



Fiche proposition de stage - *Internship offers*

Offre pour / Offer for (you can make offers for both level, if the subjects are different, please use a new form)

X Master 2 (from end January)

x Master 1 (from end January)

Intitulé du stage <i>Title</i>	Targeting collagen receptor DDR1 kinase activity to reverse immune exclusion and improve treatment of colorectal cancer
Laboratoire d'accueil <i>Host laboratory</i>	CRBM CNRS UMR5237 Team "Cancer Cell Signaling"
Nom du responsable <i>Name of the PI</i>	Serge ROCHE
Nom d'encadrant <i>Supervisor</i>	Audrey SIRVENT
Description (3 phrases) <i>Description (3 sentences)</i>	<p>Several recent reports point to the tyrosine kinase receptor DDR1 as an essential receptor mediating collagens tumor promoting effects associated with metastatic colorectal cancer (mCRC) progression and therapeutic resistance. The specific objectives of this project are: (1) to evaluate the contribution of DDR1 kinase activity in CRC tumor progression and immune exclusion, (2) to identify the associated molecular mechanisms and (3) to address if the targeting of DDR1 activity with ATP competitive inhibitors can overcome therapeutic resistance/improve response to immune check-point inhibitors using immunocompetent mice models.</p> <p><i>Methods: 2D and 3D cell culture, co-cultures, western-blot, proteome profiler antibody arrays, Q-PCR, CRISPR-CAS9, sub-cutaneous mouse xenografts, flow cytometry, immunofluorescence and immunohistochemistry.</i></p>
Durée prévue (2 à 6 mois) <i>Duration (2 to 6 months)</i>	5 to 6 months
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