

## INTERNAL / EXTERNAL CALL

### The Institute

The **Santa Creu i Sant Pau Hospital Research Institute Foundation** is a scientific foundation which mission is to improve health and quality of life of the population, through the production and dissemination of scientific knowledge, training of researchers to an international standard, and promoting health innovation and the incorporation of medical advances in clinical practice and healthcare policies. Created in 1992, the institute was attached to the Autonomous University of Barcelona (UAB) in 2003, and since 2011 it is part of the Government of Catalonia's CERCA Programme.

For the Foundation, it is a priority to ensure that the most suitable candidate is hired to fill a job through an open, transparent and merit-based selection process (OTM-R). Following these guidelines, staff mobility, knowledge exchange and, ultimately, the increase in the quality of teaching and research will be enhanced. Faithful to our commitment to the European Union's human resources strategy, our institution's personnel selection and recruitment procedures are governed by a set of basic principles that guarantee equal access to employability for all. Therefore, the constitutional principles of equality, merit and ability are followed, respecting in all cases the national and international regulations in force in this area, specifically the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (C&C). The principles of C&C are applicable to the recruitment of any personnel of the institution, regardless of their professional category. For this reason, our Foundation has obtained the recognition of "Excellence in R+D in Research" granted to the IIB Sant Pau, since 2015.



The **Santa Creu i Sant Pau Hospital Research Institute Foundation** needs to incorporate at the **Molecular Physiology of Synapses**:

**R1B- Predoctoral Researcher**

## About the Unit / Group:

The Molecular Physiology of the Synapse Laboratory was established in May 2012 at the Biomedical Research Institute Sant Pau in Barcelona.

We are focused in understanding the organization and dynamics of the proteome from synapses of the forebrain, particularly excitatory synapses from the cortex and hippocampus. We want to unravel how synaptic proteome physiology orchestrates synaptic plasticity, ultimately contributing to cognition and behaviour.

Furthermore, we pursue to understand how disruption of normal molecular synaptic physiology can contribute to certain disorders, particularly cognitive disorders such as Intellectual Disability or Autism.

As we are interested in understanding the functioning of the synaptic proteome as a whole we take advantage of a Systems Biology experimental approach, involving mainly mass spectrometry-based proteomics and bioinformatics.

The laboratory research focus can be divided in three sections:

1. Molecular Organisation and Dynamics of the Synaptic Proteome and its Role in Synaptic Function.
2. Synaptic Molecular Pathology in Cognitive Disorders
3. Development of Biochemical Methods to Study the Synaptic Proteome at the Microscopic Scale

For more information please visit our web: [www.molecular-synapse.org](http://www.molecular-synapse.org)

## Essential requirements

- Minimum qualification required: Higher Education (University Degree)
- Be a PhD student enrolled and admitted to a doctoral programme
- Oral and written knowledge of the two official languages of Catalonia or, failing that, the successful candidate will have to demonstrate, or promise to obtain, within a period not exceeding one year, a correct knowledge of the two official languages of Catalonia.
- Intermediate level of English
- Intermediate knowledge of office tools (excel, word, power point, etc).

### Skills will be valued

- Experience in biochemical, molecular and cellular studies
- Experience working with animal models (rodents) of disease
- Basic anatomy knowledge of the central nervous system
- Experience in the development of primary neuronal cultures
- Analysis of omics data, mainly proteomics

### Functions

- Characterization of synaptic molecular alterations associated with neurodevelopmental disorder caused by SYNGAP1 deficiency
- Identification of new therapeutic targets for the treatment of this disorder
- Pre-clinical trials in animal models of neurodevelopmental disorder caused by SYNGAP1 deficiency

### Offered

- Temporary contract linked: At the Molecular Physiology of Synapse Group

This contract is included in the "Synaptic Signaling Group" project dated January 1, 2023, co-financed with the grant 2021 SGR 01005 with the support of the Department of Research and Universities of the Generalitat de Catalunya"

- Annual working day of 1,627.50 hours (37.5 hours/week)
- Remuneration according to agreement.
- Research Group: Molecular Physiology of Synapses (Group Leader: Dr. Àlex Bayés)

### Documentation and deadline for submission

Interested parties should preferably deliver the documentation (1) in PDF, by e-mail to the Management of the Santa Creu i Sant Pau Hospital Research Institute Foundation, address [ir\\_seleccio@santpau.cat](mailto:ir_seleccio@santpau.cat) , indicating the reference **2023/181**:

**(1) Application letter and updated Curriculum Vitae**

At the request of the Santa Creu i Sant Pau Hospital Research Institute Foundation, the candidates must present the documentation accrediting the merits mentioned in

the curriculum vitae.

Applications will be resolved within a maximum period of one month from the end of the deadline for submission of documentation. At the end of this period, without having been notified of an express resolution, the interested parties will be entitled to understand that their applications have been rejected.

Santa Creu i Sant Pau Hospital Research Institute Foundation may declare this call for applications closed if, according to its criteria, the candidates does not meet the conditions that the Institution considers necessary to fill the position.

The interpretation of the requirements and their enforceability to the candidates will be exclusive to the Santa Creu i Sant Pau Hospital Research Institute Foundation.

**The deadline for submitting applications  
will end on August 14th, 2022, at 3:00 p.m.**

*Fundació Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau, sited at C. Sant Quintí, 77-79, 08041, Barcelona, Tel: 93 291 90 50, NIF: G-60136934, as Data Controller and in compliance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) and the Organic Law 3/2018 of 5th of December, on the protection of personal data and the guarantee of digital rights, will treat your data with the sole purpose of developing this call. The legal basis for this treatment is the article 6.1 a, c and f from the GDPR, giving that we will ask for your consent, the treatment is necessary for the application of precontractual measures and its necessary to satisfy the legitimate interests pursued by the Data Controller.*

*The data will be kept during the necessary time to develop the call. Data will be treated solely by that areas and services that are allowed to in accordance with their assigned competences and functions. There will be no data cessions made unless there is a legal obligation to do so. You are entitled to exercise the rights of access, rectification, deletion, opposition, limitation and portability. In case you have any doubts, you can contact the data protection delegate at [dpo\\_ir@santpau.cat](mailto:dpo_ir@santpau.cat). You also have the right to file a complaint to the relevant control authority.*

**PERMANENCE COMMITMENT:** *Selected persons who will hold the summoned or vacant position, will not be able to apply for a new call until 1-year period has expired. In case of part-time job positions, this period will be of 6 months. In both cases, the period will compute from the date of publication of the resolution. The vacant summoned, and the ones that derive from it (intern movements), will be successively covered on the same proceeding among the submitted candidates to each particular call, regardless of whether this entails coverage of places in turns other than the call.*

Barcelona, 31/07/2023



**Human Resources Departament**

Santa Creu i Sant Pau Hospital Research Institute Foundation

