

Post-doc offer

Single nuclei on chip – morphological and genetic responses to actin-based deformations

UMR 8640 PASTEUR, Department of Chemistry, École Normale Supérieure, PSL University,
Sorbonne Université, CNRS, 75005 Paris, France

We are seeking a highly motivated postdoctoral researcher who wishes to work on an interdisciplinary project combining biology, technological development, and biophysics. The aim of the project is to decipher the control mechanisms of gene expression change and concomitant cell fate determination of neural stem cell progenitors via nuclear deformation induced by actin cytoskeleton. Eligible applicants must have a Ph.D. in cell biology, biophysics, or biotechnology with a particular interest in biophysics. Sound experience in (primary) cell culture is highly appreciated, and the post-doc must be willing to work with mice. Experience in microfluidics is a plus. The project is supported by funding from Institute Pierre-Gilles de Gennes pour la Microfluidique (IPGG). The successful applicant will work closely with 3 researchers from Department of Chemistry, Biology, and Physics of Ecole Normale Supérieure (ENS). IPGG and ENS are neighboring institutes in a dynamic scientific environment in the heart of Paris, France.

- **Keywords**

Microfluidics, neural stem cell progenitor, mouse primary culture, nuclei purification, actin cytoskeleton, in vitro reconstituted systems, biophysics, confocal microscopy, high-throughput imaging, image analysis, mRNA FISH, mRNA sequencing

- **The position**

Available from October 2021, start date is negotiable.

For 12 months.

Applicants are invited to send a motivation letter, CV, and contact references to:

Ayako Yamada (ayako.yamada@ens.psl.eu)

Nathalie Delgehyr (delgehyr@bio.ens.psl.eu)

Julie Plastino (julie.plastino@phys.ens.fr)