

Postdoctoral Researcher - Bioinformatics

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), headed by Dr. Jana Jeschke, seeks a highly motivated bioinformatics postdoctoral researcher 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 dynamic, young, and international team of enthusiastic scientists to perform research for our ERC-funded EpiResist project. In this role, you will utilize, adapt, and develop cutting-edge bioinformatics tools to analyze single-cell sequencing data, investigating the role of the N6-methyladenosine (m6A) mRNA modification breast cancer heterogeneity and resistance to treatments. Your work will draw on experience with analyzing single-cell RNA sequencing, m6A sequencing (e.g. MeRIP) and CUT&Tag data. Knowledge of epitranscriptomic gene regulation and the mechanisms underlying tumor progression and therapy resistance will be of further advantage. Beyond leading the bioinformatics efforts for the EpiResist project, you will have the opportunity to support the bioinformatics analyses for other ongoing projects, develop your own research initiatives, contribute to grant writing efforts, and guide and mentor PhD students in their research activities.

Profile

We are seeking an enthusiastic and highly motivated bioinformatician with a PhD degree in bioinformatics or biomedical sciences/bioengineering with a bioinformatics major and a strong background in cancer biology and preferably epigenetics/epitranscriptomics research. The position requires knowledge and experience with bioinformatics and cancer epitranscriptomics, particularly:

- Coding in Bash, Python and/or R
- Analysis of single-cell RNA sequencing data
- Analysis of m6A sequencing data (e.g. m6A-seq, MeRIP, GLORI etc.)
- Analysis of CUT&Tag data

- Nextflow and/or Docker

The successful candidate should further have a track record of:

- Research excellence as evidenced by publications
- Managing PhD students and technicians
- Working autonomous and in collaboration
- Close interaction with wet-lab scientists and genuine interest in cancer biology
- Excellent skills in spoken and written English
- Excellent organization, time management and interpersonal skills

Funding

The position is fully funded for 3 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 1st of March 2025, but no later than May 2025.

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 and impactful science through collaboration and inclusion. Our group is proud to be part of the SAFE Labs initiative.

Application

Send your compelling cover letter along with your updated CV and three professional references by email directly to jana.jeschke@ulb.be. All required documents should be combined into a single PDF document. The subject of the email: ERC_Postdoc_First Name_Last Name. Do not include substantive information in the body of the mail. The application deadline is 15th of February 2025.