

Master project 2020-2021

Personal Information

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Group	Bioinformatics Unit

Project

Computational genomics

Project Title:

Design and development of bioinformatic tools for precision medicine

Keywords:

Precision medicine, Computational Genomics, data integration, Report automatization

Summary:

Genomcore/Made of Genes (<https://genomcore.com>, <https://madeofgenes.com>) is a company founded in 2015 with the objective to allow the effective implementation of precision medicine in healthcare. We developed a unique B2B technological framework designed to manage large volumes of personal, health-related, highly sensitive biomedical and health data aimed to diagnosis laboratories and healthcare providers. We also feature a packetized B2C/B2B2C personalized healthcare solution that combines genomic and metabolic analysis in a single test. Our innovative solutions are recognized worldwide through different international awards, such as MIT Technology Review Innovators Under 35, Dubai Future Accelerators or Seal of Excellence of the European Commission. If you want to join a unique fast-growing, high-potential, trend-making company, this is your chance. We are looking for a talented and motivated Bioinformatics Student to collaborate with our bioinformatics team in the research, design and development of new bioinformatic tools for precision medicine. The project will entail processing, quality and annotation pipelines for omics datasets. Data visualization and report generation for prevention, diagnostic or treatment recommendations. The project will allow the student to participate and learn from a real setting and a selection of activities aimed to complete the researchers' career development. The position will be located in our Esplugues de Llobregat (Barcelona) offices.

Expected skills::

1) Experience working in Linux environments (Unix tools, Bash scripting, SSH, Unix filesystem...). 2) Experience in scripting language (Python is preferred). 3) Knowledge of general genetics and genetic inheritance. 4) Academic training in both Computer Sciences and Life Sciences (ie, Degree + Master in course). 5) Knowledge of tools for manipulating NGS data (BWA, Samtools, GATK, etc). 6) Experience using public databases (ClinVar, dbSNP, Reactome, OMIM, GO, PharmGKB, etc) will be valued. 7) Fluency in spoken and written English. 8) Fluency in Spanish or Catalan is a plus. Knowledge of other languages is also valued.

Possibility of funding::

Yes

Possible continuity with PhD: :

To be discussed

Comments:

Gross academic aid of 300€ / month
