

2nd Online International Winter School On Flow Cytometry Data Analysis & Presentation

(Research & Clinical; Basic & Advanced)

22nd November – 18th December, 2025

Course Overview & Objective

Flow Cytometry is one of the most powerful single cell analysis tool used in biological research and clinical diagnostics. Using this state-of-the art technology, we can study and quantify various parameters of the cells or cell like particles in heterogeneous samples. This 2nd Online International Winter School for Flow Cytometry Data Analysis & Presentation is a comprehensive program designed to provide participants with in-depth knowledge and practical skills in analyzing and presenting flow cytometry data. This course is ideal for researchers, students, and clinicians looking to enhance their expertise in this critical area of biological research and clinical diagnostics. Through lectures and practical activities, participants will learn the core concepts of flow cytometry data analysis & presentation and troubleshooting. We will cover the theory combining with data analysis sessions using different data sets as part of our course curriculum.

Course Highlights

- ✓ Introduction to Flow Cytometry Data Analysis and Presentation
 - ✓ Know Your Software (KYS)-Acquisition vs Analysis Software
 - ✓ Data Import, Data Standards
- ✓ Backbone of Correct Data Analysis: Sample Quality, Experimental Designing, Controls & Data Acquisition
 - ✓ Display Plots, Gating Tools, Algorithm Based Analysis Tools
 - ✓ Spectral Overlap & Compensation/Unmixing
 - ✓ Statistics in Flow Cytometry Data Analysis
- ✓ Clinical Data Analysis-HSC Analysis, CD4/CD8 Counts, Flow Cross-Match etc
 - ✓ Clinical Data Analysis and Case Studies--Leukemia, MRD
- ✓ High Dimensional Data Analysis (t-SNE, UMAP, FlowSOM etc)
 - ✓ Live Demonstration of Data Analysis and Interpretation
- ✓ Data Presentation and Publication Guidelines (MIFlowCyt)
 - ✓ Q & A, Troubleshooting, Self Assessment

Speakers



Dr. Hemant Agrawal
Director
Flowcytometry Solutions
India



Prof. Paul Wallace
Professor Emeritus
RPCCC
USA



Dr. Andrea Valle
Product Manager
De Novo Software
USA



Dr. Abhishek V Koladiya
Postdoctoral Fellow,
Stanford University
USA



Dr. Diana Bonilla Escobar
Scientific Director
Cytek Bio.
USA



Dr. Khaliqur Rahman
Professor
SGPGIMS
India

Who Can Attend

- Student, Lab Technologist, Researcher, Postdoc, Faculty, Doctor, Industry Professional, etc
- The basic understanding of the principles of flow cytometry is required.
- No programming/coding experience is required
- Participants from academic/non-academic institutions and clinical labs from all over the world are encouraged to apply

How to Apply

- Fill Registration form online by clicking on the “**Register Now**” button below.
- Thereafter make a payment either via scanning the below QR using any payment app (From India) or send an email at training@flowsols.com requesting the payment link (Outside India).
- Once paid, share the payment receipt at training@flowsols.com, your registration will be confirmed within 24 hours via email.

Registration Fee*

Country Registration Category	INDIA	SAARC/South East Asia/Africa/South America	USA/Canada/Europe/ Middle East/Australia/New Zealand/China/Japan/Korea
Student/Research Fellow (non-PhD)/Trainee/Technologist	INR 6000	USD 150	USD 300
Postdoc/Resident Doctor (JR/SR)/ Technical or Scientific Officer/ Core Manager	INR 8000	USD 200	USD 400
Faculty/ Medical Consultant	INR 10000	USD 250	USD 500
Industry Professional	INR 15000	USD 375	USD 750

**Discount on
Registration Fee
10% for Group of 5
or More**

***Registration Fee is
non-refundable**

Register Now

Payment (For India)

Scan the below QR Code and make a payment



International Payment

After filling the registration form, send an email at training@flowsols.com requesting a payment link. A secured payment link will be provided on your registered e-mail address.



Feedback from Last Courses

“There are very few course instructors like you who put in their sweat to ensure we maximize our learnings from the course. I really appreciate how you executed the course and always kept engaging the students and answering all the queries. Thank you for the course and it was such a great experience!”

IISc, Bangalore, India

“Thank you very much for your brilliant teaching and dedication sir, learnt a lot and appreciate it very much”

University of Sri Jayewardenepura, Sri Lanka

“I very much enjoyed the course; it was very well organized and you are a very patient and considerate teacher. I will definitely recommend this course to my colleagues and anyone else interested in flow cytometry”

Cornell University, USA

“Very accurately explained everything from basic to advanced level.”

CSIR-IITR, India

“Thank you very much. I wanted to express my sincere gratitude for the beautiful lectures and informative workshop on flow cytometry. Your expertise & passion for the subject matter were evident in every aspect of the presentation, and I left feeling inspired and empowered.”

NCI Cairo University, Egypt

“Thank you very much, Sir. This was my first formal course on flow learning, and I must admit, I started from scratch. However, your ability to explain this complex topic in such a simple and beautiful manner has truly made a significant impact on my understanding. I can confidently say that I am no longer at ground zero, thanks to your guidance.”

Dhaka Medical College, Bangladesh

“This course has greatly enhanced my knowledge of data analysis & interpretation which will help a lot in my thesis work.”

AIIMS, New Delhi, India

Our Supporter



Last Date of Registration 20th November 2025

Contact: training@flowsols.com, +91-7665130114

Program (7.00 pm - 9:00 pm IST)

Day and Date	Topic
Day 1 (22 nd November, Saturday)	-Introduction to Flow Cytometry, Data Acquisition, Analysis and Presentation -Know Your Software (KYS) — Acquisition vs Analysis Software, Data Import, Data Standards, Display Plots, Gating Tools, Algorithm based analysis tools, Panel Designing Tools etc
Day 2 (23 rd November, Sunday)	The Backbone of Correct Data Acquisition & Analysis (Part 1) • Experimental Designing (Conventional & Spectral Flow Cytometry) • Quality Control (QC) and instrument standardization • Sample & its Quality (Cell concentration & viability, Clumping and doublets, Debris, Staining quality)
Day 3 (25 th November, Tuesday)	The Backbone of Correct Data Acquisition & Analysis (Part 2) • Controls (Assay Controls, Gating Controls, Instrument Controls etc) • Data Acquisition (Voltage/Gain Settings, Threshold, Events to Acquire, Event Rate etc)
Day 4 (27 th November, Thursday)	Flow Cytometry Data Acquisition & Analysis Essentials Voltration/Gaintration, Antibodies Titration, Antibody Staining, Best Practices in Gating, Hierarchical Gating, Boolean & Combination Gating, Time Gating, Debris/Doubles/Aggregates Exclusion, Live/Dead Exclusion etc
Day 5 (29 th November, Saturday)	The Importance of Compensation (in conventional flow) /Unmixing (spectral flow) in the Correction of Spectral Overlap for Data Analysis: -Compensation Controls, Manual Vs Automatic Compensation, Beads Vs Cells as Compensation Controls -Unmixing Reference Controls, Unmixing Algorithms, Autofluorescence Extraction, Beads Vs Cells as Unmixing Controls
Day 6 (1 st December, Monday)	Statistics in Flow Cytometry Data Analysis Frequency, Percentage, MFI, CV, Statistical Models, Absolute Counts, Tests for Statistical Significance etc
Day 7 (2 nd December, Tuesday)	Flow Cytometry Data Acquisition & Analysis (Research Applications 1) Cell Cycle, Ploidy Analysis, Apoptosis, Proliferation, MMP, ROS, Bacteria Enumeration etc
Day 8 (4 th December, Thursday)	Flow Cytometry Data Acquisition & Analysis (Research Applications 2) Signal Transduction, Intracellular Cytokines, Cytometric Bead Array (CBA), Multicolor Immunophenotyping etc
Day 9 (6 th December, Saturday)	Flow Cytometry Data Acquisition & Analysis (Clinical Applications 1) HSC Analysis, CD4/CD8 Counts, Flow Cross-Match, Platelet Analysis, PID and PNH Case Studies, Reporting Formats
Day 10 (8 th December, Monday)	Flow Cytometry Data Acquisition & Analysis (Clinical Applications 2) Immunophenotyping of Acute Leukemia Markers, Maturation Patterns, Gating Strategies, Controls etc Case Studies, Reporting Formats
Day 11 (10 th December, Wednesday)	Flow Cytometry Data Acquisition & Analysis (Clinical Applications 3) Measurable Residual Disease (MRD) in Acute Leukemia Markers, Gating Strategies, Controls etc Case Studies, Reporting Formats
Day 12 (13 th December, Saturday)	Troubleshooting & Pitfalls in Data Analysis Common Errors in Gating and Compensation, Autofluorescence and Dead Cell Interference, Misinterpretation of Doublets and Aggregates, Inconsistent Sample Handling and its Impact etc Q & A, Discussion
Day 13 (15 th December, Monday)	Best Practices in High Dimensional Data Analysis Data pre-processing, Scaling/Transformation, Down Sampling etc Dimensionality Reduction and Clustering (t-SNE, UMAP, FlowSOM etc)
Day 14 (17 th December, Wednesday)	-From Raw Signals to Clinical Insight: High-Dimensional Cytometry in Cancer and Other Diseases Designation -Flow Cytometry Data Presentation and Publication Guidelines MIFlowCyt: Data Presentation Guidelines (An ISAC Recommendation)
Day 15 (18 th December, Thursday)	Q & A, Discussion and Final Quiz

- *This is an interactive course designed to learn the flow cytometry data analysis and presentation principles in a simple and correct way*
- *Participants will receive structured exercises for self-evaluation and practice*