

PhD STUDENT ON BIOINFORMATICS FOR EPIGENOMICS

Job description:

A position is available for a highly motivated **Master student** that wishes to realise a **Ph.D thesis** at the Laboratory of Cancer Epigenetics headed by **Prof. François Fuks** (ULB-Cancer Research Center, Brussels).

The research goal will be the analysis of transcriptomic and epigenomic changes (e.g. DNA methylation, histone modifications) that arise in cancers. Particularly the analysis of next generation sequencing data concerning a novel epigenetic modification, which our lab recently investigated, will also be one of the tasks of the candidate (Delatte et al., *Science* 2016). The integrative analysis of these different biological levels of information will be one of the main challenging tasks of the candidate, together with the extraction of predictive signatures that may help to improve patient therapy.

Working environment:

The host lab is running a Next Generation Sequencing platform: *EPICS* (http://epics.ulb.be/) and is part of the ULB-Cancer Research Center (U-CRC), providing a high profile scientific environment. The candidate will join other experienced bioinformaticians working on transcriptomics and epigenomics, and in addition he/she will have to opportunity to interact with other bioinformaticians from the "Interuniversity Institute of Bioinformatics in Brussels" (http://ibsquare.be).

Profile/Starting date:

The candidate should hold a master in bioinformatics, bio-engineering, biomedical sciences or eventually in engineering or computer sciences and demonstrate proficiency in statistics and programming (e.g. R, python). Knowledge of sequencing data, genome-wide data sets (e.g. ChIP-Seq, RNA-Seq ...) or massive datasets analysis will be assets. The applicant should have good organizational skills and a taste for interdisciplinary research. The interaction with the biologists in the lab will be key for the success of this project and genuine interest for biology and clinical researches is required. A good biological background will be valuable. The position is associated to a Belgian grant funded for 4 years. Screening of applications begins immediately and continues until an outstanding candidate is selected (flexible starting date).

How to apply?

Informal enquiries, a motivation letter, a CV (including grades and ranking) and names of two referees should be sent to: Martin Bizet (mbizet@ulb.ac.be)

Lab website: http://www.ulb.ac.be/medecine/fukslab

Lab NGS platform: http://epics.ulb.be/

Selected publications:

- Van Grembergen et al *Sci Adv* 2016 - Deplus et al. *EMBO J.* 2013

- Delatte et al. *Science* 2016 - Volkmar et al. *EMBO J.* 2012

- Boumahdi et al. *Nature* 2014 - Dedeurwaerder et al. *EMBO Mol Med.*2011

- Deplus et al. *Cell Rep.* 2014 - Dedeurwaerder et al. *Epigenomics* 2011

- Dedeurwaerder et al. - Fuks F. *Nature* 2010

Briefings in Bioinformatics 2014 - Villa et al. Cancer Cell 2007

- Delatte et al. *EMBO J*. 2014 - Viré et al. *Nature* 2006