

Joint PhD fellowship for the Development of Glycomimetics as Siglec immunomodulators

The Glycotechnology Laboratory, CIC biomaGUNE led by Niels Reichardt and the Chemical Glycobiology lab at CIC bioGUNE led by Jesús Jiménez-Barbero invite candidates to apply for a joint 3-year fellowship towards a doctoral degree in Biomedical Glycoscience. The project is focused on the development of complex glycan mimetics and their evolution as selective modulators for Siglec receptors, important immune regulators and potential targets for the treatment of excessive inflammatory responses, such as those seen in sepsis and graft-versus-host disease. This PhD project is part of a larger joint effort between the Glycotechnology lab, CIC biomaGUNE and the Chemical Glycobiology lab at CIC bioGUNE towards the development and validation of novel glycan mimetics that outcompete natural glycan ligands in affinity and selectivity for their lectin targets on human immune cells. The student will receive advanced training in synthetic organic chemistry, glycan microarray development, structural biology (including X-ray crystallography, high resolution nuclear magnetic resonance (NMR) and single-particle electron microscopy (EM)) and *in vitro* immune assays.

CIC biomaGUNE (San Sebastian) is a leading research center in the area of bionanomaterials, molecular imaging and glycotechnology and maintains a vibrant weekly scientific seminar program given by visiting leading scientists. Additional training in soft skills and technologies covered by the CIC biomaGUNE technical platforms is offered to students within the in-house PhD training program. In 2018 CIC biomaGUNE was recognized as a Center of Excellence in the Severo Ochoa/Maria Maeztu program. On the other hand, **CIC bioGUNE (Derio)** is a key research center in the field of health sciences within the national and international scientific landscape. The center is equipped with last generation equipment to perform NMR, EM and X-ray crystallography, as well as different core technology platforms where genomes, proteomes and metabolomes can be analyzed. In 2017, CIC bioGUNE obtained the distinction of Excellence in the Severo Ochoa program.

Requirements

- Diploma and Master Degree in Chemistry, Biochemistry or Pharmacy with above average results.
- Good theoretical background and previous practical experience in (bio) organic chemistry, biochemistry and/or structural biology.
- Proficiency in English, spoken and written.
- Besides academic records a strong motivation to pursue a scientific career will be considered.

Application procedure: Candidates should submit a detailed CV, a cover letter and the names and contact details of at least 2 references using the following [form](#) and indicating **302** as job reference code. Applications are accepted **until the 10th of September 2019. The fellowship will begin from October 2019.**

Additional information:

CIC biomaGUNE, San Sebastian

The group: <https://glycotechnology.net/> The center: <https://www.cicbiomagune.es/>

The city: <http://www.sansebastian-connectingtalent.com/es/>

CIC bioGUNE, Derio

The group: <https://www.cicbiogune.es/people/jjbarbero> The center: <https://www.cicbiogune.es/center/about-us>

The city: <https://www.bizkaiaalent.eus/>