



Thesis Project Form

Title (tentative): Development and implementation of a methodology that allows printing cellular patterns on MEA-HD

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Description

Motivation and application domain

Neuronal culture maintainance
3D printer programming
Basic laboratory skill

General objectives and main activities

The aim of this thesis is to be able to develop a method to print cell patterns on MEA-HD using a 3D bioprinter. The student will have to learn to cultivate neurons derived from stem cells and to program the Allevi 1 printer in such a way as to guarantee vitality to the printed cells, so that they can exhibit spontaneous electrical activity recordable by MEA-HD.

Training Objectives (technical/analytical tools, experimental methodologies)

Neuronal culture maintainance
3D printer programming
Basic laboratory skill

Place(s) where the thesis work will be carried out: Gaslini Hospital

Additional information

Maximum number of students: 1