

**Project:** Initial Training Network for Neurological Disorders  
orchestrated by cytokines (NeuroKine)

**Research Topic:** Identification of IL-23 responsive cell populations  
and their impact on inflammation using IL-23R- conditional mice



Multiple Sclerosis (MS), inflammatory bowel disease (IBD) and psoriatic skin inflammation are severe autoimmune diseases with extreme burdens in humans. In the last decades, it has been established that the IL-23/IL-17 signaling pathway is essential in the development of such disorders and polymorphism in the IL-23R locus results in a higher genetic susceptibility.

While most studies aim to investigate the role of IL-23 in autoimmune inflammation by using IL-23 or IL-23 receptor Knock out mice, we are using a conditional IL-23R floxed mice crossed to different Cre-Recombinase expressing mouse strains. This powerful tool allows us to specific target the IL-23R on several potential pathogenic immune cells in the context of autoimmune inflammation. Taken together, this will help us to gain a grater understanding how the IL-23 signaling affects responding immune cells in inflammatory conditions.



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