

## PREDOCTORAL FELLOWSHIP IN CANCER METABOLISM

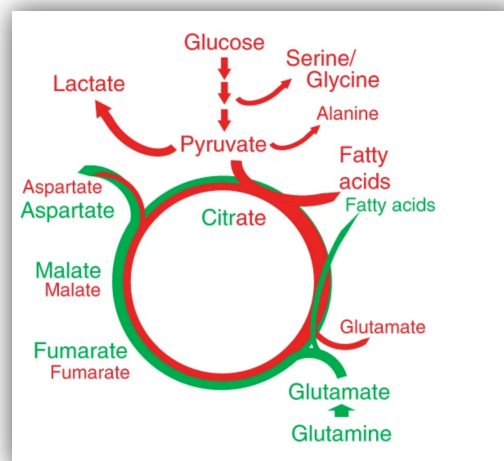
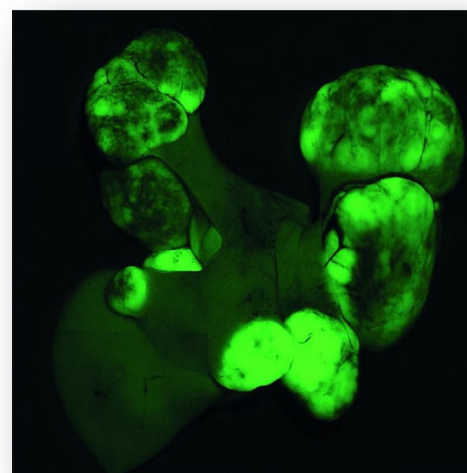
We are seeking to recruit highly motivated, ambitious, talented young scientists to carry out their doctoral thesis in our group at the University of Barcelona, studying the metabolism of tumours *in vivo* (Méndez-Lucas A. et al, Nat Metab 2, 335–350 (2020) <https://doi.org/10.1038/s42255-020-0195-8>).

Metabolism of tumours is different from metabolism in parental tissues. This difference is thought to favour maximal use of the resources with an adequate energy balance to allow cancer cells to survive and proliferate in a competitive tumour microenvironment. This metabolic rewiring of tumours can induce metabolic dependencies that have the potential to be exploited therapeutically.

Metabolomics has become a critical tool to describe the biochemistry of tissues in healthy and pathological situations. We use multiple molecular biology techniques, including stable-isotope labelling *in vivo* and in cultured cells and organoids coupled to mass spectrometry (GC-MS) and nuclear magnetic resonance spectrometry (NMR), in preclinical models of cancer. We aim to understand the metabolism of tumours growing in their natural environment, to find and test new anticancer treatments, and better describe the tumour-host interactions.

The candidate would integrate in a collaborative project from the laboratories of Dr. Andrés Méndez Lucas and Dr. Jose C. Perales at the University of Barcelona and IDIBELL institut. Previous experience in research, and having the title of experimentation on animals will be valued, but not essential.

PhD student candidates should have a master's degree in biology, veterinary, biomedicine, biochemistry, or related fields. Financial support will be obtained upon successful application to various institutional fellowships.



If you are interested please submit your application containing a cover letter and your CV to [amendez@ub.edu](mailto:amendez@ub.edu)

<https://mmfpd-ub.wixsite.com/amlmetab>

Informal enquiries are also welcome.

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