

PhD Position in Molecular Immunology (IRB Bellinzona, Switzerland)

The Molecular Immunology lab at the Institute for Research in Biomedicine (IRB), Bellinzona (Switzerland), is seeking a highly motivated PhD student to investigate how specific genetic risk alleles shape T lymphocyte functions and may contribute to autoimmunity.

Lab page: www.irb.usi.ch/molecular-immunology

Your profile

- You recently completed a **Master's degree** in Immunology, Molecular/Cell Biology, or a related field.
- You are fluent in spoken and written English.
- You are filled with curiosity, initiative, and a strong desire to learn and think independently!
- Bioinformatics skills are a plus, but not essential.

Project & Environment

- You will explore molecular mechanisms controlling immune-cell differentiation and function in health and disease, with a focus on human T cells and genetic variation. The project will combine pre-clinical *in vivo* models, primary T-cell culture, flow cytometry, CRISPR-based perturbations, functional assays, molecular biology and biochemistry.
- Bellinzona, located in the Italian-speaking region of southern Switzerland, offers a high quality of life, plenty of outdoor activities and excellent connections to Zurich and Milan.

What we offer

- Swiss National Science Foundation (SNSF)-aligned salary and conditions.
- Outstanding training, mentoring, and regular scientific exchange.
- Preferred **start date: as soon as possible** (negotiable).
- PhD students are enrolled in the **PhD program** of the Università della Svizzera italiana. The IRB offers state-of-the-art facilities and a vibrant, welcoming international environment with journal clubs, seminars, and scientific events.

How to apply

Please send **one single PDF** to silvia.monticelli@irb.usi.ch, containing:

- Motivation letter with a brief statement of research interests
- CV (include degrees and grades of final examinations)
- Complete list of Bachelor's and Master's courses with final grades
- Names and email addresses of two referees

Review of applications starts immediately and continues until the position is filled.

Selected lab publications:



IRB
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- Bianchi N *et al.* FCRL3 is an immunoregulatory receptor that restrains the activation of human memory T lymphocytes. *Journal of Experimental Medicine* 2025 (*In press*)
- Leoni C *et al.* The mRNA methyltransferase Mettl3 modulates cytokine mRNA stability and limits functional responses in mast cells. *Nature Communication* 2023
- Emming S *et al.* A molecular network regulating the pro-inflammatory phenotype of human memory T lymphocytes. *Nature Immunology* 2020