



Thesis Project Form

Title (tentative): Bioprinting of advanced brain tissue models

Thesis advisor(s): Pastorino Laura, Donatella Di Lisa

E-mail: Laura.Pastorino@unige.it

Address: Via Opera Pia 13

Phone: (+39) 010 33 56547

Description

Motivation and application domain

Development and characterization of 3D bioprinted in vitro brain tissue models.

General objectives and main activities

An ad-hoc developed bioink will be used to 3D print advanced in vitro brain tissue models using neurons differentiated from human induced pluripotent stem cells, both from a healthy donor and from a Parkinson's disease patient. The 3D constructs will be characterized by immunocytochemistry and by electrophysiological recordings.

Training Objectives (technical/analytical tools, experimental methodologies)

To gain practical experience in the development, engineerization and characterization of 3D printed brain tissue models.

Place(s) where the thesis work will be carried out: DIBRIS, University of Genova, CBA Ospedale San Martino

Additional information

Maximum number of students: 1