



Fundación Biofísica Bizkaia
Biofísica Bizkaia Fundazioa

FUNDACIÓN BIOFÍSICA BIZKAIA / BIOFISIKA BIZKAIA FUNDAZIOA

OFFER – Postdoctoral position in cryo-ET

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The IBF is a joint research centre of the University of the Basque Country (UPV/EHU) and the Spanish National Research Council (CSIC). In partnership with Fundación Biofísica Bizkaia (FBB), the centre 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 cryo-electron tomography (cryo-ET) in the laboratory of Dr. Iban Ubarretxena-Belandia at the Instituto Biofísica (IBF; [//www.biofisika.org/en](http://www.biofisika.org/en)) in Bilbao, Basque Country (Spain). The laboratory employs cryo-electron microscopy (cryo-EM) to uncover the structure and function of proteins involved in human disease. For recent publications from the laboratory please see: Nature Commun. 2022 13:1050; Nature Commun. 2020 10:2699; Nat Struct Mol Biol. 2020 10:913; and Nat Struct Mol Biol. 2019 26:955.

The project will involve in situ structural biology of macromolecular complexes in a prokaryotic and eukaryotic cellular context using cryo-ET of vitrified lamellae. This project will be part of an in house collaboration with the laboratory of Dr. Daniel Castaño-Diez, an expert in cryo-ET image processing and developer of the dynamo software <https://brem.biofisika.org/dynamo/>.

The successful applicant will have access to the in house cryo-EM facilities at the Basque Resource for Electron Microscopy (BREM; [//brem.biofisika.org/](http://brem.biofisika.org/)). This facility is unique in Spain and operates a 300 kV Krios G4 cryo-TEM equipped with phase plate and paired with Gatan's BioContinuum Imaging Filter and a K3 direct electron detector. The facility also includes specimen preparation equipment and GPU-based computer clusters for image processing and 3D reconstruction. In 2023, BREM will have operational a cryo-FIB-SEM for cryo-lamella production.

Required background

We seek highly motivated candidates holding a Ph.D. or equivalent in biochemistry, microbiology, structural biology, biophysics, cell biology, biomedical engineering, or related fields. Hands-on experience in cryo-EM and/or cryo-ET will be highly desirable.

We are an equal opportunity employer committed to diversity. Applications should be submitted through the Biofísica website contact page (<http://biofisika.org/contact/>), adding the following subject: [Job Application: 108_Postdoc CryoET]. It is recommended that applications are made as soon as possible as they will be considered upon arrival. Applications in a single pdf file must include:

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



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Biofisika Bizkaia Fundazioa

4. Copies of PhD, master and bachelor diplomas.

Incomplete applications will not be considered.

Deadline: April 7, 2023