

PhD candidate position on directed evolution of smart protein therapeutics

The ChemSynBio Group

At ChemSynBio (www.chemsynbio.iqs.edu), we harness chemical and synthetic biology to create biomedical tools, especially to treat brain diseases and to understand brain transport.

The Project

Recent advances have positioned **extracellular targeted protein degradation** as a powerful new therapeutic approach, with several candidates already progressing through clinical trials and substantial potential for further innovation. In this project, **supported by the MICIU and “la Caixa” Foundation**, we aim to establish a novel platform for the development of **smart protein degraders** that exhibit enhanced selectivity and improved degradation efficiency, with a particular focus on the treatment of brain tumors. The work is highly **interdisciplinary, integrating directed evolution, bioconjugation, and proteomics with cell-based assays and in vivo efficacy studies in mouse models**. The selected candidate will contribute to all phases of the project, with an emphasis on protein development and cellular experimentation.

Expected Tasks

- Contribution to **research excellence** at all stages: literature review, experimental design, experimentation, data analysis, and proposal of new research directions.
- **Collaboration** with other researchers and contribution to an **inspiring atmosphere**.
- **Presentation** of results and contribution to preparing reports and scientific **publications**.
- Engagement in **laboratory management** and **team activities**.
- **Training** in technical and horizontal skills. **Student supervision** and training.

Your Profile

- Requirement: **master’s degree**. Background in biotechnology, chemistry, or related.
- Optional experience: phage display, protein engineering, bioconjugation, cell culture.
- **Strong motivation and proactivity**. Excellent academic record.
- Excellent **team-working capacity**, communication skills, and fluency in **English**.

Contract Conditions

- Three years of funding guaranteed. **Gross salary: 23,871.70€**
- **Training** opportunities, close supervision, and space for creativity.
- Expenses derived from research stays, PhD tuition fees.
- Proposed starting date (flexible): **September 2026**.

Applications are welcome until the candidate is selected

- Applications should be addressed to Dr. Benjamí Oller-Salvia (benjami.oller@iqs.url.edu) and Dr. Cristina Díaz-Perlas (cristina.diaz@iqs.url.edu).
- Please include “**DESPT PhD – Your Name**” in the subject of your email.
- The following documents should be combined as a **single pdf** with your name:
 - **Motivation letter** explaining why you would be a good fit for the position and our team.
 - **Curriculum Vitae**.
 - Master’s and Bachelor’s **academic records**.
 - Contact details of two **referees**. Reference letters are valued but not compulsory.