

Master program in Cancer Biology Internship proposal form 2024

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Title	Emergent role of proline metabolism in the control of hypoxia and pyroptosis
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Host laboratory	Institut de Recherche en Cancérologie de Montpellier (IRCM)
	Genetic and phenotypic plasticity of cancer
Name of the PI	Claude Sardet
Supervisor	Geneviève Rodier
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Description (10 lines)	Proline degradation into α -ketoglutarate (α -KG) is highly downregulated in Triple negative breast cancers (TNBC). Increasing this degradation by the overexpression of ALDH4A1 induces α -KG dependant death of TNBC cells by an inflammatory process called pyroptosis. The aim of this research project is to identify the mechanisms responsibles of this cell death in order to provide preliminary data supporting that modulation of proline cycle and α -KG could be a novel therapeutic strategy to target TNBCs
Duration (2 to 6 months)	4-5 months