**Postdoctoral fellowship Bio-informatics**

***"Integrated cross species pediatric cancer genomics"***

**The position:**

The Speleman research team at the Center for Medical Genetics has an open position for a highly motivated **postdoctoral researcher** with expertise in bio-informatics and a keen interest in translational cancer research.

**The project:**

 We aim to apply high-end (epi-)genomic profiling of leukemia and neuroblastoma zebrafish tumor models as part of our efforts to establish cross species genomics studies to unravel perturbed regulatory networks and to uncover novel drugging opportunities. In addition, we aim to exploit the zebrafish cancer models as innovative platforms for testing novel drug combinations and use (epi-)genomic profiling as tools to unravel the underlying mechanistic basis of synergistic interactions in combination therapies.

**Your profile:**

You will work in a multidisciplinary environment under the supervision of senior scientists in bioinformatics and molecular biology in the Center for Medical Genetics (Dept. Pediatrics and Genetics) where you will implement and develop new algorithms for integrative and cross species comparative genomic analysis of zebrafish data.

* Holder of a PhD degree in bio-informatics, (medical) biology, (bio-) engineering, computer science, or related fields, obtained in the last 5 years, and a solid publication record. Candidates with prior experience in molecular and cellular biology methods, (epi)genomics technologies and standard bioinformatic skills are strongly encouraged to apply.
* Interest and experience in the use of in vivo cancer models would be an advantage.
* Candidates should be team players able to organize and coordinate multidisciplinary projects and have strong strategic analytical problem-solving skills (creative, critical, and open-minded).
* Solid experience with bioinformatics programming, databases and statistics for bioinformatics, including scripting (e.g. Perl, Python), R (incl. Bioconductor), UCSC Genome Browser, Ensembl API, etc.
* Experience with the analysis of massive amounts of sequence reads is a plus: human whole exome re-sequencing, whole-genome re-sequencing, SNP/indel calling, CNV, structural variation, RNA-seq, ChIP-seq, …
* Excellent oral and written communication skills in English
* MSc with a specialization track in bioinformatics or equivalent through experience
* General understanding of statistics
* Basic insight of (cancer)biology and genomics
* English language proficiency
* Complementary strengths: working experience in bioinformatics, with NGS data (quality control, read mapping, variant detection, de novo assembly...), with High-Performance-Computing (SGE, PBS...) and with statistical/mathematical packages (Matlab, R, SAS, SPSS...); knowledge of relational databases (MySQL...) and web servers (Apache...)

**What we offer:**

* A 3-year postdoc research position
* Participate in an exciting and rapidly evolving new research area of zebrafish genomics and cancer modeling
* Become member of a young, dynamic and enthusiastic research team with great team spirit (see www.c4cc.be/)
* Research team operating at international level and dedicated to improving survival of children with cancer

 (http://scholar.google.be/citations?user=jwLezwMAAAAJ&hl=en)

* "state-of-the-art" technology and facilities (sequencing, FACs, imaging, molecular biology, histology, bioinformatics, in vitro CRISPR modeling, in vivo mouse and zebrafish modeling).
* The opportunity to work in a dynamic and interdisciplinary academic research environment
* Embedded within a top-research teams with a broad range of expertise
* Collaborate with and assist wetlab scientists in the design, analysis and interpretation of cancer genomics data
* A defined track for postdoc coaching and career development (see postdoc community at Ghent University https://www.ugent.be/en/ghentuniv/strategic-plan/postdoc-community)
* Ghent is ranked amongst the top cities to visit, with connections to London, Amsterdam, Paris in no time and a diverse local community with a range of housing options and many opportunities for eating out, movies, sports,...etc.. (http://www.flandershouse.org/ghent-top-ten) . A diverse local community with a range of housing options and many opportunities for eating out, movies, sports,...etc..

**Location:**

Medical Research Building (MRB1)

Center for Medical Genetics Ghent (CMGG)

Ghent University Hospital

De Pintelaan 185, B-9000 Ghent, Belgium

tel +32 9 332 24 51

http://www.cmgg.be/‎

**Candidates can apply** by sending their letter of motivation, letter of recommendation, CV (including publications and IFs and a summary of past research) and contact information of 2 or 3 referees to A.DePaepe@ugent.be before August 31st, 2015. Top-ranked candidates will be invited for an interview (either skype or on site).