



**University of  
Zurich**<sup>UZH</sup>

**Department of Quantitative Biomedicine**



## **Postdoctoral Position Available – Regulatory T Cell Biology**

A postdoctoral position is available in the Joller group to study the specialization of Tregs during inflammatory responses and their interaction with effector T cells as well as the tissue niche. The Joller group studies immune regulation in different disease contexts. We are investigating the drivers as well as the brakes in the immune system to understand how these may be contributing to diseases susceptibility, onset and progression. We are an established research group at the University of Zurich and part of the newly founded Department of Quantitative Biomedicine.

Tregs are crucial for maintaining self-tolerance and contribute to controlled pathogen-specific immunity by dampening excessive responses. In recent years it has become clear that, just like effector T cells, Treg represent a heterogeneous population consisting of specialized subsets with distinct functions. However, which suppressive mediators these subsets utilize to exhibit their specialized function and how they are regulated is still unclear. We have characterized the changes induced in Tregs during Th1 response on the population level (Joller et al. 2014; Littringer et al. 2018; Schorer et al. 2020; Estrada Brull et al. 2020) and are now refining this analysis by moving to the single cell level. The successful candidate will contribute to these efforts by examining factors that drive Treg differentiation during pathogenic challenges as well as analyzing the interaction of specialized Tregs with effector T cells and the tissue niche.

We are looking for an enthusiastic, independent, and innovative individual that works well in a team and is eager to drive this state-of-the-art project forward. Candidates must hold a doctoral degree (PhD or MD) in immunology or related fields. Highly motivated candidates with a strong background in immunology, molecular biology and/or genetics and substantial experience with flow cytometry and *in vivo* mouse models are encouraged to apply. Experience with infectious models, contemporary high-throughput sequencing techniques and/or computational biology skills is an asset. Candidates must have excellent knowledge of English (oral and written) and at least one first author publication.

The position is available immediately. Interested candidates should send a cover letter with a brief description of research experience, interests and accomplishments, their CV, and letters of support or the names and contact information for two references to Nicole Joller ([nicole.joller@uzh.ch](mailto:nicole.joller@uzh.ch)).