

## Postdoctoral position in synthetic and cell biology for blood-brain barrier transport

We are seeking a postdoctoral candidate passionate about synthetic and cell biology to join our dynamic ChemSynBio team at IQS School of Engineering - Ramon Llull University in Barcelona!

### Group

At ChemSynBio ([www.chemsynbio.iqs.edu](http://www.chemsynbio.iqs.edu)), we harness chemical and synthetic biology to create biotherapeutics and biomedical tools, especially to treat brain diseases and to understand brain transport. We aim to conduct groundbreaking research and to grow together!

### Project

Current treatments against brain diseases have very low efficacy due to the incapacity of most drugs to cross the blood-brain barrier (BBB). Our project OBGate, funded by the prestigious **European Research Council**, aims to understand receptor-mediated transport across the BBB and to develop new strategies to deliver large therapeutics into the brain with unprecedented efficiency and selectivity. In your project, you will 1. **design proteins** that will be expressed in brain endothelial cells to improve brain transport, and 2. **adapt BBB cell-based models** for the high throughput screening of these proteins. The project is in collaboration with Prof. David Baker's laboratory (Nobel laureate in chemistry 2024).

### Tasks

- Implement **high-throughput screening BBB cell-based models**.
- Apply protein engineering, **synthetic biology** & bioinformatics to boost the project.
- **Closely collaborate with other researchers** working on the project and the group.
- Contribution to an **inspiring atmosphere** and engagement in **team activities**.
- **Training, student supervision**, Preparing scientific **publications**.

### Profile

- Requirement: **PhD** degree.
- **Valuable experience**: molecular/synthetic biology, cell biology, bioinformatics
- **Strong motivation, proactivity, and creativity**.
- **Excellent teamwork** abilities.
- **Excellent communication** skills and **fluency in English**.

### Conditions

- Two years of **funding guaranteed** with the possibility of an extension.
- **Support to apply for additional funding** (eg MSCA) with experience as fellow+host.
- **Training opportunities** and attendance international conferences.
- **Space for creativity, with mentorship and team support. Possibility to supervise PhD and MSc students**.
- Proposed starting date: **first half of 2025**

### Applications are welcome until January 31<sup>st</sup> or until the candidate is selected

- Applications should be addressed to Dr. Benjamí Oller-Salvia ([benjami.oller@iqs.url.edu](mailto:benjami.oller@iqs.url.edu))
- Please include "**Postdoc OBGateHT – 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 team**.
  - Two **reference letters** and contact details of the referees who wrote them.
  - **Curriculum Vitae**