The Group “Regulation of Gene Expression” at the IDIBAPS Research Institute (Barcelona), an ICREA group, offers the possibility to conduct the Experimental Project for the MSc (Proyecto Final de Master) in the area of “Regulation of Gene Expression in Stem Cells & in Cell Differentiation, Inflammation, Tissue Regeneration, and Cancer”. ZEB1 and ZEB2 regulate the stem cell phenotype, cell differentiation, and tumor progression. Our group is a pioneer and an international reference in the study of these transcription factors.

The selected MSc student will have the opportunity to work in one of the hottest areas in cellular biology and/or molecular oncology. There are possibilities to develop an MSc Project investigating the role of ZEB1 and ZEB2 in a number of different and timely projects involving cell differentiation and tissue regeneration (e.g., stemness, reprogramming) and oncology (tumor microenvironment crosstalk, cancer stem cells). In the area of cell differentiation, our group is focused on skeletal muscle and hematological and epithelial cells. In cancer, we use colorectal and ovarian carcinomas as well as hematological neoplasias as the main models. The MSc project will involve a wide array of in vitro and in vivo approaches including transgenic mouse models unique to our group and high throughput techniques (RNAseq, proteomics). The student will also have the chance to participate in other ongoing projects in the group.

**Requirements**

Degree in Biology or related biomedical disciplines. **ONLY** candidates that fulfill the following **essential criteria** will be considered for the MSc Project:

- with a mark/grade in the BSc above 2.7/4.0 or 8.7/10.
- that are registered (or will do it in coming months) in an Official MSc degree in an university in Barcelona (UB, UPF, UAB)

In addition, candidates with the following **desirable criteria** will be highly considered:

- interested in doing a PhD after the MSc
- that have previous lab experience

**Selected Publications**

(recent articles from the group as Corresponding Author). IF: impact factor

- Nature Commun 10:1364 (IF: 12.3)
- Nature Commun 9:2424 (IF: 12.3)
- Nature Commun. 5:5660 (IF: 12.3)
- Nature Commun. 4:2650 (IF:12.3)
- EMBO J 36:3336. (IF: 11.2)
- PNAS 108:19204 (IF: 9.9)
- Nucleic Acid Res 46:10697 (IF: 11.6)
- Gut 66:666 (IF: 17.9)
- Gut In press (IF: 17.9)
- Clin Cancer Res 19:1071 (IF: 10.2)

**INFO & APPLICATIONS**

For additional info, visit: https://www.icrea.cat/Web/ScientificStaff/antonio-postigo-379 Applications should include: a) CV with the average mark of the grade, b) names and email of 2-3 persons that have supervised the candidate during the Grade and must be sent to: idibaps.postigo2@gmail.com indicating “Master+Doctorado” in the subject of the email.