

Description - A 2 year post-doctoral research position is available in the group of Jérôme CAVAILLE at the Laboratory of Eukaryotic Molecular Biology (LBME) in Toulouse. Our research focuses on the function of hundreds of small noncoding RNAs specific to placental mammals and belonging to the microRNA and SNORD families. These genes map to chromosomal regions regulated by genomic imprinting, an epigenetic phenomenon by which genes are mono-allelically expressed in a parent-of-origin specific manner. The aim of our ongoing research is to explore the impact of SNORD genes on the expression and function of mammalian genomes, including in pathological contexts such as the Prader-Willi syndrome. The successful candidate will use novel knockout mouse models and next-generation sequencing (NGS)-based methods to explore the molecular and physiological roles of imprinted SNORD genes. Opportunities to apply for a permanent research position in a French academic Institution (INSERM, CNRS) will be examined at the end of the contract.

For further information - Labialle and Cavallé (2011) *Bioessays*; Labialle, Marty (2014) *EMBO J*; Marty et al (2016) *Hum Mol Genet*.

Keywords – non-coding RNA; Genomic imprinting, Prader-Willi Syndrome (PWS), knockout mouse model, C/D small nucleolar RNAs (SNORDs), post-transcriptional regulation.

Scientific environment – Toulouse is a 120,000-student town comprising three universities and several major engineering schools, which makes it the second university town in France. LBME is part of The Center for Integrative Biology in Toulouse (CBI-Toulouse) that regroups five research departments that form a strong pole in post-genomic biology, with a total of about 400 researchers (<http://cbi-toulouse.fr>).

Applicant profile - We are seeking a highly-motivated candidate with strong experiences in RNA biology, notably in NGS-based methods in relation to post-transcriptional regulation. Experience in mouse genetics and/or neurobiology will also be considered with great interest.

Contact – Candidates should send a cover letter describing their research interests, a CV including a list of publications and the names/emails of two (or three) references to cavaille@ibcg.biotoul.fr. Informal enquiries (via email) are welcome.

Deadline for Application – July 2017