

R2A-Postdoctoral Researcher (G1) at the Multimodal neuroimaging in recent-onset and high-risk psychosis group.

Code: FU-89/2025

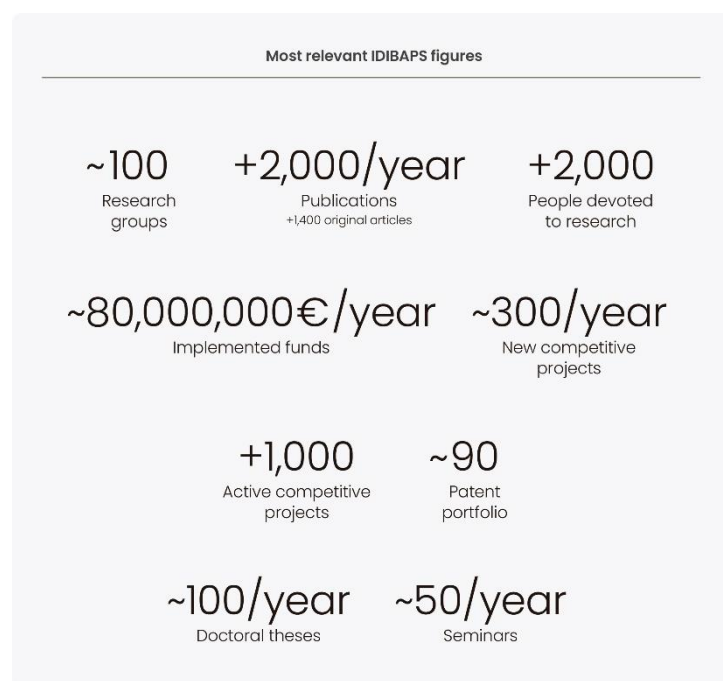
About the institution

The Barcelona Clinical Research Foundation-August Pi i Sunyer Biomedical Research Institute (IDIBAPS) is a biomedical research centre of excellence, located on the Barcelona Clinic Campus and with a clear international focus.

The IDIBAPS research community includes over 2,000 professionals and a hundred multidisciplinary groups that carry out high-impact translational research aimed at addressing biological and clinical questions relevant to human health, as evidenced by the more than 1,500 original articles published each year that make the institution one of the main biomedical research centres in Spain.

The Clínic Campus offers a high-level research and innovation environment, which includes the Hospital Clínic of Barcelona, a referral hospital committed to care, research and teaching, which covers practically all medical and surgical specialties, plus the University of Barcelona's Faculty of Medicine and Health Sciences. The latter dates from 1843 and is today one of the most prestigious health sciences faculties in Spain and worldwide.

Since 2015, IDIBAPS has had [HR Excellence in Research](#) accreditation from the European Commission. It is a CERCA centre and is accredited as a Health Research Institute by the Carlos III Health Institute (ISCIII).



Job description

- We are looking for a post-doctoral biomedical engineer who can provide consultation on the development of multimodal models using advanced AI computational methods aimed at predicting clinical outcome and identifying biotypes in youth with high risk and first episode psychosis.
- The candidate will design processing pipeline and lead analyses on structural and resting state fMRI in human samples within international consortia/opensource data.
- The candidate will supervise pre-doctoral researchers working on integrating neurobiological data from different modalities (structural, functional, and molecular imaging techniques and blood based markers) in samples of neuropsychiatric patients with autoimmune synaptopathies and across stages of risk for psychosis, aimed at understanding pathophysiology and identifying treatment targets.

Required qualifications

- PhD.
- Master's degree in Biomedical engineering.

Experience and knowledge

- MSc in Computational Biomedical Engineering
- Doctoral studies using deep generative models for neuroimaging applications.
- Work experience in brain imaging data analysis.
- Experience using other computational methodologies such as brain simulations, graph theory, radiomics, classic machine learning approaches and other deep learning architectures in academic settings.
- Experience using Python, Pytorch, Tensorflow, Matlab, R, Linux
- Experience preparing and writing manuscripts and giving presentations in the field of neuropsychiatry
- Experience teaching and supervising students, preferably in the field in biomedical engineering.
- Catalan and Spanish native, English C1.

IDIBAPS offers

- **Type of contract:** Indefinite contract for scientific-technical activities.
- **Working hours:** Part time (2,5 hours / week).
- **Line of research:** Characterization of neural substrates of vulnerability to psychosis, and relationship with clinical manifestations, in youth in the early stages of psychosis
- **Project:** KAIROS Key Advances for Impact Research in Biomedicine in FCRB-IDIBAPS
- **Funder and official project code:** Instituto de Salud Carlos III (ISCIII) a través del "Programa FORTALECE del Ministerio de Ciencia, Innovación y Universidades" - FORT23/00002_SUGR_G6

- **Incorporation into IDIBAPS:** A research centre of excellence in the city of Barcelona. Excellent research results and competitive project grant awards, both national and international.
- Long-life training offered by the institute.
- **Working conditions:** Holiday entitlement of 22 days + 6 days for personal affairs, flexible working hours and flexible remuneration (health insurance, transport, meal vouchers, training).
- **The chance to form part of a dynamic work environment:** We are a team with a wealth of experience that jointly evaluates ideas and strategies and promotes a healthy work-life balance.

Applications

- **Presentation letter:** explicitly mentioning the call reference and explaining the candidate's personal reasons for applying.
- **Curriculum Vitae:** including a list of publications, where applicable.
- **Documentation accrediting** the credentials set out and the required qualifications.
- **Obligatory:** the duly signed Authorisation relating to EU Regulation 2016/679 on the protection of personal data (*attached document, page 5*) must be attached to the application.

Submission and deadline

- Candidates shall submit their applications, indicating the call reference for the position for which they are applying, by email to the address: FCRBRRHH@recerca.clinic.cat
- **Deadline:** From the publication of this call until 04/20/2025

The employment contract will be in accordance with the provisions of Legislative Decree 1/1995, of 24 March, approving the text of the Workers' Statute Law, of Law 14/2011, of 1 June, on science, technology and innovation in accordance with the provisions of Art. 2 of Royal Decree 2720/98, of 18 December (BOE of 8 January 1999), Law 12/2001, of 9 July (BOE of 10 July) and concordant provisions.

The principle of equal treatment between men and women fundamental, in accordance with Article 14 of the Spanish Constitution, the European Community Directive of 9 February 1976, and the provisions of the Agreement of the Council of Ministers of 4 March 2005, approving the Plan for Gender Equality in the General State Administration.

The universal accessibility of people with disabilities is fundamental according to section 2 of Article 1 of Law 51/2003, of 2 December, on equal opportunities, and 5% of vacancies are reserved as long as candidates pass the selection processes and accredit their disability and compatibility with the tasks to be carried out, so that we progressively reach 2% of the total workforce.

The gross annual remuneration relating to the position that is the subject of this call will be

established based on each candidate's experience and aptitudes.

[Link to Regulation \(EU\) 2016/679 of 27 April on the protection of natural persons with regard to the processing of personal data](#)

Barcelona, on April 04, 2025

Authorisation request

I hereby authorise:

The **FUNDACIÓ DE RECERCA CLÍNIC BARCELONA – INSTITUT D'INVESTIGACIONS BIOMÈDIQUES AUGUST PI I SUNYER (IDIBAPS)**, to process my data for personnel recruitment purposes, transferring them only in cases where legally required, in line with the provisions of Regulation (EU) 2016/679, and the corresponding regulations that develop it.

Name and Surname:

DNI/NIE/ID:

Signed:

Barcelona,