

OFFER – Postdoctoral position in Membrane Repair Mechanisms

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The Biofisika Institute (IBF) is a joint research center of the University of the Basque Country (UPV/EHU) and the Spanish National Research Council (CSIC). In partnership with Fundación Biofísica Bizkaia (FBB), the center focuses on advancing knowledge about the physical and chemical processes underlying biology and disease. With the FBB accredited as a Basque Excellence Research Centre (BERC) by the Basque Government, the IBF and FBB partnership enjoys a strong national and international reputation, and provides outstanding shared facilities for advanced biophysical and structural biology approaches in a new research building in the main Leioa campus of the UPV/EHU.

Offer and description of the project

Immediately available **postdoctoral** position in the laboratory within the research laboratory of Dr. *Adai Colom* at the Basque Centre for Biophysics (IBF; [//www.biofisika.org/en](http://www.biofisika.org/en)) in Bilbao, Basque Country, Spain.

About the Position: The successful candidate will have the unique opportunity to lead experiments focused on the **repair of cell membranes**. This research will delve into various repair mechanisms employed by cells when facing different challenges. We will utilize cutting-edge techniques such as *Fast-AFM*¹⁻⁵ and *confocal*⁶⁻⁸ (<https://www.bralm.cf/>) (see Fig. 1), *Cryo-EM*⁹ at the Basque Resource for Electron Microscopy (<https://brem.biofisika.org/>) and Imperial College) to explore and dissect these intricate processes.

Collaborative Endeavor:

This project is a collaborative effort in partnership with *Harry Low's lab* (<http://www.thelowlab.org/>) at Imperial College. Together, we will unravel the complexities of membrane repair mechanisms.

Required background

We are looking for highly motivated candidates with a Ph.D. in biophysics, biochemistry, microbiology, cell biology, physics, engineering, structural biology, biomedical

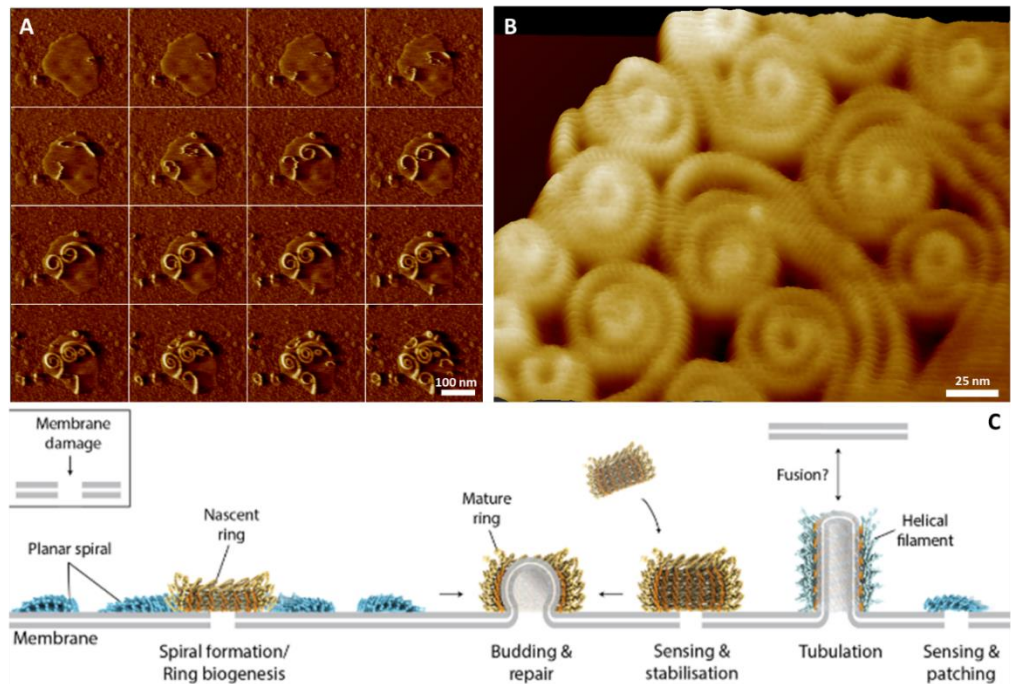


Figure 1. **A)** Fast-AFM image showing Vipp1 protein polymerization, responsible for membrane repair, on a supported lipid bilayer. **B)** High-resolution Fast-AFM image of the Vipp1 protein. **C)** Model depicting Vipp1 protein's role in membrane damage repair.

engineering, or related fields.

Experience in membrane repair mechanisms, AFM, or working with in vitro systems will be highly advantageous.

We are an equal opportunity employer committed to diversity. Applications should be submitted to adai.colom@ehu.eus. It is recommended that applications are made as soon as possible as they will be considered upon arrival:

1. Curriculum vitae
2. Motivation Letter
3. Two reference letters or contact email of referees.

Deadline: December 01, 2023

Bibliography:

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