

# 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

Contact: [thomas.matthes@hcuge.ch](mailto:thomas.matthes@hcuge.ch)  
[claudelambert@chu-st-etienne.fr](mailto:claudelambert@chu-st-etienne.fr)

Registration: [www.cytometryschool.ch](http://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**