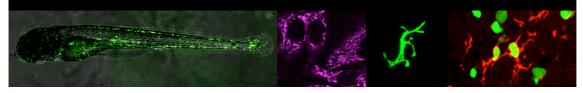


Pre- and post-doctoral positions available in the laboratory of Dr. Marina Mione to study the impact of the RNA sensing pathway in cancer progression.



## About the project:

We have discovered that cancers increase the production/accumulation of abnormal ncRNA, which activate the RNA sensing pathway in cells of the tumor microenvironment through extracellular vesicles (tEVs), (Biagini et al., submitted). The project, funded by AIRC (www.airc.it/english), aims at characterizing the effects of the RNA sensing pathway in tumors and associated immune cells using cell type specific approaches. We will identify the endogenous RNA species involved in signaling to the RNA sensing pathway, and the biogenesis of these ncRNA cargos in tEVs. We have fully funded post-doc and pre-doc/PhD positions to investigate the roles of the RNA sensing pathway in tumor progression and metastasis formation and identify drugs modulating this process.

## About the team:

Our lab (http://www.cibio.unitn.it/465/laboratory-of-experimental-cancer-biology) is dedicated to the study of cancer cell biology, using zebrafish genetic models of cancer, complemented with human cancer cell models and patient samples. The zebrafish is an excellent vertebrate model for longitudinal studies of cancer progression, and allows for high resolution live imaging of cell biology events and high throughput genetic and chemical screens. In the last year we have developed tools for the study of the RNA sensing pathway in zebrafish [PMID: 33159854], performed precise genetic targeting of oncogenes and tumor suppressors in vivo [PMID: 33576334] and set up a fast and reliable method for the isolation of tEVs from zebrafish tumors (Biagini et al., submitted). Our lab is located in a very lively scientific environment, collaborating with many internal groups working on different aspects of cancer, engaged in several international collaborations and supported by "state-of-the-art" core facilities (https://www.cibio.unitn.it/).

## About the candidates:

The pre-doctoral position should prepare for a fully funded PhD candidacy at the doctoral school of Biomolecular Sciences (<u>https://www.unitn.it/drbs/17/phd-program</u>) and will be available to candidates who have obtained a Master degree in Biomedical Studies less than one year ago (from March 2021 onwards).

The post-doctoral position is available immediately to candidates holding a PhD or expected to get one in the next few months, initially for 1 year, renewable for an additional 2 years. The ideal candidate has experience in molecular biology, in vivo live imaging and/or analysis of NGS data. Experience in zebrafish and chemical screens are a plus, while enthusiasm for cancer biology is a must. A salary based on the Academic Italian guideline system and the experience/expertise of the successful candidate will be provided. Interested applicants should send a motivation letter, a detailed CV and the letter(s) of support of one (pre-doc) or two (post-doc) referees to: mariacaterina.mione@unitn.it