Two postdoctoral positions at Institut Jacques Monod in Paris

Mechanobiology of the cytoskeleton at the single filament and network scale

We are **recruiting two postdocs** by the end of 2024 (start date flexible):

- one project on **vimentin single filament mechanics *in vitro*** (supervised by Cécile Leduc)
- one project on **actin network mechanics *in vitro*** (supervised by Guillaume Romet-Lemonne)

Context: Cell mechanics is mostly governed by the cytoskeleton which is composed of three types of interconnected filaments: actin, microtubules and intermediate filaments (including vimentin), but the mechanical regulation of these systems remains elusive. In vitro experiments, in a very controlled environment, are required to understand their properties at different scales. Both projects are in close collaboration with cell biologists and with theoretical physicists.

Keywords : microfluidics, optical traps, TIRF microscopy, biophysics, mechanobiology, micro-rheology

Localization : At Institut Jacques Monod in Paris - a great environment with awesome teams and facilities!

The team: The team 'Regulation of Actin Assembly Dynamics' is a very dynamic, multidisciplinary team, working at the interface between biochemistry, biology, and physics. It is composed of 16 persons of 5 different nationalities.

Application: We are open to various profiles, and particularly interested in applicants with a background in physics or engineering. Applicants are asked to send a CV, a cover letter and contacts of 2 references.

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