# PhD student
# Bio-informatician in cancer research

## The position

The lab of Translational Onco-genomics and Bioinformatics at the Department of Biomolecular Medicine (supervised by prof. dr. ir. Katleen De Preter) has a vacancy for a highly motivated researcher with expertise in bio-informatics and a keen interest in translational cancer research. More information on the team and the research focus can be found at www.crig.ugent.be/en/prof-katleen-de-preter-phd.

## The project

A new era of clinical care, so-called ***precision oncology*** is opening unprecedented potential for developing novel therapeutic strategies for cancer patients. Amongst others, liquid biopsies are now offering a great potential for non-invasive exploration of circulating tumor nucleic acids and cells thus allowing improved diagnostics, tumor follow up, study of heterogeneity etc. These new analytical tools also require bioinformatic developments towards dedicated data mining pipelines to fully exploit the clinical application for the cancer patient. The research in our team is supported by several grants focused on integrative data-analysis of DNA and RNA sequencing generated on bulk as well as single cells obtained using invasive and non-invasive tumor sampling.

## Your profile

- You have (or will obtain soon) a Master in Science (Bioinformatics, Bioengineering, Biochemistry-Biotechnology, Biomedical Sciences, Medicine, Computer Sciences) with a specialization track in bioinformatics or equivalent through experience.
- You have experience with bioinformatics programming, and scripting (e.g. R and/or Python). Experience with the analysis of sequencing data, such as (human) whole exome/genome sequencing and (single cell) RNA-sequencing, including variant calling, copy number and structural variation analysis, expression level analysis, etc is highly recommended. More specifically, knowledge about network inference is a plus.
- You have basic insight of (cancer) biology and genomics.
- You should have good communication skills, you are a team player and have strong strategic analytical problem-solving skills (creative, critical, and open-minded). You have excellent oral and written communication skills in English.

## What we offer

You will work in a multidisciplinary environment under the supervision of senior scientists in bioinformatics and molecular biology in the Department of Biomolecular Medicine and within the broader framework of the Cancer Research Institute Ghent (crig.ugent.be) where you will implement and develop (new) algorithms for genomics analysis of tumors aiming at a more precise care for the patient. We offer:

- A PhD position for at least one year (including a 6-month evaluation period) after which you will apply for a personal PhD grant with FWO, BOF, etc.,
- Participation in an exciting and rapidly evolving research area of clinically translational genomics,
- Being part of a research team operating at international level and dedicated to improving survival of patients with cancer,
- State-of-the-art technology and facilities (sequencing, single cell sequencing and manipulation, bioinformatics, molecular biology, etc),
- The opportunity to work in a dynamic and interdisciplinary academic research environment,
- Embedding within top-research teams with a broad range of expertise,
- Collaboration with and assistance of wet-lab scientists in the design, analysis and interpretation of cancer genomics data.

## Location

Medical Research Building (MRB1)
Department of Biomolecular Medicine
Center for Medical Genetics Ghent (CMGG)
Ghent University Hospital
Corneel Heymanslaan 10
B-9000 Ghent, Belgium

## How to apply

**Candidates can apply** by sending their CV and letter of motivation to katleen.depreter@ugent.be before July 15th, 2020. Top-ranked candidates will be invited for an interview (either skype or on site).