ISTITUTO ITALIANO
DI TECNOLOGIA
3D CHROMATIN CONFORMATION
AND RNA GENOMICS

Bioinformatics position at IIT - 3D Chromatin Architecture and non-coding RNAs

A fully supported postdoc position is immediately available at the Italian Institute of Technology in Genova in the laboratory of Dr. Dafne Campigli Di Giammartino.
The successful candidate will work in a multi-disciplinary team and will analyze in-house produced multi-omics data aiming to understand the role of non-coding RNAs in mediating 3D chromatin architecture in embryonic stem cells and cancer stem cell models.

In our group we aim to understand how non-coding elements (DNA/RNA) and their epigenetic/epitranscriptomic modifications regulate 3D genome architecture and gene expression. To address this question, we use cutting-edge chromatin conformation assays such as Hi-C, Hi-ChIP and Pore-C in conjunction with other -omics techniques (e.g. ChIP-seq, scRNA-seq etc.) and in combination with CRISPR-based genetic and epigenetic engineering tools.

As a member of the FANTOM6 consortium, postdocs in our lab will have the opportunity to attend and actively participate to the consortium meetings and will have ample opportunities for collaborations within the IIT and with extramural institutions to implement new workflows.

Lab website https://3d-chrom.iit.it/

Main responsibilities

- Analysis of next-generation sequencing data and integration of multi-omics data produced by different methods using computational tools and pipelines
- Work closely with experimental biologists and bioinformaticians to plan experiments and confirm computational results
- Interpretation of data and generation of figures for grant proposals, presentations, and publications in peer-reviewed journals

Essential requirements

- A PhD in Bioinformatics, Computational Biology, Computer Science or related field
- Knowledge of programming languages such as R and Phyton
- Knowledge of statistical methods applied to biosciences
- Proven ability to analyze next-generation sequencing data such as RNA-seq, ChIP-seq etc (previous experience in analysis of chromatin conformation data such as Hi-C will be considered a plus)
- Ability to work and think independently with a pro-active attitude, prone to team building and problem solving
- Good publication record
- Good command of spoken and written English

Application's deadline and link

- June 22nd 2024
- https://iit.taleo.net/careersection/ex/jobdetail.ftl?lang=en&job=23000027

Please submit your application to the above link including:

1. A detailed CV
2. Contact of at least 2 references (email and phone number)
3. A cover letter addressed to Dr Dafne Campigli Di Giammartino outlining motivation, experience and qualifications

For more information, please contact dafne.campigli@iit.it