

## Post-Doc position in Molecular Biology Droplet-based microfluidics and RNA expression

Biochemistry Laboratory - ESPCI Paris  
Pr Andrew Griffiths

### ESPCI Paris

ESPCI Paris is a major institution of higher education (a French "Grande École d'ingénieurs"), an internationally renowned research center (6 Nobel Prizes), and a fertile ground of innovation for industry (3 start-ups created/year). ESPCI is a highly multidisciplinary environment with teaching and research in physics, chemistry and biology.

### Prof. Andrew Griffiths' Lab

The research activities of the Laboratory of Biochemistry at ESPCI ParisTech, directed by Prof. Andrew GRIFFITHS, are based around droplet-based microfluidics, a powerful new ultrahigh-throughput system in which reaction volumes can be miniaturized by up to a million-fold compared to conventional assays in microtitre plates. This opens up exciting prospects for the development of extremely innovative systems with many applications in the Life Sciences. The successful candidate will join a highly multidisciplinary team, with experience spanning biology, chemistry and physics.

### Project

The dynamic nature of chromatin and transcriptional features are expected to participate to tumor evolution, particularly in the context of response to cancer treatment and acquisition of resistance. In triple-negative breast cancer (TNBC), we have recently revealed the heterogeneity of chromatin states in patient-derived xenografts models of acquired resistance to Capecitabine.

The Post-Doc will work on the development of droplet-based microfluidics approach for the simultaneous profiling of histone modifications and RNA expression on the very same cell.

### Requirements

We are seeking a highly motivated Post-Doc with strong experience in molecular biology (scChIP-seq and RNA-seq) or related field. Experience in microfluidics, cell biology and bioinformatics are very appreciated.

Flexibility, autonomy, the ability to work in a highly multidisciplinary team and good interpersonal skills are essential.

Starting date : March 2020

Duration : 1 year renewable

Salary : according to professional experience

Address your applications (CV + cover letter) by email to:

Prof. Andrew GRIFFITHS

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