

INTERNATIONAL CALL IC12_26

JOB TITLE

R4 – Leading Researcher in Biomedical research

JOB DESCRIPTION

The Institut de Recerca Biomèdica Catalunya Sud (IRBCATSud) is an institution that integrates research in the field of biomedicine in the “Camp de Tarragona” and the “Terres de l’Ebre”. The IRBCATSud is the instrument that the university hospitals of both health regions have been endowed with (Joan XXIII University Hospital of Tarragona, Verge de la Cinta Hospital of Tortosa, Sant Joan de Reus University Hospital, Institut Pere Mata University Hospital of Reus) and Rovira and Virgili University, in order to bring together and manage biomedical research and innovation in the territory.

The IRBCATSud is seeking to hire an R4 researcher in Biomedical research for the group DEEEA, Faculty of Engineering, led by Mariona Vinaixa who are responsible for applying engineering and technology principles to understand metabolism from a systems perspective, helping to advance precision and personalized medicine. Our main research activities focus on two aspects: developing cutting-edge technologies to turn metabolomics into a functional genomics tool, and deploying these technologies to study multigenic and multifactorial non-communicable diseases such as diabetes and cardiovascular diseases.

And, on the other hand, URLA Lipid Unit, Faculty of Medicine, led by Josep Ribalta. The aim of the group is the clinical care, teaching, and research activity related to lipid metabolism disorders. It is a consolidated research group recognized by the Generalitat de Catalunya and is part of CIBERDEM, IRBCATSud, and URV. The main research lines are: Familial Hypercholesterolemia; molecular bases of atherogenic dyslipidemia; and the genetics and epigenetics of lipid disorders.

The selected candidate will perform the following tasks:

- Direct scientific projects focused on discovering and validating novel biomarkers using high-performance
- Lead the implementation of Machine Learning algorithms to develop advanced risk prediction models for cardiometabolic and cardiovascular diseases
- Supervise research lines involving complex metabolomic profiling of various biofluids, including serum, urine, and fecal matter, to study conditions ranging from diabetes to infectious diseases
- Ensure high-impact scientific production through the publication of peer-reviewed articles
- Manage the intellectual property portfolio, specifically focusing on patents related to the structural determination of lipoprotein particles.

CANDIDATE PROFILE AND REQUIREMENTS

- Degree in Physics or related
- The researcher must hold a Doctorate degree (PhD) in Biomedical Engineering, Biophysics or areas related to Nanosystems Technologies
- Competence and experience with the development and validation of advanced biomarkers using NMR spectroscopy applied to cardiovascular risk and lipid metabolism.
- Experience and lead in the creation and executive management of university spin-offs or technology-based companies in the health sector.

IT WILL BE VALUED

- Advanced research background in the development and industrialization of lipoprotein and glycoprotein tests using Nuclear Magnetic Resonance (NMR) technology.
- Direct experience in obtaining CE certification and approvals from national health agencies (such as the AEMPS) for diagnostic application software.
- Advanced proficiency in applied biostatistics and machine learning techniques for the development of metabolic risk functions.
- Experience in the analysis of faecal and urinary metabolomics, as well as glycoprotein profiles.
- Expertise in applying Machine Learning techniques to metabolomic data for the development and validation of cardiovascular risk functions.

LABOUR CONDITIONS

- Part-time position – 10 % of working time
- Workplace: IISPV: HUSJ de Reus / HJ23 de Tarragona / Facultat de Medicina de Reus
- Contract: Indefinite scientific-technical activities, according to the needs of the Cardiovascular Metabolomics Hub project.
- Gross annual salary: 4.000 – 5.000€
- Approximate incorporation date: As soon as possible

SELECTION PROCEDURE

- Selection of CV's. Suitable and unsuitable CV's will be identified according to the requirements. Applicants who do not meet the requirements indicated in the candidate profile and requirements will not pass to the next phase.
- Evaluation of the CV. Evaluation of the CVs up to a maximum score of 30 points.

- Cover Letter. Attach to the resume a cover letter with a maximum length of 2500 characters with spaces. With a maximum score of 10 points.

To access the interview phase it is necessary to have obtained a minimum score of 60 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview (interview). With a maximum score of 60 points.

Items	60
Attitude	10
Fit in the work place	15
Experience, developed functions/skills	35

The selected person must have obtained a minimum score of 70 points in the sum of scores from the assessment of all phases of the selection procedure.

SELECTION COMMITTEE

- President: Joan Vendrell (Director IRBCATSud)
- Chair 1: Elisabet Vilella (Deputy Director)
- Chair 2: Maria Vinaixa (Group Leader DEEiA)

SUBSTITUTES:

- President: Elisabet Galve (Office Manager)
- Chair 1: Eric Moncusí (RRHH IRBCATSud)
- Chair 2: Josep Ribalta (Group Leader URLA)

CANDIDATURES

- The CV must include the number inn DNI / NIE or personal identity document.
- Send the CV and the Cover Letter through the form that you will find on the bottom of the offer page <https://www.iispv.cat/treballa-amb-nosaltres/>

For any questions or queries: recruitment@irbcatsud.cat

DEADLINE FOR RECEIPT OF CV 25/03/2026

COMMUNICATIONS

The IRBCATSud will notify the candidates of the results of the different phases of the selection process through its website.

HRS4R Research in HR Excellence

The IISPV has the European accreditation The Human Resources Strategy for Researchers (HRS4R), complies with the general principles of the European Charter for Researchers and the Code of Conduct for the recruitment of researchers.

The IISPV has an internal recruitment policy that follows the Open, Transparent and Merit-based Recruitment (OTM-R) policies. More information about the HRS4R policies implemented at the IISPV is available on the following website: <https://www.iispv.cat/hrs4r-hr-excellenceresearch/>

The IISPV will guarantee the right to equal opportunities and treatment, as well as the real and effective exercise of rights by people with disabilities under equal conditions with respect to other citizens, through the promotion of personal autonomy, universal accessibility, access to employment, inclusion in the community and independent living and the eradication of any form of discrimination, in accordance with articles 9.2, 10, 14 and 49 of the Spanish Constitution and the International Convention on the Rights of Persons with Disabilities and international treaties and agreements ratified by Spain.

In the event of a tie, priority will be given to hiring the person with a disability.

In the event of a tie between people of different genders, the person of the least represented gender in the work group/department/service in which he joins will be hired.

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