

Autumn School of Cell Analysis in Immunology

**Geneva
Switzerland
18th – 22nd October 2021**

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)
Carlo CHIZZOLINI (Geneva, Switzerland)
Camilla JANDUS (Geneva, Switzerland)
Stéphanie HUGUES (Geneva, Switzerland)
Claude LAMBERT (Saint-Etienne, France)
Silvia DELLA BELLA (Milano, Italy)
Aleksandra DUFOUR (Geneva, Switzerland)
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

Spectral cytometry

Mass cytometry

High-dimensional data analysis