

# **Postdoctoral Fellowships**



Marie Skłodowska-Curie Actions Developing talents, advancing research

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

**Supervisor** Stéphane Vassilopoulos

Supervisor page <a href="https://recherche-myologie.fr/profile/stephane-vassilopoulos/">https://recherche-myologie.fr/profile/stephane-vassilopoulos/</a>

**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 Vassilopoulos Research Group

https://vassilopoulos.org/

### **Project Title**

Dynamic Rivalry: Spectrins vs. Clathrin in Health and Neuromuscular Diseases

# **Project Description**

Our previous research uncovered a dynamic competition between spectrins and clathrin, two key regulators of membrane trafficking, and cytoskeletal stability essential for cellular organization. However, in Duchenne muscular dystrophy and myotonic dystrophy type 1, this delicate balance is disrupted, leading to impairments in endocytosis and trafficking. Understanding the mechanisms of this competition may pave the way for innovative therapeutic strategies to restore cellular homeostasis.

#### **Keywords**

clathrin-mediated endocytosis, spectrin cytoskeleton, neuromuscular disorders

# **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.