



ERC-funded Postdoc and PhD positions in molecular regulation of hematopoietic development

Human hematopoietic development and disease modeling Lab - Andrea Ditadi

The goal of our lab at the San Raffaele – Telethon institute for Gene Therapy (SR-TIGET) in Milan is to study the **regulation of blood cell emergence** during human **embryonic development**. To this aim, we use our innovative hESCs/hiPSCs platform and combine developmental cell and molecular biology to understand normal and pathological human hematopoietic development, with a particular interest in studying the genetic origins for blood disorders and developing novel strategies for their treatment.

The proposed projects build on our recent findings (*Luff et al, Nature Cell Biology 2022*) on the signaling driving hematopoietic specification during embryonic development. We now aim to dissect **how blood cells emerge and expand** during human development **to generate and grow in vitro** clinically relevant cell types. The successful candidates will be in the unique position to integrate stem cell, human development and molecular biology using a systematic approach based on CRISPR-Cas9 genome editing, *in vitro* and *in vivo* innovative assays and multi-omic strategies. Positions are for up to five years in the context of an ERC Consolidator Grant that will initiate in March 2023.

The call is open to pre- and post-doctoral fellows with the following requirements:

- Pre-doctoral: recent Degree in relevant disciplines (top grades) and research experience in competitive laboratories. Fellows are expected to enroll into San Raffaele PhD program in 2023/2024.

- Post-doctoral: PhD in molecular and cell biology, biochemistry or similar; proven track record of publications in recognized journals; documented experience in cell culture and sorting/animal models/NGS approaches. We offer competitive salary (and candidate who worked abroad are eligible for competitive tax exemption schemes) and benefits commensurate to qualifications and experience.

Informal enquiries and applications can be sent to Dr. Andrea Ditadi (ditadi.andrea@hsr.it) describing briefly research interests and career goals and including CV and contact information for 2-3 references. Interviews (preselected candidates) will take place from March 2023 until positions are filled.

References: *Sturgeon et al, Nature Biotechnology 2014; Ditadi et al, Nature Cell Biology 2015; Azevedo et al, Development 2021; Luff et al, Nature Cell Biology 2022.*

