Job description
The Applied Cancer Epigenomics and Epitranscriptomics Group (www.janajeschkelab.com), headed by Dr. Jana Jeschke, seeks a highly motivated PhD student for a bioinformatics project related to the study of RNA modifications in cancer.

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 study the dysregulation of RNA modifications in cancer. Your project entails the development and implementation of innovative bioinformatics pipelines for analyzing data from state-of-the-art sequencing technologies used in mapping RNA modifications. Building these pipelines involves benchmarking and improving existing tools, as well as the creation of new tools that use machine learning technologies. You will employ the pipelines to generate comprehensive human cancer RNA modification maps for patient samples that will serve as a foundation for uncovering novel, biologically significant insights and clinically relevant features crucial to advancing our understanding of cancer and revolutionizing its management.

Profile
We are seeking a driven and enthusiastic PhD student holding a master’s degree in bioinformatics or an equivalent field, showcasing a robust foundation in sequencing data analysis, particularly within cancer and epigenetics/epitranscriptomics domains. Proficiency with one or more of the following skills will be of advantage:

- Hands-on experience in analyzing next-generation sequencing-based omics data including RNA-seq, MeRIP-seq, m6A-seq, miCLIP
- Prior experience in analyzing Oxford Nanopore direct RNA sequencing data and adeptness in RNA modification prediction
- Strong programming skills in R and/or Python
- Comfortable working within a Linux environment and skilled in Bash scripting
- Practical exposure to machine-learning methodologies
• Excellent in spoken and written English

**Funding**
The position offers full funding for one year through the (IB)2 ULB-VUB PhD Seeding Grant. Subsequent funding will be necessary and typically obtained through a PhD fellowship or project funding. The salary will be commensurate following ULB’s pay scale. The start date is flexible: earliest 1st of January 2024, but no later than March 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. All required documents should be combined into a single PDF document and named: IB2_PhD_First Name_Last Name. Do not include substantive information in the body of the mail. The application deadline is 31st of January 2024.