# Offer for a 4-Year PhD Contract

**Position:** Pre-doctoral Researcher in Training
**Project Reference:** PID2024-155225NB-I00
**Research Group:** Structural Microbiology Laboratory
**Research Center:** Fundacion Biofísica Bizkaia, located at Instituto Biofisika (CSIC, UPV/EHU)

**Contract Duration:** 4 years, starting from the date of incorporation.

**Project Description:** This PhD contract is linked to the project "Structure-function studies of Type VI secretion system toxins (T6SS-TOXINS)", grant PID2024-155225NB-I00 funded by MICIU/AEI /10.13039/501100011033 and ERDF, EU. The research concentrates on uncovering the molecular mechanisms of bacterial protein toxins secreted by the T6SS. The project aims to determine the high-resolution structures of various toxins, examine their complexes with target molecules and T6SS components, and understand their enzymatic activities and membrane interactions. Advanced structural techniques such as cryo-EM and X-ray crystallography will be combined with biophysical and biochemical methods. The ultimate goal is to generate new knowledge with potential applications in developing antimicrobials and biotechnological tools.

**Candidate Profile:** The ideal candidate will hold a university degree required for admission into a PhD programme. The candidate must not possess a doctoral degree from any Spanish or foreign university. Experience in structural biology, biophysics, or biochemistry is highly valued.

The candidate must meet the requirements established in Article 21.a) of Law 14/2011, of June 1st, to enter into a predoctoral contract or, failing that, be in a position to meet the requirements at the time the contract is formalised.

**Training and Career Development:** The PhD candidate will join the Structural Microbiology Laboratory (https://albesalab.org/) and will enrol in the "PhD Program of Molecular Biology and Biomedicine" at the University of the Basque Country (UPV/EHU), a programme that has been recognised at Level 8 of the European Qualifications Framework. The candidate will benefit from a group-specific training programme, including weekly seminars and tutorials from senior Group members. The programme also offers opportunities for national and international congress participation and international research stays to promote scientific growth and enhance technical skills.

**Application Process:** The evaluation will be based on:

1. Academic and scientific-technical trajectory of the candidate (up to 50 points), including scientific contributions (up to 45 points) and the impact of stays at prestigious institutions (up to 5 points).
2. Suitability of the candidate for the planned research activities (up to 50 points).

Applications should be addressed through the Biofisika website *join us* page (https://www.biofisika.org/en/join-us), adding the following subject: [Job Application: **137_DAlbesa PhD**. Interested candidates should submit their CV by **30 September**. Please send informal enquiries to david.albesa@ehu.eus.