

Postdoctoral candidate position on synthetic biology to study and improve transport to the brain

We are looking for a highly motivated candidate willing to postdoctoral research in our young and dynamic ChemSynBio team at IQS School of Engineering - Ramon Llull University in Barcelona!

Group

At ChemSynBio (www.chemsynbio.iqs.edu), we harness chemical and synthetic biology to create biotherapeutic 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) and target particular cell populations. We have recently been awarded a highly prestigious grant by the **European Research Council** to understand 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 be working on **engineering proteins** in the brain endothelium by **combining synthetic biology and bioinformatic** approaches for high throughput screening on **BBB models**. This project is in **collaboration with Prof. David Baker's** laboratory (Nobel laureate in Chemistry 2024).

Tasks

- Lead the creation of a **high-throughput screening platform on BBB models**.
- Apply **bioinformatics** and protein engineering to boost the OBGate 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**: bioinformatics, molecular/synthetic biology, mammalian cells
- **Strong motivation, proactivity, and creativity**.
- **Excellent teamwork** abilities.
- **Excellent communication** skills and **fluency in English**.

Conditions

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

Applications are welcome until April 30th or until the candidate is selected

- To apply, please click the following link:
<https://cezanneondemand.interviewbit.it/iqs/jobs/postdoctoral-researcher-on-synthetic-biology-48687/en/>