



Post-doctoral position Multiphoton light-sheet microscopy

Laboratory for Optics and Biosciences,
Ecole Polytechnique, Palaiseau, France

The “advanced microscopies and tissue physiology” group at the Laboratory for Optics and Biosciences (LOB), Ecole Polytechnique, Palaiseau, France, is seeking a talented postdoctoral scientist with background in instrumentation/optics and interest in interdisciplinary optical biomicroscopy research.

The LOB has extensive expertise in nonlinear optical imaging, and develops advanced methods in multiphoton microscopy, image analysis and cell/developmental biology for studying intact tissues with subcellular resolution.

Candidates should have a good background in optics and software programming, and should be motivated to work within a state-of-the-art interdisciplinary research program. Previous experience in optical microscopy would be an asset.

The successful candidate will develop novel approaches for **multiphoton light-sheet microscopy of live and large samples**. The awarded project funding the position aims to develop new methods for fast imaging of live and large biological samples for development and neuroscience. The work will involve microscope design and implementation, wavefront shaping, manipulation of zebrafish embryos and fixed tissue samples, programming, and data analysis. The candidate will have access to a functional light-sheet microscope prototype (Malkinson ACS Nano 2020) to realize proof-of-concept studies, state-of-the-art femtosecond sources, local workshops, biology facilities, and storage/computing servers. He/she will have regular interactions with a group of 3-4 persons, and weekly meetings with the microscopy group.

The appointment will be for 2 years, available now, funded by the French National Research Agency (ANR). More information about the project and work environment can be requested via email: interested applicants should send a short presentation letter and CV with reference names to Drs Emmanuel Beaurepaire (emmanuel.beaurepaire@polytechnique.edu) and Willy Supatto (willy.supatto@polytechnique.edu) before July 31st 2020. Applications will be reviewed on a rolling basis, starting immediately.

For more information on research at LOB microscopy group, please visit: <https://portail.polytechnique.edu/lob/en/research/advanced-microscopies-tissue-physiology>