

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~~**

**Master 2**

**Parcours concerné(s) :** Cancer Biology, epigénétique, qBio

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| **Intitulé du stage**  *Title* | 3D Chromatin organization during transcription elongation in single erythroid cells |
| **Laboratoire d’accueil**  *Host laboratory* | *Centre de Biochimie Structurale (CBS), CNRS UMR 5048 - UM - INSERM 1054*  *Equipe:Mechanisms of DNA Segregation and Remodeling* |
| **Nom du responsable**  *Name of the PI* | *Marcelo Nollmann* |
| **Nom d'encadrant**  *Supervisor* | *David Llères* |
| **Description** (3 phrases)  *Description (3 sentences)* | Cellular differentiation requires the coordination of gene activation and repression and erythropoiesis is one of the most robust cellular differentiation and proliferation systems. How 3D chromosome structure regulates transcription of key genes associated with erythroid differentiation is poorly understood. We will use Hi-M, a novel imaging-based spatial genomics method we developed to restore 3D chromatin organization and transcriptional status in single cells. |
| **Durée prevue (2 à 6 mois)**  Duration (2 to 6 months) | 6 mois |
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