

2nd Annual Online Certificate Course in Flow Cytometry

Principles, Experimental Designing & Data Analysis

1st - 31st May, 2024

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.

Course Highlights

Basics of Flow Cytometry

Know Your Cytometer (KYC), Machine Setup, QC, Voltage/Gain Settings etc

Panel Designing, Spectral Overlap & Compensation

Sample Preparation, Experimental Designing, Controls

Cell Sorting

Cell Signaling Analysis

Advances in Flow Cytometry

Data Analysis and Presentation (Basic & High Dimensional)

Live Demonstration of Instrument Setup, Data Acquisition, Data Analysis and Interpretation

Q & A, Troubleshooting, Self Assessment

Speakers



Dr. Hemant Agrawal
Founder Director
Flowcytometry Solutions, India



Dr. William Telford
Head, ETIB Flow Cytometry Facility
NCI, NIH, USA



Dr. Rui Gardner
Head, Flow Cytometry,
MSKCC, NY, USA



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

Program (7.00 pm - 9:00 pm IST)

Day and Date	Topic
Day 1 (1 st May 2024)	Introduction to Flow Cytometry
Day 2 (3 rd May 2024)	Applications of Flow Cytometry
Day 3 (5 th May 2024)	WET LAB: 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.
Day 4 (7 th May 2024)	Flow Cytometry Experimental Designing (Part 1) Fluorochrome Selection, Spectral Viewer, Sample and its Quality, Antigen Density, Antibodies Selection, Antibody Clone, Autofluorescence etc.
Day 5 (9 th May 2024)	Flow Cytometry Experimental Designing (Part 2) Panel designing, Spectral Overlap & Compensation, Data Spread, Spillover Spreading Matrix (SSM) etc.
Day 6 (11 th May 2024)	Sample Preparation Immuno-fluorescence Staining for Flow Cytometry Controls in Flow Cytometry Assay Controls, Gating Controls, Instrument Controls, Comp Controls etc
Day 7 (12 th May 2024)	Q & A, Troubleshooting, Self Assessment
Day 8 (14 th May 2024)	WET LAB: 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 9 (16 st May 2024)	Cell Sorting—Principle and Approach
Day 10 (17 th May 2024)	WET LAB: Cell Sorting
Day 11 (19 th May 2024)	Q & A, Troubleshooting, Self Assessment
Day 12 (21 st May 2024)	Cell Signaling Analysis by Flow Cytometry
Day 13 (23 rd May 2024)	Flow Cytometry Data Analysis and Presentation Data Standards, Plots, Displays, Axis, Gating, Statistics, Number of Events to Acquire etc.
Day 14 (25 th May 2024)	LAB: Flow Cytometry Data Analysis and Presentation Analysis of Different Data Sets—Cell Viability, Cell Cycle, Apoptosis, Proliferation, MMP, ROS, Signal Transduction, Cytokines, Whole Blood Leukocytes etc.
Day 15 (27 th May 2024)	LAB: Flow Cytometry Data Analysis and Presentation High Dimensional Data Analysis (tSNE, UMAP, FlowSom etc)
Day 16 (28 th May 2024)	Advances in Flow Cytometry
Day 17 (30 th May 2024)	Flow Cytometry Data Publication Guidelines MIFlowCyt: Data Presentation Guidelines (An ISAC Recommendation) Q & A and Final Quiz

- 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.

How to Apply

- Fill Registration form online by clicking on the “**Register Now**” button below.
- Thereafter make a payment via scanning the below QR using any payment app. After payment, send receipt at training@flowsols.com. Once all the information is received, the registration will be confirmed within 24 hours via email.

Registration Fee*

For India

- Student/MD Biochem. (postgraduate student)/Research Fellow/Trainee/Technologist: INR 6000
- Postdoc/Resident Doctor (JR/SR)/Technical or Scientific Officer: INR 8000
- Faculty/Consultant: INR 10000
- Industry Professional: INR 15000

Payment (For India)

Scan the below QR Code and make a payment



Outside India:

- SAARC/South East Asia/South America/ Africa: USD 150
- Other Countries: USD 250

International Payment

Upon registration, payment link will be shared with you to make an online payment.

Register Now

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

***Registration Fee is non-refundable**

Reading Material will be provided

Recordings for all the sessions will be available to watch

E-Certificate will be given to all registered participants

Feedback from Past Course

“Thank you sir for your patience and the very simple way in making us understand this complex topic... Especially to people like me who have never seen a flow cytometer”

VIMS, 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

“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

“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

Last Date of Registration 30th April 2024

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