

Two 3-year Post-Doctoral Positions available on innate immunity and gene therapy in hematopoietic stem cells

The “*Retrovirus-Host Interactions and Innate Immunity to Gene Transfer*” Lab, led by Anna Kajaste-Rudnitski, at the San Raffaele Telethon Institute for Gene Therapy (SR-TIGET), Milan, Italy is recruiting post-doctoral fellows with **strong experience in innate immunity, virology (HIV) and/or hematopoietic stem cell gene therapy** to work on the ERC-funded ImmunoStem project. The goal is to elucidate the principles governing **innate immune sensing, pathogen recognition and restriction in human hematopoietic stem and progenitor cells** upon their ex vivo gene engineering for the development of innovative cell and gene therapy strategies and to fight infectious and autoimmune diseases.

The candidate must hold a PhD Degree in Biological Sciences, Biotechnology or related disciplines with skills in molecular and cellular biology, lentiviral vectors/retrovirology/gene therapy as well as primary human cell culture and manipulation. Experience in NGS data analysis and/or animal handling is a significant plus. Proficient English, independent working capacity, excellent organizational skills and team spirit are required. The successful candidate will be offered a 3-year contract with possible extension thereafter and a competitive salary, negotiated depending on experience.

As part of the **SR-TIGET**, a world-leading Institute in the fields of gene and cell therapy for the treatment of human genetic diseases, we benefit from a highly competitive, international and scientifically stimulating environment and offer excellent working conditions, state-of-the-art facilities and infrastructures (Next-Generation Sequencing, Cell Sorting and Imaging, Animal Facilities), and access to clinically relevant human samples. Milan is a vibrant international city and is an excellent location for arts, commerce, design, entertainment, fashion and gastronomy!

Interested candidates should submit their application with a detailed CV, a cover letter, and names of 1-2 references to **Anna Kajaste-Rudnitski**, kajaste.anna@hsr.it

Selected Publications:

Petrillo C, Thorne LG, Unali G, Schirotti G, Giordano AMS, Piras F, Cuccovillo I, Petit SJ, Ahsan F, Noursadeghi M, Clare S, Genovese P, Gentner B, Naldini L, Towers GJ, Kajaste-Rudnitski A*. Cyclosporine H Overcomes Innate Immune Restrictions to Improve Lentiviral Transduction and Gene Editing In Human Hematopoietic Stem Cells. **Cell Stem Cell**. 2018 Oct 24. pii: S1934-5909(18)30489-2. (*corresponding author; lab member)

Piras F, Riba M, Petrillo C, Lazarevic D, Cuccovillo I, Bartolaccini S, Stupka E, Gentner B, Cittaro D, Naldini L, Kajaste-Rudnitski A*. Lentiviral vectors escape innate sensing but trigger p53 in human hematopoietic stem and progenitor cells. **EMBO Mol Med**. 2017 Sep;9(9):1198-1211. (*corresponding author; lab member)

Petrillo C, Cesana D, Piras F, Bartolaccini S, Naldini L, Montini E, Kajaste-Rudnitski A*. Cyclosporin A and rapamycin relieve distinct lentiviral restriction blocks in hematopoietic stem and progenitor cells. **Mol Ther**. 2015 Feb;23(2):352-62. (*corresponding author; lab member)

Kajaste-Rudnitski A*, Naldini L. Cellular innate immunity and restriction of viral infection: implications for lentiviral gene therapy in human hematopoietic cells. **Hum Gene Ther**. 2015 Apr;26(4):201-9. (*corresponding author; lab member)