

PhD Opportunity at the Biofisika Institute (UPV/EHU, CSIC): Join Our Project on Organelle and Cell Membrane Repair

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We are excited to announce a fantastic opportunity to join our dynamic research team at the **Biofisika Institute (UPV/EHU, CSIC)**! We are seeking a highly motivated **PhD student** to contribute to our **Membrane Repair Project on Organelles**, which integrates **Fast-AFM, STED microscopy and Cryo-EM** to unravel the mechanisms of membrane dynamics and repair.

Our research focuses on understanding the role of **ESCRT proteins** in lipid membrane repair, exploring their response to **contaminants** from in vitro models to cellular systems. If you are passionate about membrane biology, biophysics, and cutting-edge imaging techniques, we encourage you to apply!



FIGURE: Fast-AFM images of Vipp1. (A) Fast-AFM image of ESCRT proteins (Vipp1) assembling on a lipid membrane. (B) Molecular-resolution Fast-AFM image showing different Vipp1 protein conformations on a lipid membrane. (C) Schematic model illustrating the role of Vipp1 in membrane repair. (Naskar et al. 2024)

About Biofisika Institute:

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). The Biofisika Institute is renowned for its cutting-edge research in the field of biophysics and cellular biology. Our collaborative and interdisciplinary environment provides an excellent platform for researchers to thrive, learn, and make significant contributions to the scientific community.

Position Details:

1. **PhD Student:** We invite applications from enthusiastic and dedicated individuals who are passionate about membrane repair experiments. As a PhD student, you will work closely with our team of experts, gaining valuable insights and 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 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.

Application Process:

Interested candidates are invited to submit their application, including a CV, cover letter outlining their research interests and relevant experience, and the contact details referees, to *adai.colom@ehu.eus* by **30.04.2025**.

We welcome applications from candidates of all backgrounds and experiences. The **Biofisika Institute (UPV/EHU, CSIC)** is committed to creating an inclusive and diverse research environment.

Join us in our mission to unravel the mysteries of membrane reparation and make a significant impact on the world of biophysics. Together, let's explore, discover, and innovate.

Bibliography:

Naskar, Souvik, Andrea Merino, Javier Espadas, Jayanti Singh, Aurelien Roux, Adai Colom*, and Harry H. Low*. 2024. 'Mechanism for Vipp1 Spiral Formation, Ring Biogenesis, and Membrane Repair'. Nature Structural & Molecular Biology 2024: 1–14. doi:10.1038/s41594-024-01401-8.

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