

Post-doctoral Position

RNA biogenesis and genome homeostasis

We are looking for a highly-motivated **Post-doctoral Research Scientist** with knowledge in the fields of **gene expression and/or genetic stability** to join the team « *RNA biogenesis and genome homeostasis* » led by Benoit PALANCADE at **Institut Jacques Monod** (CNRS/Université Paris Diderot, Paris, France – <u>http://www.ijm.fr</u>).

Current work in the lab aims to uncover **novel regulations targeting mRNA metabolism** and to decipher their **impact on gene expression patterns** and **genomic integrity**. We are specially interested in understanding which *cis-* and *trans-*acting factors influence the formation of **genotoxic DNA:RNA hybrids**, and thereby challenge **genome dynamics and stability**. The post-doctoral fellow will more particularly focus on the functional characterization of novel factors restricting hybrid-dependent genetic instability, which we previously uncovered through innovative screens in budding yeast. For this purpose, the project will combine genome-wide approaches with mechanistic studies based on yeast genetics and molecular biology/biochemical assays. The post-doctoral fellow will have access to the leading-edge core facilities available within the IJM building, and will benefit from a highly dynamic scientific environment.

Qualifications

You will have a PhD in biological or biochemical sciences and demonstrable experience in genetics and molecular biology techniques. Previous experience in yeast biology or bioinformatic analyses of genomic data will be appreciated but is not essential. You will need strong organizational and team working abilities to take projects from conception to completion, as well as verbal and written communication skills in English (French is not mandatory). You will have a CV and publication record that would be competitive for national/international post-doctoral fellowships.

Application details

The position is funded by ANR (*Agence Nationale de la Recherche*), and is fixed term for up to 2 years with the eventuality of an extension. The position can start at any time after November 1st 2018. Applications including a CV and a cover letter summarizing current and future research interests, as well as the contact details of 2 referees, should be ultimately submitted through the Emploi CNRS portal (<u>http://bit.ly/2Mg0ZrO</u>), but preliminary inquiries and additional informations can be discussed by e-mail to benoit.palancade@ijm.fr.

Recent publications from the host lab

<u>Rouviere JO</u>, Bulfoni M, Tuck A, Cosson B, Devaux F & <u>Palancade B</u>. (2018) *A SUMO-dependent feedback loop senses* and controls the biogenesis of nuclear pore subunits. **Nature communications** 9(1):1665

Palancade, B. (2018) R-loop dependent genetic instability: why introns matter. médecine/sciences. 34(4):300-302

<u>Bonnet A</u>, Grosso AR, Elkaoutari A, <u>Coleno E</u>, <u>Presle A</u>, Sridhara SC, Janbon G, Géli V, de Almeida SF & <u>Palancade B</u>. (2017). *Introns protect eukaryotic genomes from transcription-associated genetic instability*. **Mol Cell** 67(4):608-621.e6

Babour A, Dos-Santos J, Shen Q, Murray S, Gay A, Challal D, Fasken M, <u>Palancade B</u>, Corbett A, Libri D, Mellor J and Dargemont C. (2016). *The chromatin remodeler ISW1 licenses nuclear mRNAs for export to the cytoplasm.* **Cell** 167(5):1201-1214

Bonnet A, Bretes H & Palancade B. (2015) Nuclear pores affect distinct stages of intron-containing gene expression. Nucleic Acids Research 43(8):4249-61

<u>Bretes H</u>, <u>Rouviere JO</u>, Léger T, Oeffinger M, Devaux F, Doye V and <u>Palancade B</u>. (2014) Sumoylation of the THO complex regulates the biogenesis of a subset of mRNPs. **Nucleic Acids Research** 42(8):5043-58