

Winter school of Cell Analysis in Immunology



**Geneva
Switzerland
9th-13th March 2020**

Organizers :
Thomas MATTHES (Geneva)
Claude LAMBERT (Saint-Etienne)

Typing & counting

Lymphocytes, monocytes & dendritic cells
Maturation pathways, compartments
Recent Thymic Emigrants and ILCs

Functional tests

Activation, Proliferation
Intracellular Cytokines
Cytotoxicity, apoptosis
Phagocytosis, ROS production
Degranulation

Quantitative cytometry

ImageStream; Mass Cytometry
Multidimensional data - analysis

Monitoring diseases

Immunodeficiencies
Allergy, Sepsis
Lupus, arthritis

FLOW CYTOMETRY *Advanced level*



for
Immunologists
Researchers
Clinical Biologists
PhD students
Lab assistants
R&D pharma

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Registration: www.cytometryschool.ch

Preliminary program (will be updated regularly)

Faculty:

Antonio COSMA (CEA Paris, France)
Ulrich SALZER (Freiburg, Germany)
Azzedine TAHIAT (Alger, Algeria)
Fouad SEGHROUCHNI (Rabat, Morocco)
Frederic VELY (Marseille, France)
Anne WILSON (Lausanne, Switzerland)
Peter and Camilla JANDUS (Geneva, Switzerland)
Stéphanie Hugues (Geneva, Switzerland)
Claude Lambert (Saint-Etienne, France)
Silvia della Bella (Milano, Italy)
Thomas Matthes (Geneva, Switzerland)

General review on applications of immunology analysis by flow cytometry

B-cells lymphopoiesis, development and pathology

T cell phenotypes and subsets

Assessment of T cell activation, proliferation and function (antigen specific response)

Innate Lymphoid Cells

Myeloid lineage, myelopoiesis and normal maturation pathways

Phagocytosis, monitoring granulocyte reactivity and ROS production

Human monocyte and dendritic cell populations

Immunopathology and Sepsis, Immunoparalysis

Hypersensitivity and Basophil degranulation tests

Primary immunodeficiencies

Panel design

Quality Assurance and standardisation

ImageStream; Mass cytometry

High-dimensional data analysis