Scientist in Bioinformatics for a genomic medicine project

The GIGA Research Center is a multidisciplinary research group at the University of Liège aiming at developing applied genomics and proteomics research programs. The CHU Liège is a University Hospital active in all the aspects of health care, including human genetics, oncology, and microbiology. Together the GIGA Research Center and the CHU launch a genomic medicine project. The project will set up the technological, scientific and medical bases for clinical application of genomics in the fields of genetic diseases, cancer diagnosis and follow-up, and infectious diseases. The project will be performed at the GIGA center with the equipment of the GIGA Genomics platform (soon to be completed with a NovaSeq sequencer) in close collaboration with the scientists and physicians from the hospital. The program will be under the direction of Prof Vincent Bours, member of the Giga Center and Head of the Department of Human Genetics at the CHU.

For this project, the University of Liège / GIGA Center recruits a scientist in bioinformatics.

Contract

Project-based contract. A one-year contract will be offered with possible extension for at least 3 years.

Duties

- building and applying bioinformatics pipelines in Whole Genome Sequencing (WGS) ; building and applying the required bioinformatics tools for a genomic medicine activity in collaboration with the GIGA Center and the CHU
- identifying and reducing bottlenecks in NGS pipelines (computational, I/O, bandwidth bottlenecks)
- assisting the continuous improvement of NGS analyses in an accredited setting (ISO 15189)
- writing the quality insurance documentation necessary for the developed tools, in an accredited setting (ISO 15189)
- facilitating technology transfer from research to the diagnostics laboratory
- interacting with internal (GIGA) or external laboratories for bioinformatics development
- participating in the Belgian bioinformatics task force from the Genetic Centers

Qualifications and abilities

- Masters or PhD degree in bioengineering, computer science, (bio)informatics, applied physics or related field.
- Strong experience in bioinformatics applied to NGS is required, preferably in human genetics or oncology in a medical environment.
- Strong experience with Python, Perl, R and bash scripting in a Linux environment is required.
- Experience with the bioinformatic tools used for variant calling and interpretation.
- Experience with High Performance Computing (e.g. SLURM).
- Ability to organize and prioritize work duties as well as to function as a team-member.
- Ability to collaborate with the bioinformatics teams from the GIGA and the hospital, as well as with the bioinformatics teams from the other Belgian Centers.
- Ability to work with a multidisciplinary team and to interact with all the partners from the GIGA and the Hospital.
- Good written and oral communication skills.
- Language skills: fluency in English; ability to work in French and in English would be an asset.

Applications should be sent before January 20th 2017 to Prof Vincent Bours at the address: vbours@uliege.be