

Postdoc and research assistant positions in Gabriele lab (SR-Tiget, Milan)

A postgraduate research assistant and a postdoc position are available from Summer 2025 in the group of "3D genome dynamics in differentiation and pathology", led by Michele Gabriele.

<u>The lab:</u> The research focuses on understanding the molecular mechanisms responsible for gene expression regulation through enhancer-promoter interactions and the 3D genome architecture, whose dysregulation leads to various pathologies. We employ a **multidisciplinary** approach combining super-resolution live cell imaging, 3D genome architecture and epigenomics, computational approaches, and cell differentiation.

<u>The Institute:</u> SR-Tiget was created in 1996 as a joint venture between Fondazione Telethon and Ospedale San Raffaele (OSR), with the mission to perform cutting-edge research on gene and cell therapy and to translate its results into therapeutic advances for genetic diseases. The Institute is located within the OSR campus, which includes a large multi-disciplinary research hospital, a biomedical research center, a university, and also hosts several biotechnology companies.

<u>The position:</u> We are looking for a motivated postdoc and/or research assistant to study chromatin dynamics and biophysics, enhancer-promoter interactions (EPIs), and the role of chromatin regulators in differentiation. We aim to understand how gene expression is established and maintained in neurodevelopment as a consequence of EPIs, and the direct role of chromatin regulators, whose dysregulation causes pathologies such as neurodevelopmental disorders and cancer. For more details: https://www.gabrielelab.com/research

Main tasks

- Neuronal differentiation starting from mESC and iPSCs and genome engineering
- Perform experiments of 3D genome architecture, epigenomics, and single-cell
- Perform super-resolution live cell microscopy experiments
- Analyze and/or visualize microscopy data, functional genomics, and polymer simulations
- Responsibilities will match seniority (e.g., mentorship for trainees)

Qualifications and skills

- <u>Postdoc:</u> PhD and documented experience (e.g., papers, preprints, GitHub) are required.
- Research Assistant: a master's degree is required.
- A background in biological engineering, physics, chromatin biology, or neuroscience is preferred
- High motivation to work in a multidisciplinary environment and enthusiasm for learning
- Previous experience with the used methodologies is preferred, but not required
- Friendly, collaborative, pro-active mindset with excellent oral and written English

We offer

- Competitive salary depending on qualifications and experience
- A dynamic environment and the chance of learning multidisciplinary skills.
- Training in an excellent international environment and direct mentorship

Applications, including a CV and the names and contact details of at least two referees, should be sent by email to Gabriele_lab@pm.me. Evaluation of applications/interviews will begin immediately and continue until the position is filled.





