

PhD Position in Cancer Glycobiology laboratory at CIC bioGUNE

We seek a motivated PhD candidate to join “*PreMetaCan AECC*”, a cutting-edge project on cancer metabolism and precision medicine, working under the supervision of [Dr. June Ereño-Orbea](#) and [Dr. Marco Piva](#) at CIC bioGUNE, a Severo Ochoa Excellence research center in Bilbao, Basque Country, Spain. This position is part of a prestigious €2M Scientific Foundation of the Spanish Association Against Cancer (AECC) Excellence grant aimed at tackling systemic tumor-host metabolic interactions to advance precision oncology.

Description of the project

The selected PhD student will work on studying how changes in tumor glycosylation influence tumor initiation, progression, and response to treatments. A key focus of this project will be on the role of **Siglec receptors expressed on the surface of immune cells and their impact on cancer progression**. The project aims to understand how Siglecs interact with tumor-associated glycans and how these interactions contribute to immune evasion, metastasis, or therapy resistance.

The ultimate goal is to decipher how glycan-Siglec interactions shape tumor biology and whether they can be **therapeutically targeted**. This will be achieved by employing a multidisciplinary approach, integrating techniques from cell biology, immunology, and structural biology. The team will develop and implement detection strategies to identify cancer-associated glycans **expressed in solid tumors, utilize in vitro cell cultures to investigate the interactions between Siglec-expressing immune cells and cancer cells, and apply protein biochemistry and structural biology techniques to produce proteins such as antibodies targeting glycans or Siglecs**.

To translate these findings into potential therapeutic applications, key discoveries will be **validated using both in vitro and in vivo models**. These models will enable the assessment of the functional impact of differential glycosylation patterns and the evaluation of their therapeutic potential in preclinical settings.

Profile of the candidate

We welcome applications from motivated young scientists with strong background in **cellular and molecular biology**. Candidates with experience in **glycobiology, biochemistry, or structural biology** are particularly encouraged to apply. Given the nature of the project, **training in immunology** is an advantage. Applicants should be willing to be trained in a highly collaborative environment within a **multidisciplinary team**.

What We Offer

The selected candidate will join a fully funded 4-year PhD project, supported by the AECC Excellence Program, focused on deciphering the glycan landscape of tumor cells and the tumor microenvironment across various pathological contexts to uncover novel therapeutic targets. This position offers a unique opportunity to engage in cutting-edge research in cancer glycobiology, while receiving multidisciplinary training in glycosciences, structural biology, and AI-based analytical tools. The candidate will gain hands-on experience with both in vitro and in vivo models and benefit from access to state-of-the-art facilities. The research will be conducted at CIC bioGUNE, a leading international center in biosciences, within a dynamic and collaborative environment.

Application Details

Motivated candidates should submit an application package including (i) a detailed CV, (ii) a cover letter, and (iii) contact details for references.

Applications should be submitted via the form available at <https://www.cicbiogune.es/job-offers-form>, and indicating **42201** as reference. For further details and application instructions, please contact [Dr. June Ereño-Orbea](#) and [Dr. Marco Piva](#).