

ERC Funded Postdoctoral position in gene regulation in Montpellier

Translation dynamics during patterning of the *Drosophila* embryo

Project

During embryonic development, cellular identities are progressively established with a striking accuracy and reproducibility. This is in part due to precise regulation of gene expression in space and time. Our understanding of gene expression control during development is largely based on mRNA studies, ignoring potential regulatory inputs from translation. While precision at the transcriptional level is well-documented, much less is known concerning protein synthesis, which is not necessarily linearly related to transcription. How is the translation process regulated in space and time during development? To what extent does translation efficiency differ between identical mRNAs in distinct subcellular environments?

This project aims to unravel the mechanisms underlying the lack of correlation between mRNA and protein levels in order to elucidate the sources of reproducible cell fate decisions during development. The project leader will primarily use quantitative imaging in *Drosophila* embryos combined with genetic/optogenetic manipulations. More info [here](#).

Qualifications

Prior experience with molecular biology, genetics or microscopy are essential.

Strong interest in developmental or cell biology.

Knowledge of *Drosophila* genetics will be valuable.

Ability to work as part of an international team is required.

A PhD in biology, biophysics or a closely related field is required by the start of the appointment. Interdisciplinary profiles are strongly encouraged to apply.

Environment

[IGMM](#), is located on the historic CNRS Montpellier "Route de Mende" campus. It is physically connected to [CRBM](#) and [IRIM](#) research institutes, forming a critical mass of 600 people who create an exceptional dynamic intellectual and technological environment. The labs at IGMM have access to high-tech facilities, in particular through [BioCampus](#).

Application details

Applicants should submit the following information to mounia.lagha@igmm.cnrs.fr by email containing "[ERC Post doc application]" in the subject line:

- 1- Curriculum vitae with contact information of at least 2 referees.
- 2- brief description of previous research (<1 page)
- 3- cover letter describing your interest in the position

Starting after January 2023, the appointment will be made for 3 years. Salary will be commensurate to previous experience in accord with CNRS standards.

