

1. Call Opening

1.1. Introduction

The Lleida Biomedical Research Institute Fundació Dr. Pifarré (IRB Lleida) is established with the aim of creating synergies between basic research, clinical research, and epidemiological research, so that biomedical research becomes the driving force for improving daily clinical practice, for the benefit of the entire population. IRB Lleida's objective is to promote, develop, transfer, manage, and disseminate excellence in research, scientific and technological knowledge, teaching, and training in the fields of life sciences and health. To achieve this, it fosters relationships and the exchange of knowledge among researchers and research groups belonging to various centers and entities within the biomedical field, primarily operating in the Lleida area. It also encourages collaboration with other institutions and entities, prioritizing joint projects, raises funds to finance research activities of excellence of interest to these centers and facilities, and manages research-oriented resources entrusted to it by the various institutions and entities that are part of it.

1.2. Summary

The objective of this grant is to attract candidates who wish to develop their master's research project within one of the IRB Lleida research groups participating in the call.

2. Call Description

2.1. Scope

At the time of application, candidates must have completed their undergraduate degree and be enrolled in the Master in Biomedical Research (UdL), the Master's in Health Education (UdL), the Master's in Research, Innovation, and Transfer in Health (UdL), or a master's related to the field of biomedicine at a Spanish or European university (see Annex I).

2.2. Funding & Payment

IRB Lleida offers 6 grants of five months for the development of master's thesis research projects in IRB Lleida research laboratories.

These grants will provide a monthly payment of 500 € for the five months of the grant. To be able to carry out the internship, it will be essential to sign an Educational Cooperation Agreement between the university organizing the master's program and

IRBLeida, which will include insurance coverage. Each IRBLeida Principal Investigator (PI) may host a maximum of 1 candidate.

The regulation of the external academic internships carried out under these grants will follow the provisions of Royal Decree 592/2014, of July 11, which regulates the external academic internships for university students.

2.3. Duration & Important Dates

The expected start date of the grant is from February 2025.

Opening date of the call: September 27th 2024

Deadline: October 25th 2024 11.59 p.m

Estimated provisional resolution: November 2024

Estimated final resolution: December 2024

3. Candidates profile

3.1. Eligibility

At the time of application, candidates must have completed their undergraduate degree and be enrolled in the Master in Biomedical Research (UdL), the Master's in Health Education (UdL), the Master's in Research, Innovation, and Transfer in Health (UdL), or a master's related to the field of biomedicine at a Spanish or European university (see Annex I).

3.2. Incompatibility

N/A

4. Application & Award Decision

4.1. Proposal Submission

Interested students must submit the required documentation through the provided link in the intramural calls section of the IRBLeida website (<https://www.irbllleida.org/es/convocatorias-intramurales/>).

To formalize their application, candidates must submit:

- Candidate's CV.
- Motivation letter including a brief description of their previous research experience.
- Documentation accrediting the enrolment in one of the Master's degrees.
- Academic certificate of the bachelor's that granted them access to the Master's degrees.

Students may choose three of the IRBLeida research groups offering a position for hosting a student through the application (see Annex II).

4.2. Evaluation Criteria

Eligible applications according to the call's criteria will be prioritized by the IRBLeida Internal Scientific Evaluation Committee (CIAC) following the criteria below:

Criteria	Definition		Points
Evaluation of the candidate	Average Bachelor's degree grade		70
	Personal Interview	Motivation Letter	30
		Interview questions by the panel	
Maximum	Total sum		100

4.3. Award Decision

Once the candidate evaluation process is complete, the CIAC will send the prioritization of the applications and the evaluation reports for each candidate to the director of IRBLeida (or their designee). This prioritization will indicate the selected candidates and those on the reserve list. The director of IRBLeida (or their designee) will issue a provisional award decision with the selected candidates from this call and a prioritized reserve list of candidates.

After the provisional funding decision, applicants will have 5 working days to submit any possible allegations to the decision by sending an email to projects@irbllleida.cat. The allegations will be studied by the panel, and a response will be given within a maximum period of 10 business days. Once the allegations are resolved, the final funding decision will be made public.

Within one month from the publication of the final award decision, the selected candidates proposed as beneficiaries must sign a document accepting the grant. This document will include the expected start date. If the proposed candidate does not sign the acceptance document within this period, it will be understood that they forfeit the grant. In special cases, the IRBLeida Directorate may authorize variations in the start

date, provided the beneficiary has requested it in writing and the reasons have been positively evaluated by the CIAC.

Any resignations after acceptance must be notified by sending an e-mail to projects@irbllleida.cat.

If all the positions offered are not covered or resignations occur, and there are not enough candidates on the prioritized reserve list to fill the possible vacancies, IRBLeida Directorate may invest the unused resources in new actions that are strategic for the institution.

5. Beneficiaries' obligations

5.1. Project Follow-up

N/A

5.2. Project Outputs

Scientific tutors must notify the IRBLeida Innovation Department via the email address innovacio@irbllleida.cat of any communication or dissemination data generated from this grant, whether oral or written, in articles, posters, clinical practice guidelines, etc., both nationally and internationally, before it takes place to ensure adequate protection of intellectual and/or industrial property.

In any communication and/or publication resulting from this grant, it must be stated that it has received funding from the "Grants for the completion of a master's thesis project at IRBLeida." Scientific tutors must express their commitment to these requirements by signing the application form.

5.3. Final Reporting

Beneficiaries of the grant must send a final report (1-2 pages) to the IRBLeida Projects Unit via email (projects@irbllleida.cat) detailing the scientific objectives achieved in their final project of the master's degree, as well as a list of publications and communications that have resulted from these findings, including those that are in the process of publication and those pending publication.

6. Other Clauses

Participation in this call implies full acceptance of the rules by both candidates and scientific tutors. Failure to comply with the duties or conditions established in the call for this grant will result in the loss of beneficiary status. If the cause of the non-

compliance is attributable to the scientific tutor, they will not be allowed to submit candidates for the Grants for the completion of a master's thesis project at IRBLleida for the following two years.

6.1. Proposal Documentation Confidentiality

The documentation associated with the proposals will be treated as confidential information, being obliged to maintain the confidentiality of the information all persons involved in the evaluation and assessment of the proposals, and may be used for informative and dissemination purposes, subject to prior consent of the applicants.

6.2. Personal Data Collection Purpose and Processing Information

Responsible party: Institut de Recerca Biomèdica de Lleida Fundació Dr. Pifarré (IRBLleida).

Purpose: Management of calls and, where appropriate, the awarding and delivery of the prize.

Legitimation: The legal basis of the processing is the carrying out of a selection process to provide financial support for research projects.

Addressees: The data will not be transferred to third parties, except in the legal obligations established by law.

Rights: Access, rectification, and deletion of data, as well as other rights, as explained in the additional information.

Additional information: You can consult additional and detailed information on Data Protection on our website <http://www.irbllleida.org/en/legal-notice/>.

The data provided by applicants will be incorporated into the processing system owned by IRBLleida in order to manage and resolve the selection process, and will be processed in a lawful, fair, transparent, adequate, relevant, limited, accurate, and up-to-date manner, in compliance with the provisions of Regulation (EU) 2016/679 of the European Parliament and Organic Law 3/2018, of 5 December (LOPDGDD). The legal basis for the processing of data is the fulfilment of a legal obligation on the part of the controller reinforced with the consent of the data subject.

This data must be kept for the period of time strictly necessary to fulfil the aforementioned purpose, respecting in all cases the period determined by these rules and regulations governing the call for applications and the applicable archiving regulations.

Certain data may be communicated to third parties in the public or private sphere, either because the intervention of these entities in the course of the aid management

process may be necessary because it is correctly resolved, or because it is provided for in a regulation with the status of law.

As long as the interested party does not communicate otherwise, it will be understood that their details have not been modified and that they undertake to notify the IRBLleida of any variation.

Applicants may exercise their rights of access, rectification, limitation of processing, suppression, opposition to the processing of their data or exercise their right to portability by writing to IRBLleida (Avda. Rovira Roure, 80, 25198 Lleida), to the e-mail address protecciodedades@irblleida.cat or to the IRBLleida's Data Protection Delegate, dpd@ticsalutsocial.cat. You must attach a photocopy of your ID card or sign the e-mail with a recognized electronic signature. In the event of disagreement with the processing, you also have the right to lodge a complaint with the Catalan Data Protection Authority.



7. Annexes

7.1 Annex I

[Màster Universitari en Medicina Regenerativa i Teràpies Avançades \(CEU\)](#)

[Màster en Biologia Molecular i Biomedicina \(UdG\)](#)

[Màster de Genètica i Genòmica \(UB\)](#)

[Màster en Immunologia Avançada \(UB/UAB\)](#)

[Màster en Omics Data Analysis \(UVic-UCC\)](#)

[Màster en Biomedicina \(UB\)](#)

[Màster de Bioquímica, Biologia Molecular i Biomedicina \(UAB\)](#)

[Màster en Investigació Biomèdica Traslacional \(VHIR-UAB\)](#)

[Màster de Microbiologia Avançada \(UB\)](#)

[Màster Universitari en Estadística i Investigació Operativa](#)

Intramural Research Program

7.2 Annex II

Supervisor(s): Maria Alba Sorolla Bardaji

Research Group: Grup de Recerca de Biomarcadors en Càncer

Contact: msorolla@irblleida.cat

Proposal Title: Exosomal short-chain non-coding RNA profiling of pleural fluid for the non-invasive diagnosis of squamous cell lung carcinoma

Supervisor(s): Águeda Martínez Barriocanal

Research Group: Oncologia Molecular

Contact: amartinez@irblleida.cat

Proposal Title: Investigation of the molecular mechanisms underlying the initiation and progression of endometrial tumors and study of drug-induced cellular senescence in colorectal cancer.

Supervisor(s): Diego Arango del Corro

Research Group: Oncologia Molecular

Contact: darango@irblleida.cat

Proposal Title: Investigation of the molecular mechanisms underlying the initiation and progression of colorectal and gastric tumors.

Supervisor(s): Laia Selva Pareja

Research Group: Grup de Recerca en Educació per a la Salut, Infermeria, Sostenibilitat i Innovació (GREISI)

Contact: laia.selva@udl.cat

Proposal Title: Educació pel desenvolupament sostenible a la infància: importància de la hidratació.

Supervisor(s): Laia Selva Pareja

Research Group: Grup de Recerca en Educació per a la Salut, Infermeria, Sostenibilitat i Innovació (GREISI)

Contact: laia.selva@udl.cat

Proposal Title: El rol de l'educació en la presa de decisions sobre fertilitat: un estudi de gènere.

Supervisor(s): Farida Dakterzada

Research Group: Grup d'Estudi de la Cognició i la Conducta

Contact: farida.dakterzada@irbllleida.udl.cat

Proposal Title: The effect of intestinal microbiota on the pathological features of AD using the 3xTg-AD animal model.

Supervisor(s): Jose Manuel Valdivielso

Research Group: Vascular and Renal traslational research group

Contact: josemanuel.valdivielso@udl.cat

Proposal Title: Role of renal IGF signaling in the early events of chronic kidney disease.

Supervisor(s): Milica Bozic

Research Group: Vascular and Renal traslational research group

Contact: mbozic@irbllleida.cat

Proposal Title: Exploring miRNA Dysregulation in Obesity-Related Kidney Disease: From Mechanisms to Therapeutic Targets.

Supervisor(s): Juan Miguel Díaz Tocados

Research Group: Grupo de investigación traslacional vascular y renal

Contact: jmdiaz@irbllleida.cat

Proposal Title: Study of the effects of targeted deletion of alpha synuclein in osteocytes on the differentiation of bone marrow mesenchymal stem cells.

Supervisor(s): Concepción Mora Giral

Research Group: Grup de Recerca en Immunologia i Metabolisme (GRIM)

Contact: conchi.mora@udl.cat

Proposal Title: Validation Dendritic Cells biomarkers of Tolerogenicity.

Supervisor(s): Sara Salvany, Glòria Arqué

Research Group: Neurociències Clíiques

Contact: sara.salvany@udl.cat , gloria.arque@udl.cat

Proposal Title: Microglial RIC-mediated cytoprotection in a preclinical mouse model of acute ischemic stroke.

Supervisor(s): Francisco Purroy, Glòria Arqué

Research Group: Neurociències Clíiques

Contact: fpurroygarcia@gmail.com ; gloria.arque@udl.cat

Proposal Title: Caracterización funcional de una cohorte de ictus isquémico perinatal mediante estudio clínico: identificación longitudinal de biomarcadores de pronóstico.

Supervisor(s): David de Gonzalo Calvo, Ferran Barbé

Research Group: Translational Research in Respiratory Medicine

Contact: dgonzalo@irbllleida.cat

Proposal Title: Sex Differences in Pulmonary Recovery Trajectories Among Survivors of Severe COVID-19.

Supervisor(s): Xavi Dolcet Roca

Research Group: Developmental and Oncogenic Signaling

Contact: xavi.dolcet@udl.cat

Proposal Title: Functional Analysis of Tumor Suppressor genes Triggering High-risk Endometrial cancer by In vivo CRISPR/Cas9 editing.

Supervisor(s): Anna Espart Herrero

Research Group: Grup de Recerca en Educació per a la Salut, Infermeria, Sostenibilitat i Innovació (GREISI)

Contact: anna.espart@udl.cat

Proposal Title: Evaluación de la Presencia de Pesticidas en el Meconio y su correlación con alteraciones antropométricas en recién nacidos: identificación de fuentes de contaminación materna.

Supervisor(s): Aida Serra Maqueda, Xavier Gallart Palau

Research Group: +Pec Proteomics

Contact: aida.serra@udl.cat , xgallart@irbllleida.cat

Proposal Title: Exploring the Use of Extracellular Vesicles-based Nanocarriers for Targeted Drug Delivery.

Supervisor(s): Teresa Botigué Satorra

Research Group: Grup de Recerca en Educació per a la Salut, Infermeria, Sostenibilitat i Innovació (GREISI)

Contact: teresa.botigue@udl.cat

Proposal Title: Cuidar-se per poder cuidar: Intervenció multicèntrica pel benestar emocional dels estudiants del Grau en Infermeria a Catalunya (Programa Inspira).

Supervisor(s): Teresa Botigué Satorra

Research Group: Grup de Recerca en Educació per a la Salut, Infermeria, Sostenibilitat i Innovació (GREISI)

Contact: teresa.botigue@udl.cat

Proposal Title: Eficacia y eficiencia de GEL-AID, agua gelificada para la hidratación segura y eficaz de personas mayores institucionalizadas: análisis de coste-eficacia.

Supervisor(s): Elisa Cabiscol Català

Research Group: Bioquímica de l'estrès oxidatiu

Contact: elisa.cabiscol@udl.cat

Proposal Title: Astroglia in the brain of the FXNI151F Friedreich ataxia mouse model. Cross talk in astrocyte-neuron functional cooperation.

Supervisor(s): Andreu Casali Taberner

Research Group: Drosophila Models of Disease and (epi)genètic analysis

Contact: andreu.casali@udl.cat

Proposal Title: Characterization of the Notch ligand Delta as a metastasis supressor gene.

Supervisor(s): Robert Montal Roura

Research Group: Cancer Biomarkers Research Group (GREBIC).

Contact: montalrobert@gmail.com

Proposal Title: Artificial Intelligence-based Pathology and Spatial Transcriptomics for the identification of the Inflamed class of Gastric Adenocarcinoma and the prediction of response to Immunotherapy.

Supervisor(s): Jordi Torres Rosell, Neus Colomina Gabarrella

Research Group: Cicle cel·lular

Contact: jordi.torres@udl.cat

Proposal Title: Replication fork remodelling and genome integrity in cancer cells

Supervisor(s): Olga Tarabal, Sara Hernandez

Research Group: Patologia neuromuscular experimental

Contact: olga.tarabal@udl.cat , sara.hernandez@udl.cat

Proposal Title: Pathological changes in motoneurons after axonal injury in spinal muscular atrophy mice.

Supervisor(s): Antonio Abellán

Research Group: Neurobiología evolutiva del desarrollo

Contact: antonio.abellan@udl.cat

Proposal Title: Expresión de receptores de vasopressina y oxitocina en el cerebro de pollo

Supervisor(s): Reinald Pamplona

Research Group: Fisiopatología metabólica

Contact: reinald.pamplona@udl.cat

Proposal Title: Cracking the Longevity Code: Centenarians and the Quest for the Fountain of Youth.

Supervisor(s): Mariona Jové

Research Group: Fisiopatología metabólica

Contact: mariona.jove@udl.cat

Proposal Title: Hunting for the Fountain of Youth: Aging, MetR, and the Secrets of Adipose Tissue.

Supervisor(s): Natalia Mota

Research Group: Fisiopatología metabólica

Contact: natalia.mota@udl.cat

Proposal Title: The great longevity puzzle: energetic metabolites in plasma.

Supervisor(s): Manuel Portero-Otin

Research Group: Fisiopatología metabólica

Contact: manuel.portero@udl.cat

Proposal Title: Membranal lipid homeostasis in neurodegeneration.
