Biography Dr. Maartje G. Huijbers

Dr. Maartje G. Huijbers is an associate professor and research group leader at the department of Human Genetics and the department of Neurology at LUMC in Leiden, The Netherlands. Maartje's career started in the lab of Prof. Dr. Josep Dalmau (UPenn, Philadelphia) where she contributed to the discovery of two new antigens for central nervous system autoimmune diseases (CASPR2 and LGI1 limbic encephalitis). She continued her passion for neuroimmunology research by starting a PhD in the lab of Prof. dr. Jan Verschuuren and Prof. Dr. Silvère van der Maarel at LUMC. Maartje obtained her PhD in 2016 from Leiden University for her work on the pathomechanism of MuSK myasthenia gravis, a neuromuscular autoimmune disease. Using *in vitro* and *in vivo* models she investigated the role of patient-derived IgG4 in the induction of myasthenic muscle weakness. During her PhD she also visited the Prof. Dr. Steve Burden lab at New York University where she unravelled the mechanism by which IgG4 MuSK autoantibodies cause myasthenia gravis. As a post doc she generated preclinical evidence for the therapeutic potential of FcRn inhibition in MuSK myasthenia gravis and continued her work on neuromuscular autoimmune diseases at LUMC which escalated into the translational neuroimmunology group which she's currently leading (https://www.huijberslab.org/). Maartje has received fellowships from EMBO, The Dutch Science Organization, LUMC, Health Holland, Prinses Beatrix Spierfonds and the European Union (ERC starting grant) to support this work.

Currently, the translational research in her group, in close collaboration with clinicians, focusses on understanding the cause and consequences of (IgG4) autoantibodies and B cells and their characteristics in these autoimmune diseases. The ultimate ambition being to either prevent or cure the onset of IgG4 autoimmune (neuromuscular) diseases. Together with a pharmaceutical partner, one therapeutic (MuSK agonist ARGX-119) which stems from her own research, is now being tested in phase 2 clinical trials in patients with congenital myasthenia gravis, SMA and ALS.