Post-Doctoral Position in Epitransriptomic

GIGA-Research Institute, University of Liège, Belgium

Topic: **Unraveling the Role of SMN in Nucleus/Nucleolar Homeostasis and Potential Implications for Spinal Muscular Atrophy**.

Position: A three-year position for a young Post-Doc is available in the laboratory of Gene Expression and Cancer – D.Mottet's Lab (GIGA-Research Institute). This proposed project is part of a transnational program (PINT Project) with research groups in France (Giuseppina Giglia-Mari, Lyon) and Canada (Jocelyn Coté, Ottawa). The project is built on an insightful observation, made recently by members of the consortium, pointing towards an important role of the SMN protein in the dynamics of the nucleolus particularly in response to UV stress and DNA repair (Nature Communications, https://pubmed.ncbi.nlm.nih.gov/37968267/).

Scientific environnement: GIGA-Research Institute is an interdisciplinary institute that regroups more than 500 scientists involved in the health sciences at the University of Liège. It includes state-of-the-art technological platforms including in genomics, proteomics, imaging and bioinformatics, that greatly facilitates access to a panoply of state-of-the-art methods.
D. Mottet's Lab at the GIGA is heavily interested in studying the role of epi-transcriptomic modifications in transcriptional and post-transcriptional cellular mechanisms in different physio-pathological contexts. His research interests are mainly divided between two main axes: *(I)* characterization of the molecular mechanisms that control posttranscriptional modifications of small non-coding RNAs (U snRNAs and rRNAs), evaluation of their respective role in spliceosome and ribosome assembly and consequences on splicing program and translatome *(II)* the role of posttranslational modifications on snRNP proteins involved in assembly and maturation of the spliceosome machinery. In the proposed project, our lab will aim to characterize the posttranscriptional modifications of rRNAs and U snRNAs in SMA models upon DNA repair-induced nucleolar reorganization.

Profile: The candidate should be ready to undertake competitive and high profile fundamental research. He/She should demonstrate high motivation, commitment and proactivity. Previous experience in molecular and cellular biology is mandatory. High background in bioinformatic is also required. Scientists with good interpersonal skills including working creatively with others, communicating clearly, collaborating, adapting to change, flexibility, interacting effectively with diverse teams, guiding and leading others, and being responsible, will be highly considered.

Starting date: Between 1st January 2024 and 1st March 2024 (to be discussed)

Application: Please send application (CV + motivation letter with contact information for 2 reference persons) to:
Please indicate where you found the job position.

dmottet@uliege.be / Object: **JPND2023 call - Post Doc Position**
Pr. Denis Mottet, Laboratory of Gene Expression and Cancer, GIGA, University of Liège