



Annex 1

Position 1

Scientific Area of SISSA: Neuroscience

Smart specialisation strategy areas (S3) of Friuli Venezia Giulia and their development trajectories: Smart Health: Innovative Therapy

Area: 05 – Biological sciences

Competition sector: 05/D1 Physiology

Relevant academic scientific sector: BIO/09 Physiology

Scientific responsible: Prof. Laura Ballerini

Duration of the fellowship: 24 months

Foreseen starting date of the activity: 01.12.2017

Gross annual fellowship: €24.336

Requisites:

Candidates must possess a university degree. A degree in Medicine, Chemistry and Pharmaceutical Technologies, Biotechnologies, Neuroscience, Biology, Chemistry, Physics, (Bio)Engineering will be considered as an asset;

Candidates must possess a PhD. A PhD in Physiological Sciences, Neuroscience, Nanotechnologies, Neurobiology will be considered as an asset;

Candidates must have documented research experience in the field of neurosciences, in particular:

- Proven capacity to work in multidisciplinary and interdisciplinary research projects;
- Experience in the development of in vitro systems such as acute slice or in primary cellular cultures (e.g. dissociated and/or organotypic and/or acute cultures of cortex, hippocampus, spinal cord, retina) in murine model (e.g. rat and/or mouse);
- Ability to autonomously and critically conduct electrophysiology experiments (for instance patch-clamping and/or calcium imaging) both in single cell and in neural networks;
- Experience in immunofluorescence and microscopy in epifluorescence and confocal;
- Knowledge of the potential and challenges of the use of nanotechnologies in the neuroscience field.



Further requisites, competences and abilities required:

- Ability to generate ideas, critically conduct experiments and implement them in the proposed research line;
- Ability to fully exploit the available equipment and infrastructures in order to reach precise research goals;
- Capacity to interact in a civil and constructive manner with the other members of the research team;
- Reliability and strong organizational skills;

Duties and responsibilities:

- Conduct experiments first-hand under the supervision of a PI directly contributing to the experimental design coherently with the development of a research project;
- Correctly conduct experiments ensuring that they are adequately recorded, analyzed and documented both electronically and by keeping a lab journal that shall serve as permanent documentation of the methodologies and of the experiments;

Gross total cost of the research fellowship € 59.770: shall be funded by project HEaD – HIGHER EDUCATION AND DEVELOPMENT SISSA OPERATION 1 (FP1619889002), approved with decree of the autonomous region Friuli Venezia Giulia n. 2242 dated 11.04.2016 for the exclusive scope of the project funding the research fellowship.

Evaluation criteria:

PhD: max 15 points

University degree: max 10 points

Published works and other research products: max 10 points

Other postgraduate degrees: max 5 points

Other titles: max 5 points

Research project: max 25 points

Interview: max 30 points