



PREDOCTORAL CANDIDATE IN THE CANCER METABOLISM GROUP

The *Cancer Metabolism Group*, led by Dr. Antonio Gentilella, is looking for a highly motivated and proactive predoctoral candidate to join our team. Our research focuses on the adaptive mechanisms that tumor cells use to survive and thrive in challenging environments such as chemotherapy and metastatic progression. This is an exciting opportunity to contribute to cutting-edge cancer research while developing a strong foundation for a scientific career.

The selected candidate will be encouraged and supported to apply for prestigious PhD fellowships, including **FPU, FI, AECC, and "la Caixa"**, with the possibility of securing long-term funding. **While awaiting fellowship outcomes, we offer the possibility to cover the first year of the PhD, ensuring continuity and financial stability** during this period.

Project Overview:

We have made key discoveries regarding a specialized subset of 40S ribosomes that, in complex with the RNA-binding protein LARP1, preserve a selective population of mRNAs, including anabolic mRNAs and 5'TOPs. These findings highlight the 40S-LARP1 complex as a dynamic metabolic node, crucial for sustaining cancer cell growth and biomass production. (See references: Gentilella et al., *Molecular Cell*; Fuentes et al., *Science Advances*; Morcelle et al., *Cancer Res*). Our goal is to unravel the cellular adaptations driving tumor growth and to identify new metabolic vulnerabilities that could be targeted in cancer therapy.

Candidate Profile:

- **Master's degree (in progress or completed)** in a relevant biomedical area (candidates currently finishing their master's can apply now for the FPU or other fellowships).
- Strong academic record (≥ 8.8 GPA), with a passion for cancer biology and metabolism.
- Experience or interest in learning state-of-the-art techniques, including CRISPR-Cas9 genome editing, advanced molecular cloning, gene expression analysis, 2D and 3D cell culture, organoids, polysome profiling, RNAseq, and more.
- Candidates with a completed master's degree can also apply if they are prepared to join the PhD program immediately.

What We Offer:

- **Full financial support for the first year** of the PhD while you apply for fellowships.

- Comprehensive training in cutting-edge techniques and methodologies in a dynamic, multidisciplinary environment.
- Mentorship and support in applying for national and international fellowships.
- Opportunity to contribute to high-impact publications and be part of an internationally recognized research group.
- Access to IDIBELL's state-of-the-art facilities, located in the vibrant research ecosystem of the Bellvitge Campus, south of Barcelona.

To apply, please send your CV and cover letter to:

agentilella@idibell.cat and/or antonio.gentilella@ub.edu