



Fiche proposition de stage - *Internship offers* 2025-26

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

- **Master 2 (from end January)**
- **Master 1 (from mid January)**

Intitulé du stage <i>Title</i>	Analyse biophysique et fonctionnelle de granules d'ARN: Exemple des granules germinaux chez la drosophile Biophysical and functional analysis of RNA granules: example of <i>Drosophila</i> germ granules
Laboratoire d'accueil <i>Host laboratory</i>	mRNA Regulation and Development Institut de Génétique Humaine (IGH)
Nom du responsable <i>Name of the PI</i>	Martine Simonelig
Nom d'encadrant <i>Supervisor</i>	Anne Ramat
Description (3 phrases) <i>Description</i> (3 sentences)	<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 biophysical properties, organization and functions of membraneless condensates. The project involves innovative approaches to purify RNA granules and single molecule imaging to record ongoing translation.</p> <p>Methods and approaches: <i>Drosophila</i> molecular genetics; optogenetics; RNA 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</i> (2 to 6 months)	6 mois 6 months
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