



Engineer position in mechanobiology at Université Paris Cité

A full-time research engineer position is open at Université Paris Cité to support the development of a mechanobiology platform in the context of the 'BioMechanOE' Transverse Project of the LabEx 'Who am I?'. The goal is to finalize several custom-made mechanobiology tools and develop them into a core facility dedicated to state-of-the-art instruments and expertise in mechanobiology, including advanced imaging and micromanipulation techniques such as FRET, FLIM, optogenetics, optical tweezers, magnetic rheometers, glass microplates and micropipettes, substrates with tuneable stiffness, or microfluidic tools.

Missions

The recruited engineer will first finalize the development of custom-made microscopy set-ups combining FRET, FLIM, optogenetics, and micromanipulation by optical tweezers and nano-indentation. He/she will collaborate with the teams involved in building up the platform to provide proof of concept for each technology. In a second step, he/she will contribute in the development of a technical platform by assessing potential user needs and managing the platform webpage. He/she will then provide initial training and user support and be in charge of the maintenance of the equipment, together with the engineers of the involved teams. He/she will also assist users in the preparation and design of their projects (feasibility, technical bottlenecks, risk assessment). In the longer term, he/she will be involved in the development of the platform into a full core facility, with standardized pipelines, quality control, technical and safety regulations, funding and business plan.

Required profile and skills

Candidates should hold a Master or Engineer degree and show advanced theoretical and practical knowledge in microscopy and optics as well as a strong experience in running experiments with custom-made hardware instruments and software interface. Additional training in biophysical tools for mechanobiology including micromanipulation, optogenetics, FRET, FLIM, optical tweezers, or biomaterials would be ideal. A PhD will also be a plus. Communication and presentation skills, autonomy and organization, multitasking abilities, team spirit will be appreciated. The candidate should be fluent in oral and written English.

Contacts and application

The contract is an 18 months CDD (contrat à durée déterminée) from Université Paris Cité which will start imperatively before June 30th 2024. The salary will be based on previous professional experience. Detailed curriculum vitae, cover letter and at least one letter of reference must be sent to the following contacts by email before April 30th 2024.

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