Bioinformatics Engineer

Keywords: Bioinformatics, Data Analysis, Networks

The Mathematics and Algorithms for Systems Biology (MABioS [1]) group in the Marseille Institute of Mathematics (I2M, CNRS, Aix-Marseille University), has an opening position for a bioinformatics engineer. The successful applicant will work in an interdisciplinary team of biologists, bioinformaticians and computer scientists, involved in the development of network approaches to better understand a specific type of leukaemia: T-cell Acute Lymphoblastic Leukaemia (T-ALL), which is a malignant proliferation of T lymphocyte precursors.

Project

This project, funded by the french National Cancer Institute (INCa), is carried out in collaboration between I2M and the Marseille Cancer Research Center (CRCM). It aims to provide a holistic view of each T-ALL case and to decipher oncogenic pathways, clonal evolution and associated resistance mechanisms. In fine, this project could contribute to improve the therapeutic management of T-ALL patients.

The engineer to be recruited will have to develop algorithms to integrate omics data using molecular interaction networks and random walks approaches. One of the first goals is to identify 'silent players', i.e. the genes that are important in T-ALL, but which are not systematically mutated or differentially expressed.

Qualifications

- Master in Bioinformatics, Computational Biology, or related fields
- Skills in manipulation and analysis of biological -omics data
- Proficiency in programming (R, Python, bash) in a Linux environment
- Experience in bioinformatics workflows and package development would be a plus
- Previous knowledge for network biology and graph-oriented problems would also be a plus
- Expected to work collaboratively with other team members

Offer

Fully-funded 34 months Study Engineer (*Ingénieur d'Études)* position in Marseille. The starting date is scheduled in April or May 2024. The salary will be based on experience (see [2]). The I2M is located on the Luminy campus (Faculty of Sciences).

Application can be sent directly to *laurent.tichit@univ-amu.fr*. Please make sure your application includes a cover letter, a detailed CV and the contact information of 2 references.

[1] https://mabios.math.cnrs.fr/news.html
[2] https://www.emploi-collectivites.fr/grille-indiciaire-etat-ingenieur-etudes-ministere-charge-enseignement-superieur/1/6580.htm