

Junior fellow in Cancer Immunology – Lugli Lab Humanitas Clinical and Research Center, Milan, Italy

The Laboratory of Translational Immunology is currently seeking a highly motivated junior scientist at the postbac (post "laurea") level to study the cellular and molecular mechanisms of memory T cell differentiation in humans and its role in immune reconstitution and antitumor immune responses. The position is initially available for 1 year, with the subsequent possibility to enter in the institutional 3-year PhD program. The Laboratory of Translational Immunology works in close contact with the Humanitas Research Hospital and the Humanitas Cancer Center to study T cell responses in individuals with cancer. The group is specialized in the identification and characterization of novel lymphocyte subsets by using high-dimensional single cell analysis (30-parameter polychromatic flow cytometry/cell sorting and single cell RNA sequencing) and advanced bioinformatics. Full access to Humanitas facilities (flow cytometry, genomics, microscopy, BSL-3, SPF mouse house) will be granted.

The optimal candidate would have a degree in medicine, biology, biotechnology or related disciplines, preferably 1-2 year laboratory training in immunology and basic experience in cell-based and molecular assays. Fluent English is required.

To apply, please send a motivation letter, your CV (no European format), and the contact information (or letters of recommendation) of at least two referees to Dr. Enrico Lugli (enrico.lugli@humanitasresearch.it).

Selected references

- 1. De Biasi, S. *et al.* Circulating mucosal-associated invariant T cells identify patients responding to anti-PD-1 therapy. *Nature communications* **12**, 1669 (2021).
- 2. Galletti, G. *et al.* Two subsets of stem-like CD8(+) memory T cell progenitors with distinct fate commitments in humans. *Nat. Immunol.* **21**, 1552-1562 (2020).
- 3. Alvisi, G. *et al.* IRF4 instructs effector Treg differentiation and immune suppression in human cancer. *J. Clin. Invest.* **130**, 3137-3150 (2020).
- Brummelman, J. *et al.* Development, application and computational analysis of highdimensional fluorescent antibody panels for single-cell flow cytometry. *Nat. Protoc.* 14, 1946-1969 (2019).
- Brummelman, J. *et al.* High-dimensional single cell analysis identifies stem-like cytotoxic CD8(+) T cells infiltrating human tumors. *J. Exp. Med.* 215, 2520-2535 (2018).