OPEN POSITION: GIGA – Cell Imaging Platform

A full-time expert in image analysis and quantification (Bioinformatician)

This expert / logistician should collaborate closely with biomedical researchers, **in collaboration with the GIGA-Cell Imaging platform**, for experimental planning: optimize their sample preparation procedures and their image acquisition protocols in order to minimize acquisition bias and artefacts and ease reproducible morphometric quantification;

Maximize the use of existing image quantification softwares (including FIJI, Imaris, Cytomine, Image J, …) by coordinating software installation, developing new adapted plug-ins, optimizing the configuration, maintenance;

Maximize the use of high-performance computing and mass storage equipment by developing software communication and user interfaces between imaging instruments (incl. whole-slide scanner, confocal microscopes, high content screening imaging system, lightsheet and epifluorescence microscopes managed by the Cell Imaging GIGA platform), computing infrastructure (grid computing and mass storage), and end-users (biomedical researchers and computer scientists developing algorithms);

Implement image format conversion tools to ease image storage and sharing;

Implement additional quantification software modules to answer specific biomedical questions;

Implement research results (new algorithms) into usable and efficient software modules;

Write protocols and documentation for end-users to describe quantification workflows, pipelines, platforms.

Organize training sessions on basic image analysis principles and software. Organize workshops

on advanced topics to foster sharing of knowledge between biomedical experts and computer scientists.

Offer daily imaging data analysis consultation and services for users of the Cell imaging GIGA platform.

Act as an interface between biomedical researchers and computer scientist researchers.

Contribute to the submission of national/international research projects that involve biomedical image quantification.

The logistician should:

Have a Master or PhD degree in Computer Engineering, Computer Science, Bioinformatics, Science or Applied Physics/Mathematics.

Have experience in image analysis/computer vision and/or machine learning/pattern recognition;

Have experience in software development and/or data management;

Have experience or strong interest in biomedical imaging and/or data management;

Experience with confocal or lightsheet microscopes is an asset.

Be creative, pragmatic, autonomous, and user and result oriented;

Have excellent interpersonal and collaborative skills to collaborate both with biomedical researchers and computer scientist researchers; English is mandatory, French is an asset.

The logistician will act as an interface between all groups. The logistician will have direct access and contact to the GIGA-Cell Imaging Platform (Dr. Sandra Ormenese) and the GIGA-Immunohistochemistry platform (Dr. Chantal Humblet).

Experience with epifluorescence, confocal or lightsheet microscopes is an asset.

The laboratory belongs to the GIGA Research Institute (Grappe Interdisciplinaire de Génoprotéomique Appliquée, http://www.giga.ulg.ac.be/, about 600 researchers). The GIGA is a unique research center offering up-to-date and centralized technological platforms (Cell imaging and immunohistochemistry platforms, flow cytometry, viral vectors production platform, animal facilities (Mouse and Zebrafish), genomics and proteomics platforms, see http://www.giga.ulg.ac.be/cms/c_5594/fr/plateformes

For further information regarding the equipment available in the GIGA- Imaging platform, please check http://www.giga.ulg.ac.be/cms/c_18283/fr/imaging-accueil-services

A Lightsheet and an Intravital multiphoton microscopes will be also available in the GIGA-Imaging platform from July 2017.

Some key figures of the GIGA Cell Imaging Platform in 2016 (see 2016 annual report http://www.giga.ulg.ac.be/books/ra2016/):

- 1633 confocal analyses
- 40 confocal time-lapse acquisitions
- 422 epifluorescence analyses
- 8 high content screening analyses

- 19 laser microdissections
- 245 users
- 70 research groups

The GIGA/ULg computing infrastructure is composed of a grid computing environment (~500 computing nodes/3500 cores) and a mass storage facility (~1000TB).

Successful candidate will be offered a full time contract. If this opportunity is matching your profile and you are looking for a new challenge, please do not hesitate to forward your CV with a cover note detailing your experience to: Sandra Ormenese (Sandra.Ormenese@ulg.ac.be) and Sandrina Evrard (rh.giga@ulg.ac.be) , with the subject heading « GIGA Imaging Platform / Bioinformatician »