



Two research fellowships

Alternative splicing regulation of cancer vasculature

Two research fellowships are open in the Ghigna laboratory at the Institute of Molecular Genetics Luigi Luca Cavalli-Sforza of the National Research Council (IGM-CNR). We have an extensive experience in the study of post-transcriptional regulation of gene expression and how it impinges on key physiological and pathological conditions, including cancer. In this respect, we demonstrated how changes in expression/activity of splicing factors influence the alternative splicing (AS) of cancer-associated genes and promote tumor progression.

Currently, we are investigating the biological relevance of AS during angiogenesis. The main goal of this research is to characterize pathways that play pivotal role(s) for vascular development and function in health and disease and to identify new AS variants selectively expressed by tumor endothelial cells (ECs) as a source of new diagnostic, prognostic and therapeutic tools for human cancer. In this regard, we are investigating the use of morpholino antisense oligos targeting tumor ECs restricted splicing variants for the development of new anti-cancer therapeutic strategies. The projects, covered by PNRR funding, will integrate genome-wide and functional approaches in cellular and animal models of cancer.

Qualification

We are searching for highly motivated, skilled and career-oriented research fellows with research experience in molecular, cellular biology and bioinformatics. Candidates possessing excellent analytical, communication and organizational skills must be able to work independently as well as with interdisciplinary teams. Master degree in the area of Life or Biomedical Sciences, or a related discipline is required.

Place of employment and work

The Institute of Molecular Genetics Luigi Luca Cavalli-Sforza of the National Research Council (IGM-CNR) is an international institute with a strong focus on the understanding of the molecular mechanisms involved in various pathological conditions. IGM-CNR by offering an exceptional research environment provides a scientific and educational environment of the highest standard and is fully equipped to undertake modern biochemistry, molecular and cellular biology research. The IGM research activity is complemented by the training of young researchers thanks to its close interactions with the University of Pavia.

Informal enquiries and applications can be sent to Dr. **Claudia Ghigna** at claudia.ghigna@igm.cnr.it

For more information about the laboratory:

<https://www.igm.cnr.it/en/institute/organization/staff/ghigna-claudia/>

Complete list of Published Works:

<https://pubmed.ncbi.nlm.nih.gov/?term=ghigna+c&sort=date>