

## Post-doc position, Institute of Molecular Genetics, Montpellier, France

### SUMOylation in Acute Myeloid Leukemia

A 2-years postdoctoral position funded by the INCA (French National Cancer Agency) is available in the team [SUMOylation and Myeloid Leukemias](#) led by Guillaume Bossis at the IGMM in Montpellier. The starting date is flexible between April and July 2025.

Acute Myeloid Leukemias (AML) are severe hematological malignancies with dismal prognosis, in particular because of high resistance to conventional chemotherapies. Our team has been interested for long in the role of SUMOylation in AML response to therapies. SUMOylation is a post-translational modification of the Ubiquitin Family, which regulates the function and fate of thousands of cellular proteins. Using various preclinical models, we have shown that the targeting SUMOylation constitutes a promising new therapeutic approach in AML (Gabellier et al, *Haematologica*, 2024; Boulanger et al, *Nucleic Acids Research*, 2023).

The aim of the project is to delineate the role of SUMOylation in AML chemoresistance. The candidate will also decipher the benefit of clinically relevant SUMOylation inhibitors to overcome AML chemoresistance.

The candidate will use functional screens as well as genomic and proteomic approaches, including at single cell level. The experiments will be carried out in model AML cells lines as well as AML patient cells and different in vivo models.

[IGMM](#) is a public pluri-thematic institute conducting fundamental and translational research that is relevant to molecular and cellular medicine, with a particular emphasis on cancer and specific infectious and genetic diseases. It brings together more than 200 people, organized into 18 research teams supported by efficient 7 technical facilities and support services. *The SUMOylation and Myeloid Leukemia* team presently includes 4 senior researchers, 3 PhD students, 2 post-docs and 1 engineer.

Candidate should hold a PhD degree in biological sciences at the start of the contract. A background in onco-hematology and/or SUMOylation/ubiquitin-like would be ideal although all relevant profiles will be considered. Experience in cytometry, mouse models and/or CRISPR/Cas9 screens would be appreciated. The candidate should be proficient in English.

Initial funding for 1 year renewable once is already available. The candidate will be encouraged and supported to apply for external follow-up funding or for tenured position.

Candidates should [apply here](#) and include in their application a CV, letter of motivation and names and email addresses of two to three references. For more information contact: [guillaume.bossis@igmm.cnrs.fr](mailto:guillaume.bossis@igmm.cnrs.fr)