Postdoc in Cellular Immunology, Humanitas Research Hospital, Milan, Italy

I am seeking a highly motivated postdoctoral scientist to study the cellular basis of human memory T cell differentiation and effector T cell responses in human bone marrow transplantation and cancer. The lab 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). Full access to Humanitas facilities (flow cytometry, genomics, microscopy, bioinformatics, SPF mouse house) will be granted.

The position, funded by a Starting Grant from the ERC, is available for up to 3 years (salary will be commensurate with experience).

The optimal candidate would have a PhD in cellular immunology, a strong track record and be skillful in flow cytometry, cell culture, cell-based assays and basic molecular techniques. Previous experience in the analysis of complex flow cytometry datasets is highly preferred but not essential (we will train). Candidates from abroad with the potential to compete for international fellowships are strongly encouraged to apply. The successful candidate should be able to carry out projects independently and is expected to collaborate with other members of the laboratory, of the institute and with international collaborators. Fluent English (written and spoken) is required.

To apply, please send a motivation letter, a 2-page CV, and the contact information (or letters of recommendation) of at least 2 referees to Enrico Lugli (enrico.lugli@humanitasresearch.it).

Selected references
1. Pilipow K, Scamardella E, et al. Antioxidant metabolism regulated CD8+ memory stem cell formation and antitumor immunity. *JCI Insight, in press*
2. Brummelman J, Mazza E et al. High-dimensional single-cell analysis identified stem-like cytotoxic CD8+ T cells infiltrating human tumors. *J Exp Med,* 2018 Aug 28
3. Roberto A, Di Vito C, Zaghi E et al., The early expansion of anergic $NKG2A^{pos}$/$CD56^{dim}$/$CD16^{neg}$ natural killer represents a therapeutic target in haploidentical hematopoietic stem cell transplantation. *Haematologica*. 2018 Aug;103(8):1390-1402
4. Roberto A, Castagna L, Zanon V, et al. Role of naive-derived T memory stem cells in T cell reconstitution following allogeneic transplantation. *Blood*. 2015;10.1182/blood-2014-11-608406.
5. Conlon KC, Lugli E, Welles HC, et al. Redistribution, hyperproliferation, activation of natural killer cells and CD8 T cells, and cytokine production during first-in-human clinical trial of recombinant human interleukin-15 in patients with cancer. *J Clin Oncol*. 2015;33(1):74-82.
6. Mahnke YD, Brodie TM, Sallusto F, Roederer M, Lugli E. The who's who of T-cell differentiation: Human memory T-cell subsets. *Eur J Immunol*. 2013;43(11):2797-2809.
7. Lugli E, Dominguez MH, Gattinoni L, et al. Superior T memory stem cell persistence supports long-lived T cell memory. *J Clin Invest*. 2013;123(2):594-599.
8. Gattinoni L, Lugli E, Ji Y, et al. A human memory T cell subset with stem cell-like properties. *Nat Med*. 2011;17(10):1290-1297.