



Università degli Studi di Torino  
**DIPARTIMENTO di SCIENZE DELLA VITA E BIOLOGIA DEI SISTEMI**

Research focus of the Lab / Research projects:

Professor Francesco Neri's research group focuses on the functional characterization of epigenetic changes/ alterations that occur in somatic stem cells during aging and lead to cancer. Neri's group has identified several important epigenetic mechanisms occurring in mammalian cell nuclei, including characterization of DNA promoter methylation dynamics during embryonic stem cell maintenance, early development, in adult tissues, and during cancer development. Emerging evidence indicates that epigenetic alterations (epimutations) may define pre-cancerous state in different somatic stem cells and favour cancer initiation. However, how these epimutations are accumulated and how they facilitate cell transformation is still not fully understood. We perform studies in several model systems including intestinal stem cells, both mouse and human. We use cutting-edge technologies for isolation of primary cells, in vitro organoids culture or in vivo systems, generation of stable cell lines, genome-wide experiments (e.g. RNA-seq, ChIP-seq, ATAC-seq, Bisulfite-seq, and single-cell omics).

Profile of the candidate/Requirements:

Creative, self-motivated candidates with an interest in developing an independent research program. Requirements include:

- Master Degree and/or PhD in Biology, Chemistry, Bioinformatics or relevant field
- high self-motivation with a genuine interest in epigenetics and/or cancer
- good team-working capabilities
- know-how in molecular biology and genome-wide experiments are welcome
- experience in cell culture, epigenetics, bioinformatics is welcome

We offer:

- a position in a well-equipped research group of a high-quality research institute, which provides several state-of-the-art facilities. Our laboratory is located in the Molecular Biotechnology Center, an interdisciplinary base for innovative research.
- a position integrated within the University of Turin that promotes interdisciplinary collaborations.
- a contract which is limited to one year initially, but extendible to up 4 years. Possibility of PhD studentship.

Candidates are encouraged to send their application (in English) including CV, list of publications, a short description of research experience and interests, and the contact details of two references by the **30.02.2022** per e-mail to **francesco.neri@unito.it**