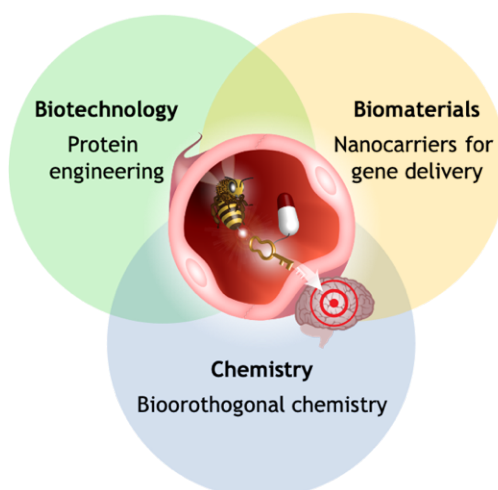


Would you like to carry out a PhD at IQS Barcelona on nano-bio-therapeutics targeting brain tumors?

The project

Glioblastoma (GBM) is the most malignant form of brain tumor. Patients die inevitably from relapse of the tumor after surgery, radiotherapy, and chemotherapy. Current treatments for GBM have very low efficacy due to their incapacity to cross the blood-brain barrier (BBB) and to eliminate resilient cancers stem cells. The goal of the highly interdisciplinary project in which you will participate is to develop gene nanotherapeutics capable of overcoming the BBB and eliminating all tumor cells. This project is co-funded by “La Caixa” and the Marie Skłodowska-Curie actions (EU).

The main purpose of the PhD proposal offered here is to develop stimulus-sensitive ligands to target the nanocarrier systems and to cross the BBB. Antibody and/or peptide mimetics will be generated combining genetic and chemical approaches. The project may involve synthetic biology, protein engineering, directed evolution, peptide synthesis, and bioorthogonal click chemistry. Interest in the optimization of polymeric nanocarriers for gene delivery will also be valued. Furthermore, you will screen nano-bio-therapeutics in cellular assays and may contribute to their validation *in vivo*.



Fellowship details

- This fellowship includes 3 years of competitive funding.
- The proposed starting date is September 2021.
- If you join us, you'll be part of a young, dynamic, and international team within the Materials Engineering Group at IQS Barcelona!
- We invite you to visit our website <https://www.oller-salvia.com>

Your profile

- BSc and MSc degrees (or equivalent to 300 ECTS credits) related to the following fields: biotechnology, pharmacy, nanotechnology, or chemistry.
- Strong motivation to conduct interdisciplinary science and learn diverse techniques in protein engineering, chemistry, nanotechnology, and cell-based assays.
- Very good academic record.
- Capacity to work in a team, excellent communication skills, and fluency in English.

Applications are welcome until May 23rd

If you would like to apply for this fellowship, please send your motivation letter, CV, academic record, and contact details of two referees to benjami.oller@iqs.url.edu.