



Fundación Biofísica Bizkaia  
Biofisika Bizkaia Fundazioa

## FUNDACIÓN BIOFÍSICA BIZKAIA / BIOFISIKA BIZKAIA FUNDAZIOA

### OFFER – PhD position / Laboratory for Numerical Methods of Cryo Electron Tomography

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We are looking for candidates interested in completing a doctoral thesis in the group of Daniel Castaño Díez at the Basque Center for Biophysics / Instituto Biofisika (<https://biofisika.org>) at the Leioa Campus of the University of the Basque Country. The position is immediately available, and applications will be considered upon arrival.

#### Description of the project and position offered

The “Laboratory for Numerical Methods of Cryo Electron Tomography” is committed to the development of new computational approaches for the automated analysis and interpretation of three-dimensional images of cells and tissues. The thesis project will focus on the application of Deep Learning methodologies to locate and structurally characterize small proteins in their physiological environment. To this, we will implement state-of-the-art Image Processing into our in-house software package Dynamo, centered in the GPU-optimized analysis for cryo electron tomography. Access to data of outstanding quality is ensured by the Titan Krios G4 cryo-electron microscope hosted by our Institute, first in Spain and currently at the forefront of the field.

The researcher will be expected to collaborate in the organization of international hands-on workshops, and to present their work in conferences and congresses. For a closer insight on our research lines, please check our publications: PLoS Biology 19 (8), e3001318; Frontiers in Molecular Biosciences, 82.

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.

Ideal candidates must hold an official degree in Mathematics, Computer Science, Engineering or similar, and has a strong background in Matlab. An interest in carrying research in Life Sciences is assumed.

Applications should be addressed through the Biofisika website contact page (<http://biofisika.org/contact/>), adding the following subject: [Job Application: 101\_DCastano]. 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:

- Curriculum Vitae.
- A motivation letter.
- Two reference letters or contact email of referees.



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We are an equal opportunity employer committed to diversity.

**Deadline: until the position is filled**