**PhD POSITION in MOLECULAR and CELLULAR BIOLOGY**

**GIGA-Research Institute, University of Liège, Belgium**

**Topic**: Deciphering new non-canonical functions for subunits of the BAF-SWI/SNF chromatin remodeling complex in cancer biology

For many years, my group has been heavily invested in research aimed at identifying epigenetic “readers, writers and erasers” that remodel chromatin and regulate gene expression in cancer. Recently we were interested in studying the role of the BAF-SWI/SNF chromatin remodeling complex, a multi-subunit complex composed of multifaceted "readers" and "shapers" of the chromatin/DNA. Given its immense influence on gene expression in general, it is not surprising that the genomics-era search for cancer-causing mutations has identified that loss-of-function mutations occuring within some subunits of BAF-SWI/SNF chromatin remodeling complex were found in ~20% of human tumors, making this complex one of the most frequently affected in cancer. However, the role of individual subunits of the BAF complex in cancer cell functions remains largely undefined. Therefore, gaining a more insight into how BAF complex assembly influences its functions and which role distinct subunits play, will hopefully give rise to a better understanding of cancer development and ultimately to new treatments.

An ongoing study in our lab shows that a member of this BAF-SWI/SNF chromatin remodeling complex, exerts as a free subunit an unexpected function and a direct role during mitosis. Numerous datas have been generated during a previous 4-year PhD program. This study will be further developed and finalized in the context of this new position.

**Position**: A one-year PhD position is available in the laboratory of Gene Expression and Cancer (GIGA-Research) (possibility to extend this position). 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 a molecular and cellular biology is preferable. Technical background in immunofluorescence experiment is a *plus*. The student will benefit from the stimulating GIGA (www.giga.ulg.ac.be) scientific environment (courses, activities, seminars, technology platforms, etc…).

**Starting date**: from January 2022 (even before – to be discussed)

**Application**: Please send application (CV and cover letter) to: dmottet@uliege.be

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