OSPEDALE
SAN RAFFAELE

Division of Genetics and Cell Biology
San Raffaele Scientific Institute

Postdoc

Leukemia research

A postdoctoral position is open in the Gabellini laboratory at San Raffaele Scientific Institute to characterize the molecular pathogenesis of acute lymphoblastic leukemia and test novel therapeutic approaches. The project will integrate CRISPR and drug screens with single-cell RNA-seq in cellular and animal models of leukemia.

Duties and Responsibilities:

- Design and perform *in vitro* experiments using leukemia cell lines and primary cells
- Conduct *in vivo* studies with PDX models of leukemia
- Manipulate gene expression (overexpression, knockdown, fine regulation strategies)
- Analyze molecular and cellular pathways related to cell adhesion, cell migration, proliferation, and apoptosis
- Perform CRISPR KO dropout screens
- Perform combinatorial drug screens
- Perform transcriptomic and molecular data analysis
- Contribute to manuscript preparation and dissemination of results
- Maintain accurate and complete records of all findings.

Required Qualifications/Skills

- PhD in Biology, Molecular Biology, Biomedical Sciences, or related fields
- Experience with cellular and animal models of leukemia, molecular biology techniques, and gene expression analysis
- Ability to work independently and as part of a team
- Creativity in problem solving, a flexible approach to tasks and adaptability

Desirable Skills

- Strong background in leukemia and/or CRISPR screens
- Experience with omics data analysis
- Familiarity with cell migration/adhesion assays
- Experience with protocols optimization
- Prior experience with using an electronic lab notebook

Place of employment and work
San Raffaele is an international institute with a strong focus on biomedical research, offering an exceptional research environment and cutting-edge platforms. It is located in Milan, a cosmopolitan city, which has been ranked number one for quality of life in Italy: https://www.yesmilano.it/en.

The team
We are interested in understanding the mechanisms and dynamics of gene expression regulation in physiological and disease states. We use in vitro and in vivo approaches to identify RNA profiles, chromatin states, transcription factor binding sites and epigenomes defining functional gene “hubs” and decision points that dynamically coordinate gene programming.

Terms of salary and employment
A 12-month renewable contract will be established. A competitive salary commensurate with the experience and qualifications will be offered to the successful candidate. Operating language in the laboratory is English. Applications including a cover letter, curriculum vitae and the names of (at least) two referees should be sent to: Davide Gabellini at **gabellini.davide@hsr.it**

For more information about the laboratory:

https://research.hsr.it/en/divisions/genetics-and-cell-biology/gene-expression-regulation.html

https://pubmed.ncbi.nlm.nih.gov/?term=davide+gabellini&sort=pubdate