



Postdoctoral Position: Immune Cell Engineering and Muscle Regeneration (Lyon, France)

We are seeking a highly motivated postdoctoral researcher to join a multidisciplinary project at the interface of **muscle biology, immunology, and genetic engineering**. The goal is to develop immune-cell-based strategies for muscle repair and disease. This is a high-risk/high-gain project with a defined translational trajectory: the successful postdoctoral researcher will be positioned to take a leading role in future applications for major follow-on funding to support a proof-of-concept phase ahead of clinical testing.

Project Description

The project is structured around two complementary research directions:

1. **Immune cells as carriers for therapeutic gene delivery to skeletal muscle.** Using genetically engineered T cells and macrophages to deliver genetic material into regenerating muscle fibers as a platform for muscular dystrophy applications.
2. **Engineering regulatory T cells to promote immune tolerance.** Using gene editing and gene transfer approaches to create Tregs with improved stability and regulatory function.

Environment & Collaborations:

The host laboratory has long-standing expertise in muscle development, regeneration, and in vivo experimentation. Complementary expertise in immunology and immune cell engineering is provided through established collaborations with world-class laboratories. The postdoctoral researcher will drive experimental development (design → execution → data analysis → publication) and will be supported in interactions with collaborators. The position offers substantial autonomy and responsibility, and an opportunity to help shape the next phase of a growing, ambitious research program.

Profile and Qualifications

Applicants should have:

- A Ph.D. in immunology, cell biology, molecular biology, or related field.
- Solid experience in cell biology, with documented exposure to immune cell-based research, including flow cytometry.
- Certification and experience in animal experimentation (mandatory).
- Experience with viral vectors or genome editing is a strong asset.
- The ability to work autonomously while engaging constructively with collaborators.
- An interest in working across disciplines and acquiring expertise outside their initial training.

Work Environment

The position is based at the MeLiS Institute (Faculty of Medicine, Lyon), that brings together eight research teams and shared state-of-the-art platforms for molecular, cellular, and in vivo biology. The postdoctoral researcher will join the newly formed Marcelle–Le Grand team, co-led by two internationally recognized investigators with long-standing contributions to vertebrate muscle development, satellite cell biology, and muscle regeneration, documented through high-impact publications and widely cited reference articles. The environment is scientifically ambitious, collaborative, and **well-suited for postdoctoral researchers aiming to build a visible and competitive scientific trajectory**.

Practical Information

- **Start date:** February 2026
- **Contract duration:** 2 years

Application

Interested candidates should send a **CV, a motivation letter and contact information for two references** to: christophe.marcelle@univ-lyon1.fr; fabien.le-grand@univ-lyon1.fr; valerie.morin@univ-lyon1.fr