UNIVERSITY OF GENOA
DEPARTMENT OF INFORMATICS, BIOENGINEERING, ROBOTICS AND SYSTEMS ENGINEERING
MASTER'S PROGRAM IN BIOENGINEERING

Thesis Project Form

Title (tentative): Mouse Brain slices coupled to MEA devices for electrophysiological recordings and stimualtion for studying epilepsy

Thesis advisor(s): Martinoia Sergio, Pasqualina Farisello, Pietro Baldelli (DIMES)

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Description

Motivation and application domain

Electrophysiology, Neuroengineering, Neuroscience, Data Analysis, MEA chips.

General objectives and main activities

Experiments with acute brain slices from wild-type and knock-out mouse (epileptic phenotye). Set-up and experiment execution with the support of PhD student and staff. Data analyis and discussions with staff and thesis advisors.

Training Objectives (technical/analytical tools, experimental methodologies)

MEA techniques, Brain slices techniques, Data analysis.

Place(s) where the thesis work will be carried out: Neuroengineering Lab @DIBRIS; Neuroscience Lab@DIMES

Additional information

Maximum number of students: 2