

## PhD Student Researcher

Full time position for ERC-funded project

**Applied Cancer Epigenomics and Epitranscriptomics Group**

### Job description

The Applied Cancer Epigenomics and Epitranscriptomics Group ([www.janajeschkelab.com](http://www.janajeschkelab.com)), headed by Dr. Jana Jeschke, seeks a highly motivated PhD student to explore new mechanisms of gene regulation in tumor heterogeneity.

Our group leverages state-of-the-art sequencing technologies to map changes in DNA and RNA modifications in human tumors. We utilize these changes to improve the stratification of cancer patients for outcome and treatment choice, to identify new targets for cancer therapy and to gain new insights into tumor biology.

You will join a young and international team of enthusiastic and dynamic scientists to perform research for our ERC-funded EpiResist project. For this project, you will work together with an experienced postdoc to set-up the newest single-cell sequencing technologies, develop state-of-the-art cancer models of therapy resistance, work with epigenetic drugs and human specimens from clinical trials to study the role of the N6-methyladenosine (m6A) mRNA modification in the heterogeneity of breast cancers and their resistance to treatments. This unprecedented analysis of the m6A methylome in breast cancer will allow you to gain invaluable new insights into tumor evolution and to disclose uncharted disrupted pathways of chemoresistance that can be therapeutically exploited.

### Profile

We are seeking an enthusiastic and highly motivated PhD student with a master degree in biomedical sciences and a background in cancer and preferably epigenetics/epitranscriptomics research. Proficiency with the following skills are of advantage:

- Cell culture and *in-vitro* cancer models of therapy resistance
- RNA extraction, RT-qPCR, western blot, CRISPR, RNAi
- Phenotypic cancer assays (cell viability, cell proliferation)
- Single-cell RNA sequencing and/or m6A/MeRIP sequencing
- Excellent in spoken and written English

## Funding

The position is fully funded for 4 years by an ERC Starting Grant. The salary will be commensurate according to experience following ULB's pay scale. The start date is flexible: earliest 1<sup>st</sup> of August 2024, but no later than 1<sup>st</sup> of October 2024.

## Environment

Our group is located at Erasme Campus of the Université Libre de Bruxelles (ULB) in Brussels, Belgium. We are part of Institut Jules Bordet, which has a long-standing track record of excellence in cancer research. We offer an outstanding scientific environment that is committed to advancing responsible science through collaboration and inclusion.

## Application

Send your compelling cover letter along with your updated CV, transcripts of degrees and three professional references by email directly to [jana.jeschke@ulb.be](mailto:jana.jeschke@ulb.be). All required documents should be combined into a single PDF document titled ERC\_PhD\_First Name\_Last Name. The subject of the email: ERC\_PhD. Do not include substantive information in the body of the mail. The application deadline is 31<sup>st</sup> of July 2024.