Lorena REDONDO-MORATA, PhD
Inserm Researcher (*Chargée de Recherche* Inserm)

Cellular Microbiology & Physics of Infection

Tel: 032087 1033 (office) | 032087 7731 (secretary) | 032087 1137-40 (lab)
Fax: 032087 1135

www.cmpi.cnrs.fr
E-mail: lorena.redondo-morata@inserm.fr

Postdoctoral position in Biophysics in the *Institut Pasteur* de Lille (Lille, France)

The team of Cellular Microbiology and Physics of Infection Lab is seeking for a postdoctoral candidate in biophysics to work on the assembly and release of SNAREpins in the membrane for synaptic transmission.

The group has recently employed High-Speed atomic force microscopy, a very innovative technique, to investigate membrane remodeling processes, e.g. ESCRT complexes remodeling [1,2]. In the proposed project, we will use High-Speed atomic force microscopy combined with super-resolution fluorescence microscopy to investigate the dynamic assembly of synaptotagmin and Munc13 in calcium-sensitive oligomers. The project aims to answer many long-standing questions concerning how SNAREpins can be assembled, clamped and synchronously released under an action potential[3].

We are looking for a postdoc motivated candidate with a strong background in biophysics desiring to address fundamental biological questions with cutting edge imaging and biophysics technologies.

We offer a 2 years postdoc position (postdoc salary according the salary rules of Inserm) to work in a dynamic young team. The candidate will have the opportunity to enhance his/her scientific career in a friendly and stimulating environment, to interact with other outstanding scientific collaborators (University College London & University of Marseille) with the possibility to start immediately.

Interested candidates, please contact: lorena.redondo-morata@inserm.fr

1. Chiaruttini & Redondo-Morata . *et al.* Relaxation of Loaded ESCRT-III Spiral Springs Drives Membrane Deformation. *Cell* **163**, 866–879 (2015).

2. Mierzwa & Chiaruttini & Redondo-Morata *et al.* Dynamic subunit turnover in ESCRT-III assemblies is regulated by Vps4 to mediate membrane remodelling during cytokinesis. *Nat. Cell Biol.* **19**, 787-+ (2017).

3. Rothman, J. E., Krishnakumar, S. S., Grushin, K. & Pincet, F. Hypothesis - buttressed rings assemble, clamp, and release SNAREpins for synaptic transmission. *Febs Lett.* **591**, 3459–3480 (2017).