Francesco S. Pavone's Biophotonics Group

LENS, Sesto Fiorentino (Florence), Italy

"Microscopy expert for the development of optical apparatuses for biological imaging"

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 an optical scientist with experience in designing advanced custom-made microscopes, ideally light-sheet microscopes, to build a new high-throughput light-sheet microscope for high-resolution mapping of cleared human brain samples and to further develop an existing apparatus for the optogenetic stimulation of the larval zebrafish brain.

In detail, he/she will work on the design and implementation of the optical system and of the electronics needed for microscope operation. The candidate will also be in charge of acquiring data, and of presenting results through scientific papers and conferences.

A PhD degree with a background in Physics/Optics/Engineering/Biology is required. Fluency in English, excellent communication skills, and the ability to work in a multidisciplinary international environment are required. Finally, previous research experience in neuroscience is appreciated.

On the following we summarize the candidate requirements:

Essential
-PhD in engineering, physics, optics, biology or a related discipline.
-Hands-on experience building advanced microscopes, ideally light-sheet microscopes.
-Experience in instrumentation: control software & electronics.

Highly appreciated
-Adaptive Optics and Imaging (AO, remote focussing, etc...) 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.