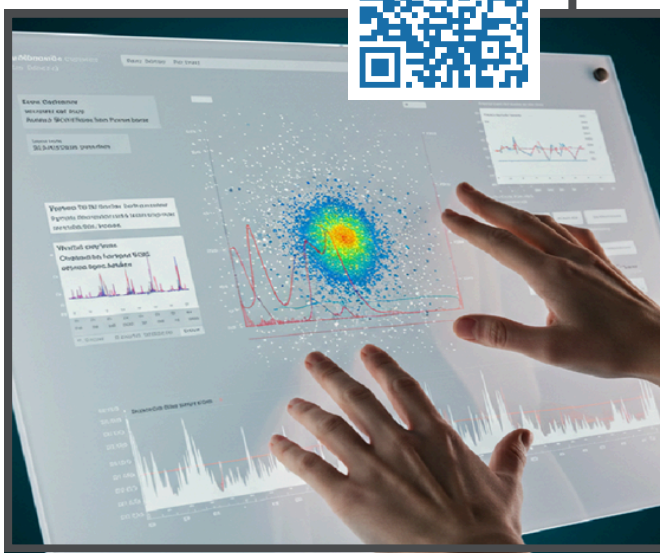
Multiparametric Cytometry Data Analysis: Stairway to High-Content

Inserm Workshop 291

Antonio COSMA (Luxembourg Institute of Health, Esch-sur-Alzette), **Aïda MEGHRAOUI** (AMK Biotech, Valbonne) **& Olivier MOLENDI-COSTE** (US41-PLBS, Institut Pasteur, Lille)



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
Annelies EMMANEEL (VIB, BEL), Raphael GOTTARDO (University of Lausanne, CHE) and Sofie van GASSEN (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

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*Ateliers Inserm - Réalisation : DRH - SDevRH - Crédit image : Canva - Décembre 2025