

Post-doctoral position

Multiphoton microscopy of myelinated tissues

**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 neuro/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 **multiscale investigation of myelinated tissues using third-harmonic generation and three-photon microscopy**. The awarded project funding the position aims to develop new methods to investigate de/remyelination processes in neurodegenerative diseases, in partnership with the Brain and Spine Institute in Paris. The work will involve microscopy developments, wavefront shaping, adaptive optics, polarimetry, tissue preparation, comparative optical/biomedical imaging, and data analysis. The candidate will have access to lab-built multiphoton microscopes, 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 a grant from the Polytechnique / Bettencourt-Schueller Biomedical program. 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 Chiara Stringari (chiara.stringari@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>