BioAlData PLATFORM BARCELONA UNIT DIRECTOR

at Barcelonaβeta Brain Research Center













WELCOME

The Barcelonaβeta Brain Research Center (BBRC), a Pasqual Maragall Foundation research centre, is a pioneer in research into the prevention of Alzheimer's disease and the study of the cognitive functions affected by healthy and pathological ageing. Founded in 2012 by the Pasqual Maragall Foundation, with the support of the Pompeu Fabra University and the impetus of "la Caixa" Foundation for its flagship project, the ALFA cohort, its purpose is to provide innovative solutions to decipher and prevent biological changes and cognitive dysfunctions associated with neurodegenerative diseases.

With an eye on the global challenge of an ageing population, the BBRC carries out cutting-edge scientific work with avant-garde technical facilities including an exclusive 3T MRI scanner for research and spaces for clinical trials. The quality of the research is based on effective management and an ongoing evaluation system using high-level peer review.

The **BBRC** is part of the Barcelona Biomedical Research Park (PRBB), one of the most dynamic biomedical research ecosystems in Europe. The PRBB offers an international, collaborative and multidisciplinary environment with a direct connection to clinical activity that favours translational research.

This setting houses prestigious research institutions including the Centre for Genomic Regulation (CRG), the Hospital del Mar Medical Research Institute (HMRIB), the Institute of Evolutionary Biology (IBE, CSIC-UPF), the Barcelona Institute of Global Health (ISGlobal), and the Barcelona branch of the European Molecular Biology Laboratory (EMBL), among others. The BBRC is one of the four leading centres of the "la Caixa" Foundation, which is part of a stable collaborative ecosystem together with IrsiCaixa, ISGlobal and the Vall d'Hebron Institute of Oncology (VHIO), and also participates in the CaixaResearch Biomedical Data Hub.

The BBRC has been awarded the HR Excellence in Research (HRS4R) seal by the European Commission, which accredits the institutional commitment to the continuous improvement of human resources policies and to an open, transparent, merit-based work environment, aligned with the European Charter for Researchers.



The **Centre for Genomic Regulation (CRG)** is an international biomedical research institute of excellence based in Barcelona, Spain, with more than 400 scientists from 44 countries. It is made up of an interdisciplinary, motivated and creative scientific team, supported by a flexible, efficient administration, as well as cutting-edge and innovative technologies.

The CRG also has the "HR Excellence in Research" distinction awarded by the European Commission.







The Hospital del Mar Research Institute (HMRIB) is the biomedical research centre linked to Hospital del Mar and is part of the MAR Health Park in Barcelona. With a long scientific background, it specializes in clinical and translational research in areas such as neuroscience, oncology, public health and biomedicine. Its mission is to generate quality knowledge to improve people's health while promoting innovation and the transfer of results to clinical practice. Integrated into the CERCA network and linked to the Pompeu Fabra University, it is a leading figure in biomedical research in Catalonia and the rest of the world.

The **Barcelona Supercomputing Center** (BSC) is one of Europe's leading supercomputing centres and houses one of the world's most powerful supercomputers, MareNostrum 5. It specialises in high-performance computing, also known as HPC. It has a dual function: to provide supercomputing infrastructure and services to Spanish and European scientists, and to generate knowledge and technology for transfer to society. BSC research focuses on the fields of computer sciences, life sciences, earth sciences, computer applications in science and engineering and computational social sciences and humanities.

The four centres are launching a shared data research platform. A new scientific infrastructure for biomedical data analysis and integration of artificial intelligence (AI) in health research projects.

For further information see: www.fpmaragall.org and www.barcelonabeta.org



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DESCRIPTION OF THE PROJECT

Within the framework of the strategic alliance between the Barcelonaßeta Brain Research Center (BBRC), the Centre for Genomic Regulation (CRG), the Hospital del Mar Research Institute (HMRIB) and the Barcelona Supercomputing Center (BSC), this shared data research platform is being created: a new scientific infrastructure for the analysis of biomedical data and the integration of artificial intelligence (AI) in health research projects.

This platform began as a strategic initiative to respond to new analytical challenges in health and biomedicine, and is conceived as a reference hub to promote research in precision medicine, drive clinical translation and generate innovative data-based solutions.

The platform will act as a shared, collaborative scientific infrastructure, offering advanced services to research groups and cross-disciplinary projects. It will combine technological capabilities in omics analysis, medical imaging, multi-scalar integration and AI, aiming at clinical application and the use of real-world data (RWD). This will allow supporting projects in patient stratification, biomarker discovery, pharmacogenomics and other strategic lines.







The new unit will be located in the MareNostrum building, sharing spaces and synergies with other BBRC platforms, the CRG and the HMRIB. The team will be hired by the BBRC, while the scientific and institutional strategy will be defined and executed jointly. This hybrid model—operationally centralised but with distributed personnel and knowledge—will make it possible to optimise resources, avoid overlaps and foster joint innovation. Governance will be guaranteed through an inter-institutional Monitoring Committee, which will ensure strategic coordination, transparency and collective decision-making.

OVERVIEW

The BioAlData Platform is a joint initiative between the Barcelonaβeta Brain Research Center (BBRC) and the Centre for Genomic Regulation (CRG), with the aim of integrating biomedical data analysis and artificial intelligence in a structured and strategic manner to progress towards precision medicine. This platform will play a key role in supporting research projects across disciplines and will foster collaboration between groups and institutions.

The Barcelonaβeta Brain Research Center (BBRC) will centralize hiring for the new BioAlData team Platform, which will be located in the MareNostrum building, sharing spaces and resources with other CRG platforms, and potentially also the BBRC.

With the aim of leading the launch and consolidation of the platform, the BBRC is opening a call for applications to incorporate a Scientific Director into its team. The person selected will lead the creation and consolidation of the joint BBRC-CRG platform, with scientific and institutional responsibility for the project. He/she will be responsible for designing and implementing the global strategy, coordinating the technical and scientific team, developing services, establishing strategic collaborations, securing funding and ensuring the impact of the platform on the research and health system. The person selected will have a scientific link between the three centres: BBRC, CRG and HMRIB.

With the aim of optimising its implementation:

- An exhaustive analysis of existing capacities will be conducted.
- Specific services will be defined to avoid overlaps and promote synergies.
- Efficient functional and technical coordination with the other platforms will be guaranteed.

KEY RESPONSIBILITIES

Analysis and integration of biomedical data:

- Create and lead a group specialising in biomedical data integration and analysis.
- Develop and implement multi-scale analysis methodologies, systems biology, and causal modelling.
- Provide methodological and analytical support to projects aimed at personalised and predictive medicine.
- Application of artificial intelligence:
- Provide support in AI and machine learning to BBRC and CRG research groups.
- Develop strategies for patient stratification, biomarker identification and drug discovery.
- Promote training and in-house knowledge transfer in AI and data.









Coordination and institutional impact:

- Establish strategic collaborations with research centres, hospitals and international networks.
- Optimise the platform's services to avoid duplication and enhance synergies with other units.
- Attract competitive funding and guarantee the impact of the platform within the research and health system of Catalonia and Europe.

REQUIREMENTS

Training and experience

- PhD in bioinformatics, biomedical engineering, computational science, systems biology, applied artificial intelligence, or related areas.
- Minimum 5 years of experience in scientific leadership of projects related to omics data analysis, multi-scalar integration or AI applied to biomedicine.
- Expert knowledge of causal analysis methods, biological network modelling, machine learning and deep learning.
- Experience in collaborative environments with multidisciplinary clinical professionals and scientists.
- Demonstrable experience in managing teams and platforms or technological services.

Competencies and skills

- Strategic leadership and impact-oriented scientific vision.
- Analytical capacity and methodological rigour.
- Excellent communication and collaboration skills in complex environments.
- Organisational and project management skills.
- Innovative mindset, result orientation and continuous improvement.

WORKING CONDITIONS

- Permanent contract.
- Annual working hours of 1,618 hours full-time, according to company agreement.
- Competitive salary proposal according to the Foundation's Remuneration Policy and Development Plan.
- Hybrid working model (on-site + remote work) and flexible hours.
- 23 working days of holiday + additional days as per internal calendar + 4 personal days.
- Access to a flexible compensation plan (restaurant vouchers, health insurance, childcare).
- Stimulating environment with access to infrastructure and unique opportunities for professional development.









HOW TO APPLY

Interested candidates should submit a single PDF file containing the following documents:

- Cover letter addressed to Dr. Arcadi Navarro and Dr. Luis Serrano, highlighting motivations, experiences and interest in the position.
- Up-to-date Curriculum Vitae (CV).
- References: Up to three contacts may be requested for references during the selection process.

The documentation must be sent confidentially and electronically to talent@barcelonabeta.org (please specify the position you are applying for in the subject line).

We are committed to providing equal opportunities to all, regardless of background. We encourage candidates to apply regardless of gender, race, disability, age, sexual orientation, religion or beliefs, marital status, pregnancy, or maternity.

Deadline for submitting applications: Applications will be accepted until the position is filled.

SELECTION PROCESS

1. Preselection

The selection committee (including representatives of BBRC and CRG), in collaboration with the HR Department, will evaluate applications based on the qualifications, experience, and motivation expressed in the cover letter and CV. This process will be merit-based, resulting in a list of preselected candidates.



2. Interview stage

The selection committee will assess each application, ensuring that every profile is evaluated according to internal selection policies, which are based on transparency and merit, in compliance with the HRS4R Excellence Award. Preselected candidates will participate in the following phases:

Vision statement

Candidates will be asked to develop and present a plan outlining their leadership style, approach to team management, and strategic vision for the future. This plan should align with the Foundation's strategic objectives and mission.

Visit

Finalists will have the opportunity to visit the organisation. During this visit, they will meet the team and experience the working environment, gaining an overall view of the institution's culture.

Comments and suggestions:

At the BBRC, we promote continuous improvement in our selection processes. If you have any questions, concerns, or suggestions, please contact us at talent@barcelonabeta.org









