HUMANITAS
RESEARCH HOSPITAL

Research Laboratory Technician-cellular immunology
Humanitas Clinical and Research Center, Milan, Italy

The Laboratory of Translational Immunology is currently seeking a highly motivated and skilled research technician to assist scientists in their laboratory procedures. The position is immediately available and is funded for up to 4 years and may become permanent under special circumstances. The selected candidate will work in close contact with the Humanitas Research Hospital and Cancer Center to study T cell responses in individuals with cancer undergoing an experimental vaccination protocol in combination with immune checkpoint blockade. The group is specialized 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 biology, biotechnology or related disciplines, at least 1-2 year training in an immunology laboratory, exceptional organization skills and previous experience in basic flow cytometry or molecular biology, Fluent English (written and spoken) is required. Duties of the job include, but are not limited to:

- assisting scientists in daily laboratory procedures and project planning human blood and tissue processing by Ficoll/Percoll gradient centrifugation
- cell collection and storage, cell thawing and sample preparation for flow cytometry analysis, cell culture
- magnetic cell isolation
- titration and validation of fluorescently-conjugated antibodies
- basic molecular biology techniques such as DNA/RNA extraction, mini/maxiprep, PCR, etc.
- clinical and research database organization and maintenance

Salary range: 23-25.000 EUR, depending on experience

To apply, please send a motivation letter, your CV, 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).

4.   Brummelman, J. *et al*. Development, application and computational analysis of high- dimensional fluorescent antibody panels for single-cell flow cytometry. ***Nat. Protoc. 14***, 1946-1969 (2019).

5.   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)