MuSkLE
PhD programme
Building, maintaining and repairing the functional locomotor system

Co-funded by the European Union

PhD Position 11 job vacancy

Reference:	**PP11**
Title:	**Spatio-temporal control of muscle diversity**
Hiring institution:	**ENS de Lyon**
Location:	École normale supérieure de Lyon 15 parvis René-Descartes - 69342 Lyon
Start date:	As from 1st September 2027
Duration:	36 months
Application deadline:	15th January 2027

Job description

Objective:	The recruited doctoral fellow will investigate the molecular and cellular logic underlying the generation of muscle diversity during development. The project uses *Drosophila* and mouse models to address these questions at both the cellular and molecular levels. To achieve these objectives, the doctoral fellow will combine single-cell and single-nucleus sequencing with an innovative 3D spatial transcriptomics approach to unravel the gene networks regulating muscle morphogenesis. The project integrates cutting-edge computational and data analysis methods to reconstruct single-cell and single-nucleus sequencing clusters in space and time. Using state-of-the-art genetic tools, the doctoral fellow will elucidate the functional roles of these gene networks by visualizing and selectively manipulating the genotypes of myoblasts and muscles during development. The consequences of these manipulations on muscle architecture will be examined using advanced microscopy, while locomotor dynamics will be assessed through quantitative behavioral assays.
Collaborations and co-supervisions:	The PhD project will be carried out in collaboration with Eglantine Heude (IGFL, ENS de Lyon).
Supervisors:	Jonathan Enriquez - jonathan.enriquez@ens-lyon.fr
Place of work:	32-34 avenue Tony Garnier 69007 Lyon
Required degree	Master's degree (or equivalent) in developmental biology, molecular biology, genetics, bioinformatics, or a related field
Skills/Experience:	- Strong background in cell and molecular biology - Experience with model organisms (preferably Drosophila or mouse) is an asset - Practical experience in molecular biology, genetics, or imaging techniques - Familiarity with single-cell omics approaches or transcriptomics data analysis is desirable - Basic knowledge of computational biology or bioinformatics (R, Python, or similar) is a plus - Interest in interdisciplinary research combining experimental and computational approaches - Strong analytical and problem-solving skills - Ability to work independently as well as collaboratively within a team - Good communication skills in English (written and oral)
Keywords	Muscle development / Myogenesis / Developmental biology / Single-cell RNA sequencing (scRNA-seq) / Single-nucleus RNA sequencing (snRNA-seq) / 3D spatial transcriptomics / Gene regulatory networks/ Cell fate specification/ Computational biology /Genetic manipulation

Mandatory requirements

Eligibility:

The doctoral fellow:

- should not have resided or carried out his/her main activity (work, study) in the country where he/she is being recruited, i.e., France, **for more than 12 months in the 3 years before the application call deadline,** unless this time was part of a compulsory national service or a procedure for obtaining refugee status under the Geneva Convention.
- **must be in possession of a master's degree** at the date of the call deadline. Applicants who have completed their cursus but not yet been awarded the formal master's degree by that date will not be considered eligible.
- must be **a doctoral candidate** (not already in possession of a doctoral degree at the date of the application call deadline).

Languages:

Oral and written skills must meet the standards of academic English used in international research.

Job details

Type of contract:

Full time position

Gross salary:

The monthly **living allowance, including employer and employees' social charges, is €3,500.** This amount corresponds to a gross monthly salary estimated to €2,500, and to a net monthly salary before income tax of €2,100 (estimated amount).

On top of the monthly salary, the candidate will receive a **mobility allowance,** including employer and employees' social charges of €4752, paid as a monthly salary supplement. This amount corresponds to a gross monthly allowance estimated to €98 and to an estimated net monthly allowance before income tax of approximately €63.

Other benefits:

Social Protection:
The candidate will benefit from **full social security coverage**, including health insurance, unemployment insurance, and pension contributions. He/she will also have access to occupational health services (*médecine du travail*), as required by French labour law. The HR department can offer assistance with obtaining a social security number.

Additional Insurance:
The candidate is required to subscribe supplementary health insurance, with partial coverage provided by the host institution.

Paid Leave:
The candidate is entitled to **25 days of paid leave annually** (for 35 hours worked per week), in accordance with national labour law, and will enjoy the same employment rights as other public-sector employees, including student union membership.

Transport: The candidate benefits from significantly **reduced fares on public transport**, available in all partner cities. Additionally, the host institution will cover 75% of the monthly transportation costs.

Relocation assistance via Espace Ulys (EURAXESS center of the Université de Lyon): the candidate can be provided with special relocation assistance and help for immigration and administrative, accommodation, healthcare and integration formalities.

Other benefits:

- A laboratory manager as a contact person for all administrative matters before and during their stay,
- Dedicated information tools: HR Information, Welcome booklet, etc.
- The opportunity for scientists and their partner to take a 22-hour beginner's French as a Foreign Language course at ENS Lyon with other scientists,
- A guided tour of both campuses in English to help the candidate to discover their new environment.