

# 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](http://www.cytometryschool.ch)

# Preliminary program (will be updated regularly)

**Faculty:**

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Anne WILSON (Lausanne, Switzerland)  
Peter and Camilla JANDUS (Geneva, Switzerland)  
Stéphanie Hugues (Geneva, Switzerland)  
Claude Lambert (Saint-Etienne, France)  
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**