

MSCA

# **Postdoctoral Fellowships**



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## **CALL FOR APPLICATIONS 2025 – FELLOWS**

Supervisor	Antoine Muchir
Supervisor page	https://recherche-myologie.fr/profile/antoine-muchir/
Host Institution	National Institute for Health and Medical Research (Inserm) https://www.inserm.fr/en/home/
Research Lab	Institute of Myology https://www.institut-myologie.org/en/
Research Team	Signaling pathways & striated muscles https://www.institut-myologie.org/en/recherche-2/centre-de-recherche- en-myologie/team-9-signaling-pathways-striated-muscles/

### **Project Title**

Role of the cytoskeleton-nucleus interaction in the development of muscular dystrophy caused by mutations in nuclear A-type lamins

#### **Project Description**

LMNA mutations are responsible for a muscular dystrophy associated with dilated cardiomyopathy. It remains unclear how LMNA mutations result in the development of the disease, and the incomplete understanding of the disease pathogenesis presents a major hurdle in the development of effective treatment approaches. We raised the hypothesis that dysfunctional connections between the nucleus and cytoskeleton is contributory to the diseases.

#### Keywords

muscular dystrophy, nuclear envelope, cytoskeleton

#### **Description of the Host Research Lab**

Located in Paris, at the heart of Europe's largest hospital, The Pitié-Salpêtrière Hospital, the Institute of Myology was created in 1996 under the leadership of an association of patients and their parents, the AFM-Telethon. Our goal: to promote the existence, recognition and development of myology as a separate discipline. Whether diseased, healthy, injured, athletic, or ageing ... muscle, on which our vital functions depend, has become a real innovative model for medical research. With a patient focus, the Institute of Myology coordinates the medical management, basic, applied and clinical research and education. It is an international reference centre that participates in numerous trials and clinical studies, mainly concerning neuromuscular diseases but also muscle damage related to high performance sports or ageing.