OFFER – **PhD 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 **PhD student** position in the laboratory within the research laboratory of Dr. *Adai Colom* at the Basque Centre for Biophysics (IBF; //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 invite applications from enthusiastic individuals who are interested about membrane repair experiments. As a PhD student, you will work closely with our team of experts, gaining valuable insights and

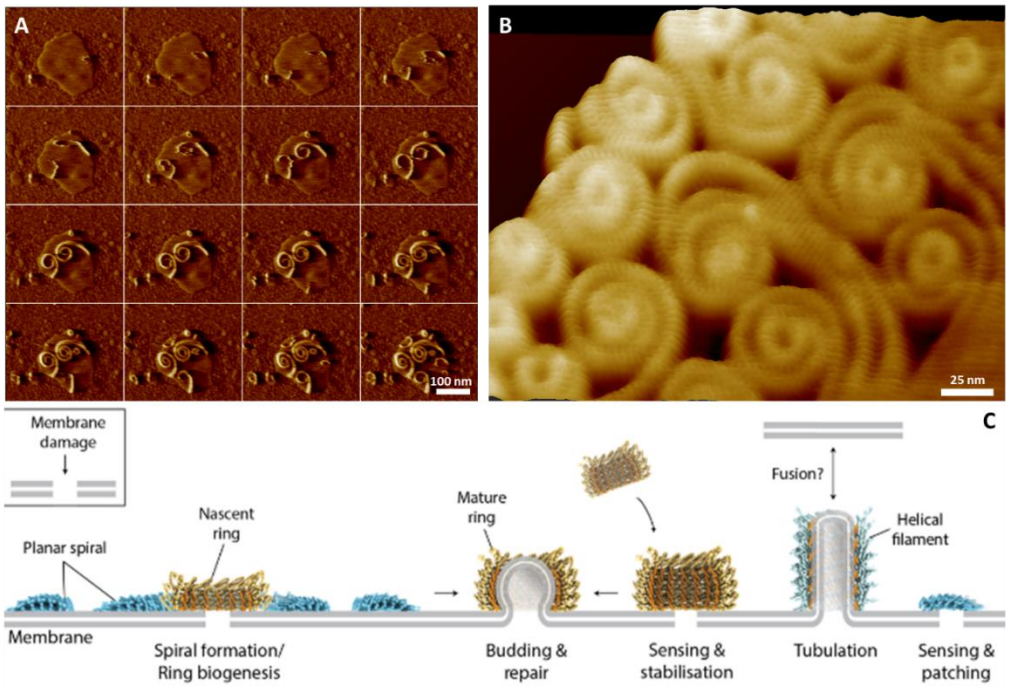

Figure 1. A) Fast-AFM image showing Vipp1 protein polymerization, responsible for membrane repair, on a supported lipid bilayer. **B)** High-resolution Fast-AFM image of the Vipp1 protein. **C)** Model depicting Vipp1 protein's role in membrane damage repair.

contributing to our ongoing research efforts. Candidate with a master degree or degree in *Science, Engineering or technology.*

Benefits of Joining Biofisika Institute:

- **International Environment:** Collaborate with researchers from diverse cultural backgrounds, fostering a rich and stimulating intellectual atmosphere.
- **Cutting-Edge Research:** Engage in pioneering research projects, exploring innovative solutions to complex biological questions.
- **Interdisciplinary and International Collaboration:** Work alongside experts in various fields, encouraging the exchange of ideas and knowledge.
- **Professional Development:** Access to workshops, seminars, and conferences to enhance your skills and broaden your academic horizons.
- **Supportive Community:** Become a part of a supportive and collaborative community, dedicated to advancing scientific knowledge and fostering academic growth.

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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4. Zuttion, F. *et al.* High-speed atomic force microscopy highlights new molecular mechanism of daptomycin action. *Nat. Commun.* **11**, 6312 (2020).
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