



Prof Federica Sallusto

Institute of Microbiology, ETH Zurich and Institute for Research in Biomedicine, Università della Svizzera italiana, Bellinzona, Switzerland



Tuesday 4th February 2025 10:00 AM to 11:00 AM (SGT)

Venue: Codon A & B, Matrix Level 5

T Cells: Differentiation, Immune Defense and Regulation

We study the human immune system to address fundamental questions in the context of the immune response to different classes of antigens. Our efforts have resulted in the development of high-throughput cellbased screening methods to analyze the repertoire and functional diversity of effector, memory and regulatory T cells in immunocompetent individuals and in immunodeficient patients. These methods, together with high throughput TCRVB sequencing, which can analyze millions of T cell clonotypes in blood or tissues, single-cell gene expression analysis, and cell engineering are used to get insights as to the mechanisms of immune-mediated protection and pathology.

Prof Federica Sallusto is Professor of Medical Immunology at the ETH Zurich and group leader at the Institute for Research in Biomedicine in Bellinzona, Switzerland. She is an expert in the field of human cellular immunology. Her research has focused on dendritic cell and T cell traffic, mechanisms of T cell differentiation and immunological memory. Among her contributions are the definition of central memory and effector memory T cells, the discovery of skin-homing Th22 cells, of non-classic Th1 cells induced by bacteria and of two distinct types of Th17 cells with pro-inflammatory and regulatory properties.

Hosted by: Dr Low Jun Siong

