

PhD Position in Engineering Biomolecular Tools for Biomedicine

Job Summary

Applications are invited for PhD students to work on in biomolecular engineering at the Biomolecular Nanotechnology Laboratory of CIC biomaGUNE, led by Prof. Aitziber López Cortajarena funded through the Predoctoral Contract program (FPI) of the Spanish State Research Agency (AEI) associated to the PROTHER project “Engineering protein tools for gene editing and combination therapies” (ref PIC2022-137977OB-100) Knowledge Generation Projects Call 2022.

The project *Prother* “Engineering protein tools for gene editing and combination therapies” is funded by the Spanish Research Agency (AEI). The project aim is to develop new tools based on protein engineering and nanotechnology to tackle current challenges in health. In particular the project aims to develop innovative protein-nanomaterial hybrid tools through protein engineering, taking advantage of the functionality of both therapeutic proteins and nanomaterials by stabilizing small nanomaterials within engineered proteins. The ultimate goal of the project is to develop effective and efficient tools for gene editing and cancer therapy using a combination of protein engineering and nanotechnology.

The project is to be carried out at **CIC biomaGUNE**, a vibrant multidisciplinary and international research institute in San Sebastian, Spain. **CICbiomaGUNE** has established a state-of-the-art research program at the interface between the chemical, biological and physical sciences. It offers excellent working conditions and is well equipped with instrumentation and facilities.

The main tasks of the position are:

- Design gene editing tools based on engineered proteins.
- Development of combination therapeutic modalities for cancer disease using engineered protein-nanomaterial hybrids.
- Characterization of the novel protein-nanomaterial tools in appropriate in vitro cell models and validation.

Education Level:

A degree in a relevant area of Biochemistry, Biotechnology, Biomedicine, Chemistry, or related areas is required and should have completed a MsC degree at the time of incorporation (approx. from November 2023 to January 2024).

Experience in the fields of protein engineering, molecular biology, protein chemistry, biocatalysts, nanomedicine is highly desirable. Candidates cannot have a previous Doctoral degree.

Skills:

We are looking for candidates with experience in the fields of protein engineering, molecular biology, protein chemistry, biocatalysts, nanomedicine is highly desirable. Candidates cannot have a previous Doctoral degree. The candidate is expected to have an interest in multidisciplinary work, and the capacity to work in an international environment. Excellent interpersonal skills as well as written and oral communication skills in English are required.

Duration:

The successful candidate will be hired by CIC biomaGUNE with a full-time contract for 4 years (in case the candidate has been hired with a previous predoctoral contract, this previous time will be deducted from the 4-year contract)

Envisaged Job Starting Date: Please note the starting date is estimated to be from November 2023 to January 2024.

Application Deadline: 2023-09-30

Project Funding:

- PROTHER - PID2022-137977OB-I00 - (Agencia Estatal de Investigación - AEI)

How to apply: [Check the full details at webpage](#)

Equal opportunities Policy: CIC biomaGUNE is proud to be an equal opportunity employer and applicants will receive consideration for employment without regard to: age, color, disability, gender, national origin, race, religion, sexual orientation, gender identity, or any other classification protected by European, national, or local law.

Open Transparent and Merit Based Recruitment Policy:

[You can check here CIC biomaGUNE OTM-R Policy](#)

About CIC biomaGUNE

CIC biomaGUNE, located in the Science and Technology Park of Gipuzkoa (Donostia-San Sebastián), is a leading research center in the area of bionanomaterials, molecular imaging and regenerative medicine and counts with more than 160 people from 24 countries. The activity of CIC biomaGUNE is conducted by a team of 11 international and dynamic research groups, supported by flexible and efficient management teams and a unique research infrastructure including the Molecular Imaging Facility, one of the biggest preclinical imaging research infrastructures in Europe.

CIC biomaGUNE maintains a vibrant weekly scientific seminar program by visiting leading scientists. Additional training in soft skills and technologies covered by the CIC biomaGUNE technical platforms is offered to researchers within the in-house training program.

CIC biomaGUNE is committed to developing an HR Strategy for Researchers, designed to bring the practices and procedures in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Charter and Code).

Please check out the Human Resources Strategy for Researchers - [HRS4R at CIC biomaGUNE](#).