

# MSCA-PF: Expression of Interest

## 1. European Postdoctoral Fellowships

### Purpose

- Support excellent researchers of **any nationality** who want to conduct research in Europe or move within Europe.
- Enhance scientific excellence, mobility, and acquisition of new skills through advanced training.
- Improve talent and facilitate knowledge transfer across Europe.

### Mobility & Eligibility

- Supported fellows must be **postdoctoral researchers** at the date of the call deadline.
- At the call deadline, researchers must have a **maximum of 8 years** full-time equivalent experience in research, measured from the date of award of the doctoral degree.
- Researchers must comply with the **mobility rule**: they must not have lived or worked in the host country for more than 12 months in the last 36 months before the call deadline.
- Researchers can be of **any nationality**.

### Duration

- 12 to 24 months hosted in an EU Member State or Horizon Europe Associated Country.
- An **additional period of up to six months at the end of the project** can be awarded to researchers who will spend that period in a non-academic organisation established in an EU Member State or Horizon Europe Associated Country.

### Impact for Fellows

- Improved research and transferable skills.
- International, inter-sectorial and interdisciplinary experience
- Stronger employability inside and outside academia.
- Broader networks and enhanced communication skills.

## **Allowance**

There are two types of contributions:

- a) Contributions for the recruited researcher (per person-month)
- **Living allowance: 6350€** (minus all compulsory deductions under national legislation).
  - **Mobility allowance: 710€**. This allowance covers their additional, private mobility-related costs (e.g. travel and accommodation costs).
  - **Family allowance: 660€**. If the postdoctoral researcher has or acquires family obligations during the action duration
  - **Long-term leave allowance: 7060€ \* % covered by the beneficiary**. This allowance contributes to the personnel costs incurred by the beneficiary in case of the researcher's leave, including maternity, paternity, parental, sick or special leave, longer than 30 consecutive days.
  - **Special needs allowance: Requested unit \* (1/number of months)**. This allowance contributes to the additional costs for the acquisition of special needs items and services for researchers with disabilities
- b) Institutional unit contribution (per person-month)
- **Research, training and networking contribution: 1000€**. This should cover, for example, costs for training and networking activities that contribute directly to the researchers' career development.

A country correction coefficient (CCC) applies to the living allowance to ensure equal treatment and purchasing power parity for all researchers. For Spain, the CCC is **94.2%**.

For more information, you can access the full work programme [here](#).

## **2. Brief description of IRB CatSud**

The Institut de Recerca Biomèdica Catalunya sud (IRB CatSud) is an institution that integrates research in the field of biomedicine in the Camp de Tarragona and the Terres de l'Ebre. IRB CatSud 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.

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43204 (Tarragona)

**Seu Tarragona:**

Parc Sanitari Joan XXIII  
C/ Doctor Mallafre, 4  
Edifici IRBCatSud  
43005 (Tarragona)

The research we lead aims to answer relevant questions related to the health of the population through the scientific method, the most advanced technology and the talent of the people who work in our teams. We listen to patients, we look for strategies to develop our projects, we seek financing to carry them out and, finally, we transfer the results achieved to society by promoting spin-offs or medical devices that we patent.

IRB CatSud and the research groups that belong to it have enormous international prestige. We are part of the CERCA institution (Institution of Research Centers of Catalonia Foundation (I-CERCA) of Catalonia).

For more information about our Institute, visit the following website:  
<https://www.iispv.cat/en/>

### 3. Short presentation about the group and research lines

#### Biomedical Research Unit (URB)

The group is led by an Associate Professor of Medicine at the Universitat Rovira i Virgili (URV), who also serves as pathologist at Hospital Universitari Sant Joan de Reus. This structure enables strong integration between clinical practice, translational research, and academic training, and provides direct access to well-characterized patient cohorts and biological samples. Such an environment is especially well suited for translational projects centered on liquid biopsy, molecular profiling, and biomarker development, facilitating the rapid transfer of clinically relevant observations into research questions and the translation of research findings back into patient care.

Our research combines clinical cohorts, advanced molecular analysis, and computational approaches to investigate the mechanisms underlying MASLD and MASH progression, particularly in patients with obesity and metabolic syndrome. A major focus of the group is the application of liquid biopsy and molecular biology tools to characterize circulating biomarkers and disease-related molecular signatures, including cell-free nucleic acids, circulating tumor-derived material, and other analytes with diagnostic and prognostic value. We also study cancer biology and the relationship between metabolic dysfunction and tumor development, with particular attention to mitochondrial dysfunction, lipid metabolism, and metabolic adaptations associated with disease progression and weight loss.

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These questions are addressed through the integration of multi-omics approaches (including lipidomics, metabolomics, transcriptomics, and targeted molecular analyses) together with histological and tissue-based studies, imaging techniques, and computational and artificial intelligence tools. This positions the group as an excellent host environment for postdoctoral projects in which liquid biopsy and molecular biology constitute the core methodological and scientific axis.

More information: <https://www.iispv.cat/en/grup/unitat-de-recerca-biomedica-urb/>

**Candidate profile**

- Candidates must comply with the eligibility criteria of the Marie Skłodowska-Curie Postdoctoral Fellowships (MSCA-PF) programme. Applicants must hold a PhD degree at the time of the call deadline and have a maximum of eight years of research experience after the PhD. They must also comply with the MSCA mobility rule, meaning they must not have resided or carried out their main activity in Spain for more than 12 months in the 36 months prior to the call deadline.
- A strong scientific background in biomedical sciences, molecular biology, biochemistry, medicine, or related disciplines is required, with particularly relevant expertise in translational molecular research.
- Demonstrated research experience in molecular biology applied to cancer biology, metabolic diseases, liver disease, or related fields is required.
- Hands-on experience in liquid biopsy approaches, including the isolation and analysis of circulating biomarkers, and in biomarker discovery and validation will be highly valued.
- Experience with omics technologies (e.g., transcriptomics, proteomics, metabolomics, lipidomics) and their integration with molecular biology workflows in biomedical research will be highly appreciated.
- Familiarity with processing and analysis of biological samples in translational research settings, particularly for molecular characterization. Experience with histological analysis or imaging techniques will also be valued.
- Experience in data analysis and integration of complex biological datasets, including bioinformatics, biostatistics, or computational approaches applied to molecular and liquid biopsy data, will be considered an advantage.
- Excellent written and oral communication skills in English.
- Ability to work independently and collaboratively within a multidisciplinary research environment.

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- Demonstrated initiative, creativity, and motivation to develop an innovative research proposal aligned with the group's research lines, especially in liquid biopsy, molecular biomarkers, metabolic diseases, liver disease, and cancer.

### Supervisor profile

Dr. David Parada Domínguez is a pathologist at Hospital Universitari Sant Joan de Reus and holds a PhD in Biomedicine from URV. His work focuses on the pathological characterization of metabolic and oncological diseases, with expertise in histopathology, tissue-based analysis, and the integration of clinical, pathological, and molecular data. His research interests include MASLD, obesity-related metabolic disorders, cancer, and the development of translational molecular strategies to improve disease characterization.

Dr. Parada is particularly involved in research integrating liquid biopsy approaches, biomarker discovery, and molecular biology with traditional histopathological evaluation. His work aims to improve the understanding, diagnosis, and monitoring of metabolic diseases and cancer through the combined study of tissue pathology, circulating biomarkers, and advanced molecular techniques, with special emphasis on the clinical applicability of minimally invasive biomarkers.

Through his dual role in clinical pathology and academic research, he contributes to multidisciplinary projects that combine clinical cohorts, molecular analysis, omics technologies, and liquid biopsy strategies, facilitating the translation of research findings into clinical practice. This environment offers strong supervision for postdoctoral fellows interested in developing projects where liquid biopsy and molecular biology are central components of the scientific and methodological plan.

If you are interested in this opportunity, send your expression of interest to [upi@irbcatsud.cat](mailto:upi@irbcatsud.cat), indicating the MSCA-PF + research group in the subject.