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Architecture et Réactivité de l'ARN

PhD position in molecular biology and
biochemistry

Franck Martin
Directeur de Recherches

PhD position in molecular biology and biochemistry

Institut de Biologie Moléculaire et Cellulaire de Strasbourg, UPR Architecture et Réactivité de l'ARN

A PhD position is available in the research group of Franck Martin at the University of Strasbourg (ARN laboratory), Strasbourg, France. Our team is investigating the interplay between ribosomes, translation initiation factors and messenger RNAs during the translation initiation process in eukaryotes. We are especially interested in atypical translation mechanisms including Internal Ribosome Entry Site (IRES) mediated translation. In this frame, we focus our research on translation initiation of several model mRNAs such as histone H4 mRNA (Martin et al., 2011, Martin et al., 2016), viral translation during Cricket Paralysis Virus infection (Majzoub et al., 2014, Gross et al., 2017) or a pathological case of Repeat-Associated Non-AUG (RAN) translation (Tabet et al., 2018).

The PhD project is to set-up an innovative approach using microfluidic technology to investigate fundamental aspects of eukaryotic translation. We will use cell-free translation extracts from various organisms that will allow us to faithfully recapitulate translation in droplets. With this experimental set-up, we will be able to perform high throughput screenings that will be analysed by Next Generation Sequencing. This will be done in the frame of an on-going collaboration with the group of Michael Ryckelynck from the same department (ARN laboratory).

The research position is funded by French National Agency for Research (ANR) for 3 years starting from October 1st 2018. Salary will be adjusted according to the rules from Ecole Doctorale (ED-414) of Strasbourg.

The successful candidate will join an interdisciplinary team of molecular, cellular, and structural biologists. The project will be carried out in close collaboration with the group of Michael Ryckelynck as part of an ANR network.

Applications and informal queries about the research project and the lab should be directed by email to Franck Martin (F.Martin@ibmc-cnrs.unistra.fr). We are looking for a colleague that is highly motivated, scientifically independent and creative, and capable of contributing to a team environment. Interested applicants require a strong background in molecular biology and biochemistry. Applicants must have an excellent grasp of up-to-date molecular techniques dedicated to protein and RNA biochemistry. Applications should include a cover letter summarizing current and future research interest, a CV and contact information for at least two references.

Sous la tutelle du

Associé à



Unité Propre de Recherche du CNRS n° 9002
INSTITUT DE BIOLOGIE MOLECULAIRE ET CELLULAIRE
15 rue René Descartes - 67084 Strasbourg cedex
Tél : 03 88 41 70 42 - Télécopie : 03 88 60 22 18 - Courriel : F.Martin@ibmc-cnrs.unistra.fr
<http://www-ibmc.u-strasbg.fr/arn/Eriani/index.html>



References

Martin *et al.*, 2011, *Molecular Cell*, doi.org/10.1016/j.molcel.2010.12.019
Martin *et al.*, 2016, *Nature Communications*, doi.org/10.1038/ncomms12622
Mazjoub *et al.*, 2014, *Cell*, doi.org/10.1016/j.cell.2014.10.041
Gross *et al.*, 2017, *Nucleic Acids Research*, doi.org/10.1093/nar/gkx622
Tabet *et al.*, 2018, *Nature Communications*, doi.org/10.1038/s41467-017-02643-5

Contact: Franck MARTIN (<https://orcid.org/0000-0001-9724-4025>)
F.Martin@ibmc-cnrs.unistra.fr

Lab web site: <http://www-ibmc.u-strasbg.fr/spip-arn/spip.php?rubrique68>