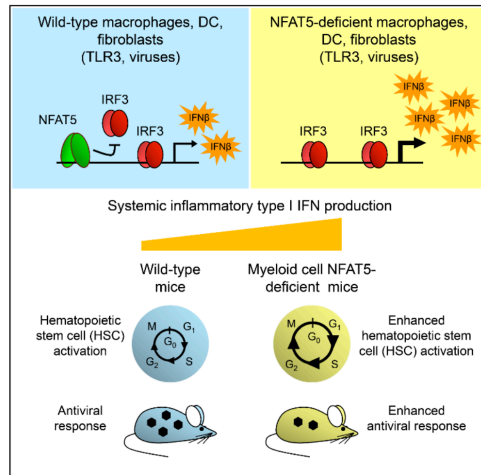
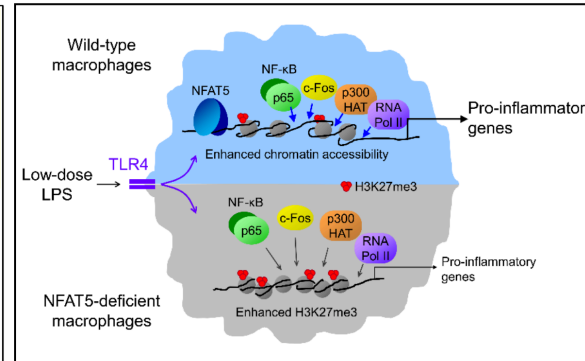


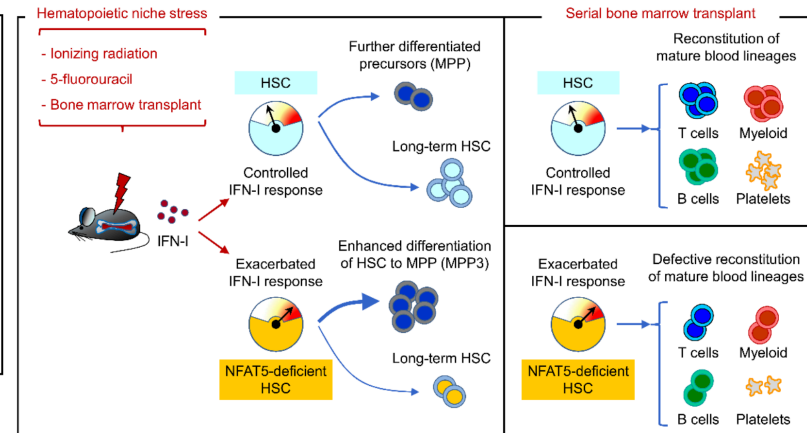
Predocctoral contract (FPI) 2025, Immunology group, Universitat Pompeu Fabra, Barcelona



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We are recruiting a candidate for a PhD thesis project that will address how metabolism and immunity influence each other in two pathological settings: obesity and cancer. We will aim at modifying specific metabolic parameters in T lymphocytes and macrophages to redirect immune responses and enhance their therapeutic effectiveness. The candidate will be funded by a four-year predoctoral contract (FPI) ascribed to project PID2024-159862OB-I00, Agencia Estatal de Investigación, Ministerio de Ciencia, Innovación y Universidades. (detailed information in: <https://www.upf.edu/web/phdfunding> (AJUTS PREDOCTORALS FPI 2025); https://drive.google.com/file/d/1j1YyogNK2OOT6-k9NV9cdovbII1coj_U/view).

Our group is developing different projects, from hematopoietic stem cell function to anti-tumor immunotherapy and immunometabolism. **Recent Publications:** Zadra et al 2025 *Cancer Letters*; Traveset et al 2024 *Blood Advances*; Riera-Borrull et al 2024 *BioRxiv*; Lunazzi et al 2021 *Journal of Immunology*; Huerga Encabo et al 2020 *Journal of Experimental Medicine*; Aramburu and Lopez-Rodriguez 2019 *Frontiers in Immunology*; Buxadé et al 2018 *Journal of Experimental Medicine*; Tellechea et al 2018 *Journal of Immunology*.

The selected candidate will enroll in the **International PhD Program in Biomedical Research at UPF**, gaining experience in **immunometabolism and immunotherapy** using in vivo mouse models for human pathologies and ex vivo assays with primary immune cells from gene-edited mice. Usual methodologies in our lab include spectral flow cytometry, advanced gene expression analysis (scRNA-seq, RNA-seq, ATAC-seq), metabolic activity, and antitumor function analysis. Additional methodologies such as super-resolution microscopy, bioinformatics (R Studio), 3D-organoids and CRISPR-based gene editing will be incorporated as needed.

Requirements

Degree: BSc in Biology, Biomedicine, Biochemistry, Biotechnology or equivalent, and completed their master's degree in 2024-2025, or will complete it by July 2026.

Languages: Fluency in written and spoken English is required.

Academic score: Ideally must be in the top 20% of their graduating class (approximately a score of 8.0 on a 1-10 scale).

We value previous experience in **immunology projects**; and experience in **gene expression, flow cytometry, or mouse models of human disease**.

Applications: email to Jose Aramburu (jose.aramburu@upf.edu) or Cristina López-Rodríguez (cristina.lopez-rodriguez@upf.edu) with subject **Ref: contrato predoctoral (FPI) MICIU 2025**. Please include your **CV, full academic transcript**, and provide **one or two contacts** (principal investigator level, with phone number and email) for references.