

Multiparametric Cytometry Data Analysis: Stairway to High-Content



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High-content cytometry enables large-scale, single-cell proteomics with 40+ markers. We will cover key data processing steps—QC, normalization, batch correction, dimensionality reduction, clustering, annotation, and integration—through expert talks, round-tables, and software solutions with the aim to build a collective consensus and knowledge around high-content cytometry data analysis.



Deadline: **July 3, 2026**



PHASE I THEORETICAL



October
5-7, 2026



Montpellier

CYTOMETRY DATA PRE-PROCESSING

Sofie van GASSEN (VIB, BEL), Raphael GOTTARDO (University of Lausanne, CHE) and Katrien QUINTELIER (VIB, BEL)

CYTOMETRY DATA UNSUPERVISED ANALYSIS

Anna BELKINA (Boston University, USA), Yvan SAEYS (VIB, BEL) and Jonathan IRISH (Vanderbilt University, USA)

AUTOMATED GATING AND MACHINE LEARNING

Martin MESTDAGH (Institut Curie, FRA), Can PINAR (Cytolytics, DEU), Benjamin TAST (LMU-BMC, DEU), Vincent PETIT (METAFlow, FRA), Mar NARANJO-GOMEZ (IRMB, FRA), Arielle GINSBERG (terraFlow, USA) and Sonia GAVASSO (University of Bergen, NOR)

CELL ANNOTATION

Alexia ALFARO (Institut Gustave Roussy, FRA), Ryan BRINKMAN (Dotmatics, USA) and Antonio COSMA (Luxembourg Institute of Health, LUX)

BIOLOGICAL AND CLINICAL CYTOMETRY DATA INTEGRATION

Sarah BONTE (VIB, BEL), Thomas ASHHURST (University of Sydney, AUS) and Samuel GRANJEAUD (CRCM, FRA)

PHASE II PRACTICAL



November
16-18, 2026



Luxembourg,
Lille, Paris &
Marseille

The aim of the practical workshops will be to explore different aspects of high-content cytometry data analysis with experts in the field, and to train young researchers for future implementation in their practice. The principle, the workflow, interpretation and comparison of each process/tool will be discussed.

- Control and push the limits of unsupervised analysis ¹
- Dimension reduction and clustering pipelines and available tools ²
- Automated supervised pipelines with OpenCyto and FowDensity ²
- Full analysis pipeline supported by Business Intelligence tools ¹

¹ experience in conventional data analysis required;
² minimal experience in R required.

SELECTION: 44 trainees (8 for Luxembourg, 12 for Lille, 12 for Paris & 12 for Marseille) will be selected among Phase I participants.

INFORMATION &
REGISTRATION **CLICK HERE**