

# **Postdoctoral Fellowships**

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

Supervisor Nelly Henry

Supervisor page <a href="https://www.labojeanperrin.fr/?nhenry">https://www.labojeanperrin.fr/?nhenry</a>

Host Institution Sorbonne Université

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

Research Lab Laboratoire Jean Perrin

https://www.labojeanperrin.fr/?lang=en

Research Team Micro-organisms biophysics

https://www.labojeanperrin.fr/?article7

### **Project Title**

Bacterial Biofilm Compressive Raman Imaging

### **Project Description**

The project is aiming to deciphering the principles of bacterial biofilm assembly. Jointly supported by Laboratoire Kastler Brossel (LKB) and Laboratoire Jean Perrin (LJP), the objective is to achieve a time-resolved functional mapping of a developing biofilm implementing a combination of conventional and compressive Raman micro-spectroscopies assisted by the use of stable isotope probes (SIP) and complemented by a multiparametric computational analysis.

## Keywords

bacterial biofilm, micro-raman imaging, biophysics

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

LJP research activities consist in Physics at the interface of with Biology and Medicine. We develop new experimental approaches to probe complex biological systems at different scales, and we develop bioinspired systems to develop new concepts or to improve our understanding of given biological mechanisms. A large part of our research aims at exploring the response of a biological system to external perturbations. Finally, the LJP includes a theoretical component closely interacting with experimenters.

To submit your application, please send an email with the required documents to msca-pf@sorbonne-universite.fr