

Prof. Michel van Putten (University of Twente, The Netherlands)

Michel van Putten was trained in applied physics (MSc and PhD from Delft University) and medicine (MD, Leiden University) and specialized in neurology/clinical neurophysiology. His research focuses on the processes involved in cerebral ischemia and changes in cortical excitability (as observed in epilepsy or postanoxic encephalopathy), with TMS and EEG as important measurement tools. Since 2009, he is full professor at the University of Twente (UT), and started the Clinical Neurophysiology (CNPH) group. He also heads the department of clinical neurophysiology at the Medisch Spectrum Twente (MST), one of the largest teaching hospitals in the Netherlands. He received funding from the Epilepsy Foundation, The Institute for Neuromodulation (TWIN), NWO and in private. Research includes improved diagnostics in epilepsy and postanoxic coma, using advanced signal processing, including deep learning, and computational modelling. This is complemented with in-vitro research with cultured neuronal networks. His group pioneered the systematic study of EEG for prognostication in coma and initiated several clinical trials using continuous EEG monitoring in patients with a postanoxic encephalopathy in the ICU (e.g. www.telstartrial.nl). In 2020, a clinical trial with ultralong ambulatory EEG will start in epilepsy patients who are candidates for DBS or NVS.