Francesco S. Pavone's Biophotonics Group

LENS, Sesto Fiorentino (Florence), Italy

Programming expert for the development of custom software for optical apparatus control and imaging data management

We are looking for a highly motivated postdoctoral profile to join the biophotonics group of Prof. Francesco Saverio Pavone at the European Laboratory for Non-linear Spectroscopy in Sesto Fiorentino, Florence, Italy.

We are seeking a scientist with programming expertise and experience (in particular LabView). The selected candidate will develop custom software applications to properly integrate several functionalities and controls in in-vivo experiments, e.g. to tailor the stimulation patterns and to customize the acquisition parameters. Moreover, the selected candidate will focus also on data management, in particular: post-processing, storage, and sharing of large datasets produced during the acquisitions.

Previous research experience in neuroscience is appreciated, ideally, in studying whole-brain neuronal interconnection and in recording and stimulating neural activity in real time.

A PhD degree with a background in Physics/Mathematics/Optics/Engineering/Biology is required.

Finally, fluency in English, excellent communication skills, and the ability to work in a multidisciplinary international environment are required.

On the following we summarize the candidate requirements:

Essential
-PhD in engineering, mathematics, physics, optics, biology or a related discipline.
-LabView programming knowledge.
-Experience in instrumentation: control software & electronics.

Highly appreciated
-Arduino-based Open Hardware knowledge.
-Big-data handling experience.
-Neuroscience-related experience.

The successful applicant will be hired with a research fellowship ('Assegno di ricerca') at the University of Florence. This research will be part of top-tier international projects where the lab is involved, i.e. NIH-funded BICCN project, EU-funded Human Brain Project, ERC-funded BrainBIT project, ERC-POC-funded DAPTOMIC project and others. The applicant will have the opportunity to work in collaboration with top-class researchers in Europe and in the US, and to interact with private companies working in the imaging and the image analysis fields. The web page of the research group is: http://bio.lens.unifi.it/. Here all information regarding the working environments and the various research lines can be found.

Preliminary applications, including CV, list of publications and statement of research interests should be sent to Prof. Francesco S. Pavone (pavone@lens.unifi.it). Review of applications will begin immediately and will continue until the position is filled.