Looking for a highly motivated Bioinformatician to join our Team in IRCCS Casa Sollievo della Sofferenza, Rome

Job Description

The bioinformatics laboratory and the Institute for Stem Cell Biology, Regenerative Medicine and Innovative Therapies (ISBReMIT) at the IRCCS Casa Sollievo della Sofferenza - Mendel (Rome) are looking for one Bioinformatician/Computational biologist.

The candidate will be involved in two main projects:

- (30%) Design of potential peptide competitors of the Notch dimer
- (70%) Analysis of leukemic cellular subpopulations through scRNA-Seq and RNA-Seq with the aim to identify surface proteins in tumor cells to be targeted by antibodies/CAR. A second stage of the project will include the computational identification/selection of potential single-chain variable fragment (scFv) of human antibodies against specific surface markers.

Computational skills that will be positively evaluated if owned include, but are not limited to:

- Knowledge of high-throughput NGS pipelines for variant calling, functional annotation and expression profiling (WGS, WES, RNA-Seq and scRNA-Seq data analysis)
- Python and R languages
- Data-dimensionality reduction algorithms (PCA,tSNE, UMAP and Monoclo)
- Statistical modeling
- Machine learning

The correct cultural background is in Bioinformatics, Biostatistics or Computational Biology with strong statistical background.

Good knowledge of Scientific English will be positively evaluated for this position, together with good presentation and teamwork skills.

A CV with one professional reference, details on educational background and on the statistical and/or bioinformatic and/or data analysis skills and experience should be sent by email for a preliminary selection to: **Tommaso Mazza**: t.mazza@css-mendel.it and **Vincenzo Giambra**: v.giambra@operapadrepio.it

Context

Casa Sollievo della Sofferenza is an Institute for hospitalization, care, and scientific research located in San Giovanni Rotondo, Italy. It integrates clinical assistance (with inpatient and outpatient facilities) and research. It has an affiliate institute, CSS-Mendel, located in Rome. Between the two

sites, it employs over 150 researchers who focus on genetic diseases, innovative therapies and regenerative medicine. The Institute is equipped with state of the art genomics technology (2 Illumina MiSeq and one NextSeq 500, ThermoFisher Ion Proton and Ion S5, Agilent microarray platforms) as well as two dedicated high-performance computing clusters, a non-conventional workstation of GPUs and a short- and long-term storage.

Applications

Candidates should send:

- a cover letter explaining the role they would like to undertake within the Center, even if it is not listed in this job adv, stating clearly why they would be a good fit to the proposed role, and what they would bring to the Institute in terms of expertise, ideas, talent;

- a CV including a list of publications;

- List of referees.

Start date

Immediate

Type of contract and duration

Co.Co.Pro. 1 year (renewable)

Funding Source

Institutional

Salary

15.000€ – 27.000€ gross salary (depending on experience)