



The group of Dr. Roberto Ronca at the University of Brescia (Italy) is evaluating expression of interest from foreign applicants to participate in the forthcoming PhD program.

The research program will be carried out in co-mentorship with Dr. Andrei Turtoi, Tumor Microenvironment and Resistance to Treatment Lab at the IRCM-INSERM U1194 and University of Montpellier, France.

The PhD candidate entering the PhD program will be enrolled in the Doctoral Schools of both the University of Brescia (Italy) and the University of Montpellier (France).

Main topic: Anti-angiogenic/anti-tumor functions of new soluble stromal proteins

Tumor microenvironment represents a complex and heterogeneous tissue mainly composed of cancer associated fibroblasts, endothelial cells and immune infiltrate. Microenvironment components, both individually and collectively, are well known contributors to the different steps of tumor progression. Unexpectedly, recent studies have shown that these host cells may also prevent rather than promote tumor development. This apparent dual role of tumor stroma on tumor progression remains poorly understood and may represent an unexplored avenue for the development of better anti-cancer treatments.

Starting from an original proteomic study of the extracellular matrix components of human tumors, we have identified new proteins that may play a relevant role in modulating angiogenesis and tumor growth in different types of cancer. Aim of this PhD program is to identify the role of these proteins and the mechanisms/interactions that mediate their “tumor-regulatory” function and to exploit these findings for the development of new prognostic and therapeutic tools.

Candidate Requirements

We are looking for very motivated and enthusiastic students, graduated outside Italy, with an excellent academic track record and a genuine interest in cancer research, ideally evidenced by his/her master thesis.

Please email your expression of interest (explaining your motivation to join the proposed project) accompanied by a CV, transcript of records and master thesis to Roberto Ronca (roberto.ronca@unibs.it). Selected candidates will be invited to apply to the forthcoming PhD program of the University of Brescia for the final selection exam.

1. Ronca R, et al: Long-Pentraxin 3 Derivative as a Small-Molecule FGF Trap for Cancer Therapy. *Cancer Cell* 28:225-239, 2015.
2. Maris P, et al. Asporin is a fibroblast-derived TGF- β inhibitor and a tumor suppressor associated with good prognosis in breast cancer. *PLOS Medicine* 12(9): e1001871, 2015.
3. Turtoi A, et al. Organized proteomic heterogeneity in colorectal cancer liver metastases and implications for therapies. *Hepatology* 59 (3): 924-34. 2014.
4. Ronca R, et al: Long pentraxin-3 as an epithelial-stromal fibroblast growth factor-targeting inhibitor in prostate cancer. *J Pathol* 230:228-238, 2013.

