POSTDOCTORAL FELLOWSHIP POSITION
Division of Stem Cell Transplantation and Regenerative Medicine

The Roncarolo Laboratory has an opening for a highly creative and motivated postdoctoral fellow with an interest in immune tolerance. Successful candidates will join the Pediatric Division of Stem Cell Transplantation and Regenerative Medicine at Stanford University School of Medicine.

Our group aims to integrate findings from mechanistic and functional studies in genetic and acquired diseases of the immune system to progress towards treatments of immune-mediated diseases. We are interested in understanding the pathways involved in inducing and maintaining immune tolerance by investigating T regulatory lymphocytes and identifying genes whose disruption leads to autoimmunity and immune dysregulation.

Our laboratory employs: tissue culture, T cell cloning and functional in vitro T cell assays, LV/Talen/Crispr-based gene-transfer into T cells and stem cells, Flow cytometry and Cytoff, single cell transcriptome analysis, in vivo mouse disease models and humanized-mouse models.

The project will focus on:
1) Biology of Tr1 cells: plasticity, interaction with T helper cells, B cells, and hematopoietic stem cells, specific transcription factors and markers, homing;
2) Role of Tr1 cells and LV-IL-10 transduced T cells in graft vs. host disease and graft vs. leukemia effect;
3) Development of cell and gene therapy approaches in preclinical models and in patients with genetic and acquired autoimmunity.

Requirements:
The applicant must be PhD (immunology, cell biology or molecular biology) or MD/PhD graduate with:

- Strong publication record in peer-reviewed journals in at least one of the following areas: immunology, immunodeficiencies, autoimmunity, stem cell biology, gene transfer.
- Outstanding personal initiative and communication skills.
- Excellent molecular and cell biology skills with a strong background in immunology.

Candidates with experience in human sample handling and flow cytometry are encouraged to apply.

Candidates should email an updated CV, complete contact information for three references and a cover letter describing their past research experience, career goals and a statement of future research interest (1-2 pages) to Rika Bosmans at <rbosmans@stanford.edu>