Propositions associated with this thesis

B and T cell-mediated central nervous system demyelinating disease: underlying mechanisms and clinical perspectives

1. IFN-γ- and GM-CSF-producing Th17.1 cells play a key role in driving early disease activity in MS patients.
   This thesis

2. The pathogenicity of Th17.1 cells is exemplified by their increased capacity to infiltrate the CNS and express glucocorticoid resistance, anti-apoptotic and cytotoxicity genes.
   This thesis

3. IFN-γ and TLR9 ligand synergize to promote CXCR3(T-bet)$^+$ B cell differentiation and recruitment to the CNS of MS patients.
   This thesis

4. High EBV load in memory B cells from MS patients correspond to their development into CXCR3$^+$ plasma cells capable of producing anti-EBNA1 IgG *in vitro*.
   This thesis

5. Therapeutic strategies that inhibit T-bet function have the potential to become a double-edged sword in MS by suppressing the interaction between IFN-γ-producing Th17.1 and CXCR3(T-bet)$^+$ B cells.
   This thesis

6. Mouse is not man and blood is not brain.
   Gerd Meyer zu Hörste, et al. Trends in Immunology 2020

7. The detection of EBV in the MS brain: what you find depends on how and where you look.
   Adapted from Francesca Aloisi, et al. Brain 2010

8. Persistent EBV infection of B cells triggers pathogenic CD4$^+$ rather than CD8$^+$ T cells in patients with early MS.
   Michael P. Pender, et al. Journal of Neurology, Neurosurgery and Psychiatry 2009; Jan D. Lünemann, et al. Journal of Experimental Medicine 2010.

9. The brain is a monstrous, beautiful mess, its billions of nerve cells…lie in a tangled web that displays cognitive powers far exceeding any of the silicon machines we have built to mimic it.
   William F. Allman (1955)

10. Progress is made by trial and failure; the failures are generally a hundred times more numerous than the successes; yet they are usually left unchronicled.
    William Ramsay, Harper's Magazine 1904

11. I have no special talent. I am only passionately curious.
    Albert Einstein (1879-1955)