Endosomal TLRs and B cells investigations in animal models of autoimmunity

The goal of our research is to gain a comprehensive understanding of immunopathogenesis of autoimmune diseases such as systemic lupus erythematosus (SLE) and multiple sclerosis (MS), and to propose new therapeutic targets. In our recent and present research work, we perform several types of investigation with three main objectives: 1- Define more precisely the roles and the interplay of the endosomal TLR (Toll-Like Receptor), TLR7, TLR8 and TLR9 in the induction of lupus-like autoimmune responses; 2- Study TLR7 implication in a murine model of MS, the experimental autoimmune encephalomyelitis (EAE); and 3- Investigate APRIL, its receptors TACI and BCMA, in the deregulation of B cells and plasma cells in SLE.