

# 4<sup>th</sup> Annual Online Certificate Course in Flow Cytometry

## Principles, Experimental Designing & Data Analysis

25<sup>th</sup> April – 25<sup>th</sup> May, 2026

(7.00 pm - 9.00 pm IST, 8.30 am - 10.30 am CST, USA)

### 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 1-month online course will cover the fundamentals and provide a deeper understanding of the important concepts of flow cytometry. Through lectures and practical activities, participants will learn the core concepts in experimental designing, data acquisition, data analysis & presentation and troubleshooting. We will cover the theory combining with the practical sessions of the most frequent assays as part of our course curriculum. This in-depth 1-month course will enhance your flow cytometry knowledge and skills preparing you for any current or future flow cytometry jobs and projects.

### Highlights

- Basics of Flow Cytometry
- Full Spectrum Flow Cytometry
- Applications of Flow Cytometry
- Know Your Cytometer (KYC)
- Machine Setup, QC, Voltage/Gain Settings etc
- Sample Preparation, Experimental Designing, Controls
- Panel Designing, Spectral Overlap & Compensation/Unmixing
- Cell Sorting
- Intracellular Cytokine Staining (ICS)
- Data Analysis and Presentation (Basic & High Dimensional)
- Live Demonstration of Instrument Setup & Data Acquisition
- Q & A, Troubleshooting, Self Assessment
- Sessions Recordings will be Available to Watch
- Reading Material will be Provided
- E-certificate for All Registered Participants

### Special Tutorials

\* Artificial Intelligence (AI) & Machine Learning (ML) in Flow Cytometry

\* Career Options in Flow Cytometry

### Speakers



**Dr. Hemant Agrawal**  
Director  
Flowcytometry Solutions  
India

**Dr. Rui Gardner**  
Head,  
Flow Cytometry  
MSKCC, NYC, USA

**Dr. Andrea Wang**  
Co-Founder & CEO  
AHEAD MEDICINE  
USA

**Prof. Rashmi Kaul**  
Professor of Immunology  
Dept. Biochem. & Microbiol  
OSU-CHS, USA

**Dr. Diana B. Escobar**  
Scientific Director  
Cytek Bio.  
USA

**Dr. Alfonso Blanco**  
Director, Flow Cytometry  
University College Dublin  
Ireland

**Dr. Paul Hutchinson**  
Incharge  
Flow Cytometry Facility  
NUS, Singapore

**Dr. Andrea Valle**  
Product Manager  
De Novo Software  
USA

### Who Can Attend

- Student, Lab Technologist, Researcher, Postdoc, Faculty, Doctor, Industry Professional, etc
- This online course is designed for students, researchers, doctors and technical people at any step of their career and will cover the important concepts and principles of flow cytometry
- Participants from academic/non-academic institutions 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](mailto:training@flowsols.com) requesting the payment link (Outside India).
- Once paid, share the payment receipt at [training@flowsols.com](mailto:training@flowsols.com), your registration will be confirmed within 24 hours via email.

### Registration Fee\*

Registration Category	Country	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



G Pay  
PhonePe  
paytm  
BHIM UPI  
HTCA

### International Payment

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



Reading material provided



Recordings available for all sessions



E-Certificate given to registered participants



Online course is 32 hours over 16 days

“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. 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 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

“It's a very helpful and comprehensive course that allowed me to significantly extend my knowledge of instrument set up, panel design, QC, clinical cytometry. It allowed me to improve my practical skills in flow cytometry experiments, enhanced my ability to interpret and troubleshoot flow cytometry data, which helped me to produce more accurate and reproducible results.”  
Kelly Government Solutions, USA

“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

“Given all the details of flow cytometry concepts and we had a chance to ask anything/everything”  
Dept. of Clin. Path., Jakarta, Indonesia

“The course was in depth and up to date with the present day flowcytometry techniques. The rigorous and comprehensive theoretical knowledge and associated resources were great help and will certainly be useful for planning and conduction flow cytometry-based experiments of any nature.”  
BRIC-ILS, Bhubaneshwar, India

“This course will strengthen my ability to analyze, interpret, and present research data more effectively. It will directly support my current PhD research by improving my understanding of advanced data analysis techniques and enhancing the quality, accuracy, and reproducibility of my results”  
University of Liverpool, UK

“In depth understanding of flow cytometry machine configuration and data analysis”  
Excella Biotechnologies Ltd, Kenya

### Our Supporter



**Last Date of Registration 23<sup>rd</sup> April 2026**

**Contact: [training@flowsols.com](mailto:training@flowsols.com), +91-7665130114**

## Program (7.00 pm - 9:00 pm IST/ 8.30 am – 10.30 am CST, USA)

Day and Date	Topic
Day 1 (25 <sup>th</sup> April 2026, Saturday)	Introduction to Flow Cytometry
Day 2 (26 <sup>th</sup> April 2026, Sunday)	-Applications of Flow Cytometry in Biological Sciences -The Impact of Flow Cytometry on Immunology
Day 3 (28 <sup>th</sup> April 2026, Tuesday)	KYC: Know Your Cytometer—Decoding the Black Box--Fluidics, Optics & Electronics Setting up a Flow Cytometer Correctly—Quality Control, Template Creation, PMTV Settings, Threshold Settings etc. (LIVE Demonstration)
Day 4 (30 <sup>th</sup> April 2026, Thursday)	Flow Cytometry Experimental Designing (Part 1) Machine Configuration, Sample and its Quality, Spectral Viewer, Fluorochrome/Dye Selection, Autofluorescence, Antibodies Selection, Antigen Density, etc.
Day 5 (2 <sup>nd</sup> May 2026, Saturday)	Flow Cytometry Experimental Designing (Part 2) Spectral Overlap & Compensation
Day 6 (5 <sup>th</sup> May 2025, Tuesday)	Flow Cytometry Experimental Designing (Part 3) Panel designing, Data Spread, Spillover Spreading Matrix (SSM) etc. Controls in Flow Cytometry: Assay Controls, Gating Controls, Instrument Controls, etc
Day 7 (7 <sup>th</sup> May 2025, Thursday)	-Sample Preparation for Flow Cytometry Assays -Intracellular Cytokine Assays
Day 8 (9 <sup>th</sup> May 2025, Saturday)	Career Options in Flow Cytometry Q & A, Troubleshooting, Discussion
Day 9 (11 <sup>th</sup> May 2025, Monday)	Full Spectrum Flow Cytometry Introduction, Spectral Overlap & Unmixing, Panel Designing etc
Day 10 (13 <sup>th</sup> May 2025, Wednesday)	LIVE Demonstration: Multicolour Immunophenotyping Experiment Antibodies Titration, Preparation of Compensation Controls and Multicolor Samples, Generation of Compensation Matrix and Spillover Spreading Matrix (SSM), Data acquisition and Discussion
Day 11 (15 <sup>th</sup> May 2025, Friday)	Flow Cytometry Data Analysis and Presentation Data Standards, Plots, Displays, Axis, Gating, Statistics, No. of Events to Acquire etc
Day 12 (17 <sup>th</sup> May 2025, Sunday)	Flow Cytometry Data Analysis and Presentation (Live Demonstration) Analysis of Different Data Sets—Cell Viability, Cell Cycle, Apoptosis, Proliferation, MMP, ROS, Signal Transduction, Cytokines, Whole Blood Leukocytes etc.
Day 13 (19 <sup>th</sup> May 2025, Tuesday)	Flow Cytometry Data Analysis and Presentation (Live Demonstration) High Dimensional Data Analysis (tSNE, UMAP, FlowSom etc)
Day 14 (21 <sup>st</sup> May 2025, Thursday)	Lecture: Cell Sorting—Principle and Approach Live Demonstration: Cell Sorting
Day 15 (22 <sup>nd</sup> May 2025, Friday)	Artificial Intelligence (AI) & Machine Learning (ML) in Flow Cytometry Q & A, Troubleshooting, Discussion
Day 16 (24 <sup>th</sup> May 2025, Sunday)	MIFlowCyt: Flow Cytometry Data Publication Guidelines (An ISAC Recommendation)
Day 17 (25 <sup>th</sup> May 2025, Monday)	Final Quiz, Troubleshooting, Discussion, Q & A

This is an interactive course designed to learn the flow cytometry principles in a simple way  
Exercises will be given for each topic for self assessment. This is not a clinical diagnosis course