



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)

Master 1

X Master 2

Parcours concerné(s) : EpiGenBio

Intitulé du stage <i>Title</i>	Functional analysis of RNA granules: example of <i>Drosophila</i> germ granules
Laboratoire d'accueil <i>Host laboratory</i>	mRNA regulation and Development Institute of Human Genetics
Nom du responsable <i>Name of the PI</i>	Martine Simonelig
Nom d'encadrant <i>Supervisor</i>	Anne Ramat
Description (3 phrases) <i>Description (3 sentences)</i>	<p>Membraneless condensates are thought to play a key role in organizing biological reactions within the cell. However, the relationships between the organization of condensates and their functions are poorly understood. RNA granules are a specific class of condensates. The project aims at analyzing RNA granules in the <i>Drosophila</i> germline, to decipher the links between organization and functions of membraneless condensates. The project involves innovative single molecule imaging approaches to record ongoing translation.</p> <p>Methods and approaches: <i>Drosophila</i> molecular genetics; CRISPR knock-in; RNA molecular biology; single molecule imaging: smFISH, SunTag; live imaging.</p> <p>Key-words: mRNA regulation; Phase separation; RNA granule; Translational regulation; Single molecule imaging</p>
Durée prévue (2 à 6 mois) <i>Duration (2 to 6 months)</i>	6 months
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