

Institute of Experimental Immunology

# MSC thesis project in Tumor Immunology in the Tugues Lab

"Manipulating innate lymphocytes against cancer"

## **Background:**

The progression of cancer is tightly regulated by the crosstalk between tumor cells and various components of the immune system, which either restrict or potentiate tumor growth. As crucial effectors of immune responses, Innate Lymphoid Cells (ILCs) have been distinctly associated with tumor-promoting as well as tumor-suppressive activities. This dichotomy arises from the high degree of heterogeneity and plasticity between the ILC family subsets. The most common metastatic organs, for instance, are populated by unique ILC subsets that engage in different, specialized effector functions. Our research aims at understanding whether organ-specific microenvironments induce distinct patterns of ILC responses during tumor progression. In addition, we investigate how ILCs interact with other cell types within the tumor microenvironment. Gaining a better understanding of the multifaceted roles of ILCs in cancer will allow us to develop novel strategies to manipulate their responses against this fatal disease.

#### What we offer:

A 9-12 months project embedded in our research line with a flexible starting date.

Being part of a dynamic team comprising 5 PhD students, 1 Research Assistant and 3 Msc students.

Access to cutting-edge technology to perform your research (high-dimensional flow cytometry, single-cell RNA sequencing, computational workflows).

Dedicated supervision and a supportive environment to thrive on your scientific education.

#### What we expect:

A high motivation and interest in understanding the immunological control of cancer. Good communication skills.

Enthusiasm for teamwork.

### Interested in the position?

We are very much looking forward to your application. Please contact:

## Prof. Sònia Tugues

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