

INTERNATIONAL CALL IC38_26

JOB TITLE

Postdoctoral Researcher in Lipidomics / Metabolomics - PHARAO (R2)

Researcher career profile (R2)

JOB DESCRIPTION

The Metabolomics Interdisciplinary Laboratory (MIL@b) at The Pere Virgili Institute for Health Research (IRBCatSud) / Universitat Rovira i Virgili invites applications for a **Postdoctoral Researcher in Lipidomics/Metabolomics**.

The position will focus on the development and application of advanced LC-MS/MS approaches for the characterization of lipid metabolism within the international project [EP PerMed PHARAO](#), an EP PerMed-supported project leveraging multi-omics and predictive modelling to improve psoriatic arthritis care

MIL@b combines analytical chemistry, mass spectrometry, data science, bioinformatics, engineering, and biomedical expertise. The successful candidate will have access to advanced UHPLC-HRMS/MS instrumentation and mass spectrometry imaging platforms, together with computational infrastructure and established metabolomics workflows.

The Pere Virgili Institute for Health Research (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.

Number of available positions: 1

Aquest projecte compta amb el suport del Departament de Salut (Número d'expedient SLD175-26-00001)



Generalitat de Catalunya
Departament de Salut

This project has received funding from the European Union’s Horizon Europe research and innovation programme under grant agreement No 101137129.



**Co-funded by
the European Union**

The selected candidate will perform the following tasks:

- Coordinate the scientific activities of IRBCatSud within the European project [EP PerMed PHARAO](#) project, in close collaboration with the PIs and international partners.
- Develop and optimize LC-HRMS/MS lipidomics workflows for untargeted and targeted analyses.
- Acquire high-resolution MS and MS/MS lipidomics data using state-of-the-art mass spectrometry instrumentation.
- Acquire NMR-data using high-resolution NMR facilities.
- Process and quality-control large-scale lipidomics datasets.
- Perform lipid feature detection, annotation, identification, and quantification.
- Perform statistical analysis, multivariate analysis, and biological interpretation of lipidomics data.
- Develop and apply workflows for lipid analysis, annotation, and identification using reproducible research practices and appropriate documentation procedures.
- Collaborate with consortium partners in multiomics data integration.
- Contribute to the development and validation of analytical and computational methodologies.
- Prepare technical reports, project deliverables, and presentations for consortium meetings and scientific conferences. Participate actively in project meetings and contribute to the achievement of project milestones and deliverables.
- Disseminate results through peer-reviewed publications, conferences, and scientific meetings
- Collaborate with interdisciplinary teams and external academic and clinical partners supporting MIL@b research activities.
- Contribute to grant applications and collaborative research projects.
- Supervise undergraduate, MSc, and PhD students when appropriate.

CANDIDATE PROFILE & REQUIREMENTS

- PhD in Analytical Chemistry, Mass Spectrometry, Metabolomics, Lipidomics, Biochemistry, or a closely related discipline.
- Demonstrated research experience in mass spectrometry-based lipidomics and/or metabolomics.
- Hands-on experience with LC-MS/MS (high-resolution) platforms.
- Experience with sample preparation metabolite/lipid extraction, chromatographic separation, and MS data acquisition.
- Experience in processing and interpreting complex mass spectrometry datasets based on open-source tools.

- Experience with statistical analysis of omics data.
- Strong scientific writing and communication skills in English.
- Ability to work independently while contributing effectively to an interdisciplinary research team.

IT WILL BE VALUED

- Experience with Orbitrap-based HRMS/MS platforms.
- Strong knowledge of lipid chemistry, lipid classes, adduct formation, fragmentation, and lipid identification/annotation pipelines.
- Hands-on experience in lipidomics data processing and annotation software.
- Multivariate statistics and machine learning.
- R and/or Python programming.
- Molecular networking and MS/MS spectral libraries.
- Integration of lipidomics with transcriptomics, proteomics and other -omics.
- Experience with FAIR data practices.
- Publication record in lipidomics, metabolomics, mass spectrometry, analytical chemistry, or related fields. Experience publishing in international peer-reviewed journals.
- Previous experience in similar projects.
- Ability to identify and solve problems and to work independently.

WE OFFER

- A stimulating and collaborative international research environment.
- Access to state-of-the-art mass spectrometry, NMR, and metabolomics infrastructure.
- Opportunity to work with international cohorts and high-dimensional omics datasets.
- Opportunities to develop expertise across experimental and computational metabolomics/lipidomics.
- Participation in national and international research projects.
- Opportunities for high-quality scientific publications and conference presentations.
- Professional development and training opportunities.
- Possibility to develop independent research lines and contribute to future funding applications.

LABOUR CONDITIONS

- Full-time position
- Workplace: Department d'Enginyeria Electrònica - Universitat Rovira i Virgili: Lab 242/
Servei de Recursos Científics i Tècnics: Lab. Preparativa, Sala Blanca/ Centre de Ciències Òmiques – Eurecat Reus

- Contract: Indefinite for scientific and technical work linked to the project [EP PerMed PHARAO](#) (Approximately until 28/02/2029)
- Gross annual salary: [27000-30000] €
- Starting date: 1st November 2026

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 40 points.
- Cover Letter. Attach to the resume a cover letter with a maximum length of 2500 characters with spaces. With a maximum score of 20 points.

To access the interview phase it is necessary to have obtained a minimum score of 50 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview. With a maximum score of 40 points.

Items	40
Attitude	10
Fit in the work place	15
Experience, developed functions/skills	10
Teamwork	5

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: Maria Vinaixa (Group Leader)
- Chair 1: Oscar Yanes (PI)
- Chair 2: Jordi Capellades (Senior Researcher)

SUBSTITUTES:

- President: Xavier Domingo (PI)
- Chair 1: Nuria Amigó (PI)
- Chair 2: Jesús Brezmes (PI)

CANDIDATURES

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

For any questions or queries: recruitment@irbcatsud.cat

DEADLINE FOR RECEIPT OF CV 30/09/2026

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 IRBCatSud 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 IRBCatSud 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 IRBCatSud is available on the following website: <https://www.IRBCatSud.cat/hrs4r-hr-excellenceresearch/>

The IRBCatSud 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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CHANGE CONTROL		
Date	Review	Modifications
03-07-24	00	Document creation