

Diego Dibitetto group

PhD candidate position

Milan, February 2024

Job description

The Molecular Oncology and DNA Damage Response Laboratory at the Istituto di Ricerche Farmacologiche Mario Negri IRCCS (Milan, Italy) uses different preclinical models to study the molecular mechanisms at the basis of chemotherapy resistance in breast and ovarian cancer.

We are looking for a highly motivated researcher to be involved in a PhD program. The project is funded by a recently awarded Start-Up grant from AIRC (Rif. 29029) and will focus on the biology of DNA damage signalling kinases. The selected candidate will employ cutting edge genomic and proteomic techniques to profile the role of DNA-PKcs and ATM kinases in the maintenance of genome stability in response to chemotherapy, with a special focus on PARP inhibitors. Despite the initial clinical success of PARP inhibitors, particularly in cancer patients with mutations in *BRCA1/2* genes, therapy resistance still represents a major clinical challenge. Results from this project will have ground-breaking clinical implications and may help in the future to eradicate tumors in patients with acquired therapy resistance.

The successful candidate will be primarily involved in the following research tasks:

- Mammalian cell culture;
- Molecular biology, such as PCR, qPCR, ChIP, NGS library preparation;
- Kinase target identification by mass spectrometry;
- Cell editing by CRISPR-Cas9 technology;
- Recording all the results and managing the data analysis;
- Interacting and discussing research with the collaborators;
- Presenting results to relevant scientific meetings;

At the hosting institution, the successful candidate will work in a highly dynamic environment closely with other labs with a shared focus on genome stability and therapy resistance. Moreover, (s)he will be part of an international scientific network with the unique opportunity to monthly share data with partner research groups in Switzerland, the Netherlands, and Czech Republic.

Job requirement/s:

- Master degree in scientific fields (Master Degree in Biology Science, Biotechnology or equivalents);
- Basic experience in cellular and molecular techniques;
- Good knowledge of English;
- Ability to work and collaborate in a team;
- Ability to work in a multi-cultural environment with respect and sensitivity for diversity.

Interested in the position?

Please send an email to Diego.Dibitetto@marionegri.it. Your application should include a motivation letter stating your research interests, your CV, and the name of two reference contacts.