# Open positions at the Department of Immunology and Inflammation Humanitas Research Hospital

The Humanitas Research Hospital (http://www.humanitas-research.org/) hosts research labs investigating the role of the immune system in different human diseases, including cancer. The Department of Immunology and Inflammation has recently been granted an AIRC 5x1000 grant to develop a research project, coordinated by Alberto Mantovani, aimed at developing innovative biomarkers and therapeutic strategies related to tumor invasion, spreading and metastasis. The project focuses on deconvolution of the complexity of immune cells in the tumor microenvironment, taking into account the key role of the organ immunological context, and capitalizes on original molecules and therapeutic candidate targets, advanced technologies for single cell-level analysis of the tumor-associated immune infiltrate, and clinical samples of primary tumors and synchronous/metachronous metastasis. The project is primarily focused on colorectal and pancreatic tumors.

We are looking for candidates for the following positions:

- **1 predoctorate position** for a motivated student aiming at participating to the selection in the Humanitas University PhD program to enter the PhD in January 2020. Availability to work with animal models will be essential for the position. The young fellow, graduated preferentially in biology, biotechnology, or equivalent, will investigate the recruitment and functional phenotype of tumor-associated and circulating immune cells as well as immune checkpoint-related markers.
  Supervisor: Raffaella Bonecchi

- **1 predoctorate position** for a motivated student aiming at participating to the selection in the Humanitas University PhD program to enter the PhD in January 2020. The young fellow, graduated preferentially in biology, biotechnology, or equivalent, will be involved in preclinical cancer and metastasis studies. The focus will be on IL-1R8, a member of the IL-1 receptor family with negative regulatory functions and acting as a checkpoint molecule in NK cells. The aim of the project is to extend the knowledge on the role of IL-1R8 in the functional activity of lymphocytes and to develop the inhibition of this molecule as a therapeutic target in preclinical cancer models.
  Supervisor: Cecilia Garlanda

- **1 postdoc position** for a candidate with a well-established expertise in animal models. The enrolled fellow will be involved in the activities related to the identification and characterization of new molecules involved in macrophage polarization. In particular, he/she will develop models to investigate their role in tumor invasion and will focus on their therapeutic targeting.
  Supervisor: Barbara Bottazzi

- **1 bioinformatician** who will join the Bioinformatics Facility at Humanitas Research Hospital to analyze total RNA-seq and single cell RNA-seq experiments performed on mouse tumor models and human samples, and bioinformatics analysis of public datasets (e.g. pan-cancer Atlas).
  Supervisors: Massimo Locati

Applicants should submit a full CV with detailed description of her/his background and expertise together with contacts for recommendations.

Enquires should be sent to Diliana Spada (diliana.spada@humanitasresearch.it), indicating "Candidature to 5x1000 positions" in the mail object.