

Master program in Cancer Biology Internship proposal form 2023

☑ MASTER 1

☑ MASTER 2

Title	New effectors of cell competition during development and cancer
Host laboratory	Epithelial growth and cancer - IRCM
Name of the PI	Alexandre DJIANE
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Description (10 lines)	In all growing epithelial tissues, the status of individuals cells regarding metabolism, growth or genetic identity is constantly checked to establish a relative fitness hierarchy. This results in competition for tissue formation favoring the strongest cells at the expense of the weakest. This conserved cellular phenomenon is known as « cell competition » and growing evidences support its central role during cancer development (clonal evolution, resistance to treatments, metastatic niche). The project consists in the establishment of a new cell competition paradigm in cultured mammalian cells, and to investigate the role of key lipid metabolism genes in this process.
Duration (2 to 6 months)	5 to 6 months