

# **Postdoctoral Fellowships**

Marie Skłodowska-Curie Actions Developing talents, advancing research



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

**Supervisor** Francisco Fernandes

Supervisor page <a href="https://lcmcp.science/francisco-fernandes/">https://lcmcp.science/francisco-fernandes/</a>

Host Institution Sorbonne Université

https://www.sorbonne-universite.fr/en

Research Lab Laboratoire de Chimie de la Matière Condensée de Paris

https://lcmcp.science/

Research Team Materials and Biology

https://lcmcp.science/matbio-en/

### **Project Title**

Investigation of Nascent Proteins in Heterogenous Extracellular Matrix Analogues

### **Project Description**

A recent strategy has allowed to image the emergence of nascent proteins of the Extracellular Matrix (ECM) as secreted by single cells in hyaluronic acid hydrogels. In this project the candidate will implement an equivalent approach (secondment in Loebel lab, UPenn) to understand the role of biomimetic ECM analogues based on collagen on the deposition and remodeling of the matrix by individual cells. The results will be applied to develop new biomimetic materials with programmable remodeling.

## **Keywords**

biomaterials, extracellular matrix, nascent proteins

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

The LCMCP is a well-known figure in the development of inorganic or organic-inorganic hybrid functional materials, and in the evaluation of their physico-chemical properties at different scales. These materials target applications with high societal impact, particularly in the fields of energy, health and the environment.