



## P2 PhD Positions in Bioinformatics and Computational Biology

Full time position

**Breast Cancer Translational Research Laboratory (BCTL)** 

### About the lab

The Breast Cancer Translational Research Laboratory (BCTL) is based at the Institut Jules Bordet (Université Libre de Bruxelles), Belgium's only comprehensive cancer centre. Our research group is internationally recognized for its contributions to breast cancer biology, genomics, and translational medicine.

We work at the forefront of cancer research, focusing on:

- Molecular profiling using NGS, spatial transcriptomics, and single-cell sequencing to study tumor heterogeneity, disease progression, and resistance;
- Tumor microenvironment characterization, including immune and stromal cell phenotyping;
- Multimodal data integration, combining genomic/transcriptomic, imaging, and clinical data to predict treatment response and outcomes;
- Participation in international clinical studies and translational research networks.

## Positions summary

We are offering two fully funded PhD positions for highly motivated candidates with a strong interest in bioinformatics and computational biology. The projects will explore tumor heterogeneity and its impact on treatment response and patient outcomes, through the integration of cutting-edge technologies such as single-cell and spatial transcriptomics/proteomics, alongside clinical and molecular data analysis. One position will focus on breast cancer, and the other on bladder cancer.

The successful candidate will:

- Develop and lead an independent research project aligned with the lab's focus;
- Contribute to collaborative data analyses supporting ongoing breast cancer studies;
- Engage with an interdisciplinary team of bioinformaticians, clinicians, and molecular biologists.

# Candidate profile

A Master's degree (or equivalent) in bioinformatics, computational biology, biostatistics, bioengineering, or a related field;

A genuine passion for cancer research, omics technologies, and translational medicine;

Strong motivation, intellectual curiosity, and a proactive attitude;

Excellent interpersonal and communication skills, essential for team-based scientific collaboration;

A willingness to learn new tools and methodologies and adapt to new challenges;

Fluency in English (working language of the lab); knowledge of French is a plus;

Prior experience in NGS data analysis, R/Bioconductor, and/or Linux/UNIX environments is highly desirable.

#### What we offer

A 2-year funded PhD contract (F.R.S. - FNRS Télévie), renewable for up to 2 additional years; A supportive, international, and interdisciplinary research environment; Access to cutting-edge technologies and data from real-world clinical studies; A dynamic and welcoming location in Brussels, a diverse and vibrant European capital.

## How to apply

Applications including a **letter of motivation**, an **up-to-date CV** and at least **two referees** should be sent to Prof. Christos Sotiriou (christos.sotiriou@hubruxelles.be) and Prof. Françoise Rothé (francoise.rothe@hubruxelles.be).