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

Co-funded by the European Union

PhD Position 01 job vacancy

Reference:	**PP01**
Title:	**Definition of the regenerating niche in muscle diseases**
Hiring institution:	**UCBL**
Location:	University Claude Bernard Lyon 1, Villeurbanne, France.
Start date:	As from 1st January 2027
Duration:	36 months
Application deadline:	6th May 2026

Job description

Objective:	**The recruited doctoral fellow (DF01)** will develop the following program: ***Context***. Muscle diseases (MD), including degenerative myopathies like Duchenne Muscular Dystrophy (DMD) or myositis, are characterized by chronic inflammation, permanent attemps of muscle regeneration and the activation of stromal cells called fibro-adipogenic precursors (FAPs) that lead to fibrosis. Possible causes include a persistent inflammation-driven muscle damage, and/or defects in skeletal muscle regeneration, a process involving activation and myogenesis of muscle stem cells (MuSCs). The lab has shown an impairment of the myogenic functions of MuSCs derived from myositis muscles (PMID:35351794) and a progressive loss of the myogenic nature of MuSCs in DMD (PMID:39650736), rendering muscle repair inefficient. Moreover, studies have shown that the MuSC microenvironment is crucial for an efficient muscle regeneration. MuSCs receive cues from their close environment that composes the regenerative niche. This includes myofibers, vascular cells, FAPs and immune cells (notably macrophages). ***Project hypothesis***. Given the importance of the interplays between MuSCs, FAPs and macrophages for skeletal muscle regeneration, we hypothesize that the regenerative niche is altered in MD. It likely forms an inflammatory niche that may negatively impact on MuSCs and potentially sustains the alteration of muscle regeneration. ***Objectives.*** The PhD program will be implemented with human material (cells and muscle biopsies). The program aims to identify the alteration of the regenerative niche in MD at the cellular and molecular levels and to evaluate how it impacts myogenesis. The main techniques will be co and tri-culture, cell biology techniques, omics and molecular histology. The results will depict the status and behavior of the main cell components of the MuSC niche in MD. At the molecular level, it will identify the pathways driving the organization of the regenerative (inflammatory) niche in normal and MD muscles, with a cellular mapping of the regenerative niche *in vivo* as well as *in vitro* molecular functional validation and *in situ* validation.
Collaborations and co-supervisions:	The PhD project will be co-supervised by Laure Gallay and Bénédicte Chazaud.
Supervisors:	Laure Gallay – laure.gallay@univ-lyon1.fr Bénédicte Chazaud – benedicte.chazaud@inserm.fr
Place of work:	Laboratory Physiopathologie et Génétique du Neurone et du Muscle, Lyon, France
Required degree	Master's degree or equivalent in Cellular and molecular biology

Skills/Experience:	Experience in cell culture and cell biology techniques is required.
Keywords	Idiopathic inflammatory myopathies; muscle stem cells, regenerative niche, macrophages, fibroblasts

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 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 €2,440 and to an estimated net monthly salary before income tax of approximately €1,976. On top of the monthly salary, the doctoral fellow will receive a **mobility allowance,** including employer and employees' social charges of €4,752 over the 36 months of the working contract. This amount corresponds to a gross monthly allowance estimated to €92 and to an estimated net monthly allowance before income tax of approximately €74.
Other benefits:	**Social Protection**: The fellow 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. **Additional Insurance**: The fellow may choose to subscribe to complementary health insurance plans, at affordable rates (approximately €70 *per* month), of which 50% is paid by the employer. **Paid Leave**: The fellow is entitled to up to **33.5 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. **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. **Transport**: The fellow benefits from significantly **reduced fares on public transport**, available in all partner cities. Additionally, the host institution will cover 50% of the monthly transportation costs. **Sports and culture:** The fellow will enjoy the cultural environment provided by the Lyon 1 campuses, where numerous exhibitions and activities open to the general public are organised throughout the year. The fellow may play his/her favourite sport in the largest University Sports Association in France, where over 30 activities are on offer year-round through the Sports & Physical Activity University Department. The fellow may also join one of the 70 student associations that unite the University.