Title (tentative): Human stem-cells derived neurons coupled to MEA devices for studying epilepsy

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Description

Motivation and application domain
Neuroengineering, brain-on-a-chip, neuroal diseases and translational medicine

General objectives and main activities
Experimental work involving neuronal differentiation of human induced pluripotent stem cells and electrical activity recordings using micro-electrode arrays. Data analysis on dataset including control and cells from epileptic patients

Training Objectives (technical/analytical tools, experimental methodologies)
Experimental neuroscience and neuroengineering. Data analysis. Translational medicine.

Place(s) where the thesis work will be carried out: Neuroscience Lab @UTWENTE, The Netherland

Additional information

Maximum number of students: 2

Financial support/scholarship: Erasmus+