



Post-doc position: Multiscale dynamics of the tumor-suppressor p53 and their role in controlling cancer cell fate.

A two-year position is available in the Imaging of Gene Regulation lab of San Raffaele Scientific Institute. The project – funded by the Italian Association for Cancer Research, AIRC – aims at characterizing how the dynamics of the tumor suppressor p53 at multiple scales determine the cancer cell response to genotoxic therapies.

The selected candidate will use cutting edge technologies, ranging from in-house developed single molecule imaging approaches to gene editing and -omics to determine how p53 recruitment to nuclear substructures can in turn modulate its activity to control cell fate.

The candidate

We are seeking enthusiastic candidates – passionate about basic research and interested in working in a highly multidisciplinary, diverse and international environment, with a strong focus on quantitative biology. Previous experience in advanced imaging approaches will be welcome, but it is not needed. The post-doctoral fellow will be exposed to wet-lab and computational/data-analysis, so previous exposure to both aspects will be considered a plus.

Qualifications:

- PhD in Biology, Biotechnology, Biophysics, Bioengineering, Computational Biology, and related fields.
- Motivation.
- Team-working attitude.
- Problem solving skills; independent thinking.
- Fluency in written and spoken English.

The lab

The Imaging of Gene Regulation lab develops and applies innovative microscopy approaches to dissect in a quantitative manner how gene expression is controlled in living cells. In particular, we have developed intranuclear single molecule tracking approaches that over the last decade have allowed to characterize how transcription factors search for their targets in living cells, and what is the relationship between the factors kinetics and their activity. The lab is located within the San Raffaele Research Institute, the leading research hospital in Italy, hosting a wide research program that spans from basic to translational and clinical research, and state-of-the art facilities and infrastructures.

Interested candidates should submit their application – with a CV, a letter of motivation and contact information of two referees, to Prof. Davide Mazza, mazza.davide@hsr.it.