

2025: Research & literature internships – Epilepsy and channelopathies

Title: Investigating ion channel composition and action potential machinery involved in Epilepsy

Organizations: Synaptica & Donders Institute Nijmegen

Duration: 1-12 months

Internship Overview: Are you interested in the relationships between the molecular & ion channel composition and complex behavior of neural circuitry dysfunction that occurs in channelopathies such as epilepsy? We have internships available for ambitious students with a background in neuroscience, biophysics and/or AI. We use computational methods, Protein Language Models (such as Google's AlphaFold2) and large genetic and molecular datasets to study the functional consequences of genetic variants that lead to epilepsy and other brain diseases. We are in contact with clinics in order to make our research and developments applicable. For this internship, being able to perform computer programming yourself is a plus, but not obligatory as you will work together with a team of computational neuroscientists.

Questions: Contact Dr. Marijn Martens at marijn.martens@synaptica.nl

Team Synaptica

