactions with encephalitogenic T cells in the spinal cord of living mice.

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