

Self-renewal mechanisms of intestinal stem cells and implications for cancer biology

Master's Thesis Opportunity – European Institute of Oncology IEO, Milan

A one-year Master's thesis position is available in the laboratory of *Dr. Marina Mapelli* at the European Institute of Oncology (IEO) in Milan. For further information please visit: https://www.ieo.it/en/RESEARCH/People/Researchers/Mapelli-Marina/

The Mapelli group investigates the molecular mechanisms of *Wnt signaling propagation in intestinal stem cells*. In adult organisms, the proper regulation of intestinal stem cell self-renewal is essential for maintaining intestinal epithelial homeostasis and regeneration. Consistently, deregulation of these processes is a key driver of intestinal tumorigenesis. The project is funded by the Italian Association for Cancer Research (AIRC).

The proposed thesis project will focus on the characterization of *genome integrity maintenance* mechanisms under both physiological and oncogenic conditions, using a combination of biochemical, transcriptional, proteomic, and quantitative cell biology approaches.

We are seeking a highly motivated and enthusiastic Master's student with a strong interest in understanding the molecular mechanisms underlying biological processes. Applicants with an interest in cell biology, genomics and structural biology techniques - including cryo-electron microscopy - are particularly encouraged to apply.

The Department of Experimental Oncology at IEO provides access to state-of-the-art facilities for biochemistry, genomics, proteomics, and advanced imaging. Students will also benefit from a collaborative, international, and scientifically stimulating environment within the IFOM-IEO Campus.

How to apply: Interested candidates should contact Dr. Marina Mapelli directly by sending a brief statement of motivation and an academic CV to marina.mapelli@ieo.it

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