

Llicenciat/da Suport Recerca (G3) at the Computational Cancer Biomedicine Group.

Code: FU-346/2025

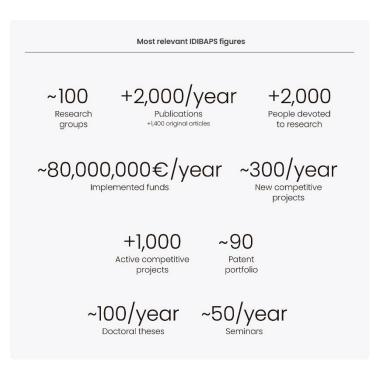
About the institution

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 specialities, 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 <u>HR</u> <u>Excellence in Research</u> 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 use **multimodal artificial intelligence** to understand how the immune system links diverse clinical conditions. By integrating **radiology**, **dermatology**, **gene expression**, **and immune profiling data with electronic health records**, our models capture how systemic and tissue-level immune responses shape therapy outcomes and cancer risk. This framework goes beyond prediction, aiming to uncover **immune mechanisms across diseases** and enable **precision prevention and treatment**.

The successful candidate will have access to unique unpublished data on thousands of highly curated dermatology patients from Hospital Clínic Barcelona and contribute in the AECC excellence in cancer immunotherapy program to develop and apply computational pipelines that integrate imaging, molecular, and clinical data to model immune system dynamics. Specific tasks include:

- Building and training multimodal neural networks that combine imaging, molecular, and clinical data to predict immune phenotypes and therapy outcomes.
- **Developing data harmonization and preprocessing workflows** for large-scale datasets, including radiological images and (single cell) transcriptomic profiles.
- Implementing interpretable AI approaches to identify immune mechanisms and molecular signatures that generalize across diseases.
- Collaborating with clinicians and immunologists to validate model findings and translate computational insights into biological and clinical hypotheses.
- Contributing to open-source tools and reproducible pipelines for multimodal data integration and explainable AI in immunology.

Required qualifications

- Computer science, software engineering, informatics, physics, engineering, mathematics or other relevant degree.
- Master's degree (must-have).

Experience and knowledge

- Relevant experience in building relevant discriminative and/or generative neural network architectures in computer vision and/or genomics, particularly working with radiology, dermatology or single cell transcriptomics data. Familiarity with multimodal data integration, model fusion architectures, clinical or immunological questions are desired.
- Excellent command of English.

IDIBAPS offers

- Type of contract: Indefinite contract for scientific-technical activities.
- Working hours: Full time (37.5 hours / week).
- Line of research: Multimodal artificial intelligence for clinically actionable insights.
- Project: AECC-IDIBAPS Excellence Program: Pioneering Strategies to Maximize

- Immunotherapy Efficacy in Cancer.
- Funder and official project code: FUNDACIÓN CIENTIFICA ASOCIACIÓN ESPAÑOLA CONTRA EL CANCER - EPAEC246711CLIN.
- 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 December 02, 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.

<u>Link to Regulation (EU) 2016/679 of 27 April on the protection of natural persons with regard to the processing of personal data</u>

Barcelona, on November 18, 2025.

Authorisation request

I hereby authorise:

Barcelona,

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: | | | |
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