

Flow Cytometry and its Applications in Clinical Diagnostics

2nd - 4th February 2024

Jointly Organized by

Department of Hematology, SGPGIMS, Lucknow Trust for Education and Training in Cytometry, India



Program Highlights

- Four parallel workshops to chose from, on 2nd and 3rd February.
- The workshops will be hands-on with close interaction in small groups.
- Dedicated time slots to experience live data analysis on laptops with the supervision of Experts.
- CME on clinical applications of Flow cytometry- both the classic and newer advances on 4th February (3 Credit Hours granted from U.P Medical Council)
- Several awards to Claim:
- Dr Awtar Krishan Award: Based on the Quiz at the end of each workshop
- TETC- Best Poster, Best Oral presentation Award. (Visit <u>www.tetc.in/2024</u> for details)
- TETC Best published clinical paper award (Visit www.tetc.in/2024 for details)



About the INDO-US workshops

It gives us great pleasure to announce that the Department of Hematology, SGPGI will be hosting the Clinical workshop and CME as part of the forthcoming 25th INDO-US Flow cytometry workshops from 2nd - 4th of February, 2024. The INDO-US Flow cytometry Workshops were started in India by Prof. Awtar Krishan in 2002. These workshops were started with a vision of bringing national and international experts to the same platform, where their expertise can be harnessed by the participants to understand the basics and advanced concepts in flow cytometry and to apply this insight to their research and clinical

Looking at the increasing demand and requirement of flow cytometry educational programs, Prof. Awtar Krishan, a visionary and father of flow cytometry education in India, decided to form a non-profit organization, Trust for Education and Training in Cytometry (TETC), in the year 2018. The responsibility for the same was given to Dr. Rekha Gour, who has been associated with INDO-US Flow cytometry workshops since 2002 and is presently serving as the managing trustee. TETC is instrumental in connecting with the flow cytometry community to organize and conduct Flow cytometry workshops in India, and outside India.

The upcoming INDO-US Flow Cytometry workshop is the 25th anniversary, the silver jubilee of this academic program, which will be celebrated in Lucknow. SGPGI will be hosting the clinical workshops and CME, as a part of this 25th INDO-US Flow Cytometry workshops, from 2nd to 4th of February 2024, in collaboration with TETC, India.

Flow Cytometry has now been utilized for decades and continues to be a vital tool in clinical research and routine patient care. There has been vast improvement in the technology, development of newer fluorochromes as well as development of newer algorithmic tools for data analysis, which has led to a paradigm shift in the application of flow cytometry.

To cover all these aspects of the conventional and newer development in the field of FCM, we will be conducting four parallel workshops on 2nd and 3rd of February, followed by a one-day CME on 4th February. National and international faculty, who are the authorities in their respective field will be available for the lectures and discussion during this program.

The venue, SGPGI, is one of the biggest tertiary care super speciality medical institutes of North India and is located in Lucknow, the capital of Uttar Pradesh. It is profoundly called as the 'City of Nawabs'. The city is known for its rich culture and 'Ganga-Jamuni Tehzeeb'. The famous embroidery artwork of 'Chickankari' and the traditional dance form of Kathak, both originated from Lucknow. In addition, the own Awadhi cuisine of Lucknow has remained an attraction for tourists since decades.

With the success of our past endeavours in emanating knowledge in the field of flow cytometry, we look forward to your active participation in this forthcoming exciting event as well. The conference would provide a wonderful platform to learn from our national and international speakers and freely discuss issues from routine practice. Your presence at our conference will be much appreciated and is vital for the true success of the event.

'Muskuraiye, aap Lucknow aa rahe hain'

Invited Faculty

International

- **Brent Wood**
- Paul Wallace

National

- Amita Aggarwal
- Sumeet Gujral
- **MUS Sachdeva**
- Nitin Dayal
- Namrata P Awasthi
- Kunal Sehaal
- Jasmita Das
- Gaurav Chatterjee
- Rutvi Dave
- **Anshul Gupta**

- Manisha Madkaikar
- **Prashant Tembhare**
- **Anil Handoo**
- Rashmi Kushwaha
- **Hemant Agrawal**
- Geeta Yadav
- Surabhi
- Ramya V
- Maya Gupta
- Sitaram Ghogale

INDO-US Workshop Committee

Patron

Awtar Krishan

Chairperson

Rekha Gour

Organizing Secretaries

- **Hemant Agrawal**
- Khaliqur Rahman
- G Sunil Babu
- Mrigank Srivastava
- Satyendra K Singh

Members

- Vivek Tanavde
- **H** Krishnamurthy
- Himanshu Tillu
- Maya Gupta
- Rajendra Kumar
- Abhishek Pandeya

Advisory Committee

- R.C.Sobti
- P.N. Razdan
- **Paul Wallace**
- William G Telford
- **Arvinder M Sinah** Rui Gardner



Workshops 2nd & 3rd February 2024

1: Leukemia/Lymphoma (Max Seat -24)

- Basics of FCM The technology
- Brief over view of Equipments & Instrument settings
- Panel Designing Details of Ab and Fluorochrome
- Overview of Sample Processing
- How to approach a flow cytometry data
- FCM in Acute Leukemia- Case based Studies
- Clonality assays for B and T cells
- FCM in B cell Lymphomas Case based studies
- FCM in T cell Lymphomas Case based studies
- · Live case analysis

3: Measurable Residual Disease (Max seat – 50)

- MRD Evaluation using FCM- Why, when and How
- Sample processing Tips and tricks
- B ALL MRD: Principle/Panels/Advances/Cases
- T ALL MRD: Principle/Panels/Advances/Cases
- AML MRD: Principle/Panels/Advances/Cases
- MM MRD: Principle/Panels/Advances/Cases
- Assay Validation and Quality assurance in FCM based MRD assay
- Newer tools for the MRD analysis- The role of Machine Learning and AI
- MRD assessment in the era of targeted therapies

2: Non-Neoplastic Hematology (Max seat -20)

- Basics of FCM The technology
- Brief over view of Equipments & Instrument settings
- Panel Designing Details of Ab and Fluorochrome
- Overview of Sample Processing
- How to approach a flow cytometry data
- PNH Screening
- · OFT and EMA Binding Assay
- · Platelet Activation studies
- Hematopoietic Stem cell enumeration
- · HLA Cross match and DSA screening

4: Primary Immunodeficiency Disorders (Max Seat -20)

- Basics of FCM The technology
- Brief over view of Equipment & Instrument settings
- Panel Designing Details of Ab and Fluorochrome
- Overview of Sample Processing
- How to approach a flow cytometry data
- Diagnostic armamentarium in Diagnosis of PID special reference to FCM
- Lymphocyte subset analysis- The conventional and beyond TBNK
- Identification of Neutrophilic and phagocytic defect
- · Case based studies of PID

CME 4th February 2024

- Journey of Clinical FCM The past, present and the future
- Laboratory validation of a flow cytometric Assay
- Immunophenotypic characterisation and Aberrancies of myeloid lineage cells- The Non AML setting
- FCM in the T cell proliferation
- Screening and pertinent classification of Inborn errors of immunity using the FCM
- Platelet function assay using flow cytometry

- FCM in transplant Immunology
- Platelet function assay using flow cytometry
- AML MRD The conventional and the New
- QA in flow cytometry- The ILCP and EQA program in India
- Newer tools in FCM data analysis Role of AI
- Harmonization of Flow Cytometry Based assay in INDIA



Registration Fee

	Till 25 th Dec 2023	26 th Dec 23 to 15 th Jan 2024	After 16 th Jan 2024
Workshop Only (2 nd & 3 rd Feb 2024)	INR 4000	INR 5000	INR 6000
CME Only (4 th Feb 2024)	INR 2000	INR 3000	INR 4000
Workshop + CME (2 nd to 4 th Feb 2024)	INR 5000	INR 7000	INR 9000

The registration fee are exclusive of the GST. A GST of 18% is applicable on the registration fee.

Undergraduate/PhD Students/Technologist are eligible for a **flat discount of 20%.** They are required to submit a recommendation letter from their HOD/Supervisor.

Registration fee is only **partly refundable for the request made till 10th January 2024 (75%). No refund** is admissible for the request made **after 10th January**.

Last date of Abstract Submission: 5th January 2024.

Abstract Notification: 15th January 2024

Accommodation:

Click here to submit Abstract

Limited accommodation on a twin share basis is available in the institutes guest house on the first cum first serve basis. Preferences will be given to female candidates. Please write to us on the email given below, post registration Please *contact Mr Kaushal Kumar*, STO, Dept of Hematology – Mobile number – 9450659995.

Click here to register

Scan here to register



Patron: Prof R K Dhiman.

Organizing Chairperson: Prof Rajesh Kashyap

Organizing Secretaries: Prof. Ruchi Gupta & Dr Khaligur Rahman

Joint Organizing Secretaries: Dr Dinesh Chandra, Dr Sanjeev, Dr Manish K Singh

Treasurer: Dr Khaligur Rahman

Members: Mr Manoj K Sarkar, Mr Kaushal Kumar, Ms Shobha Kardam, Dr C P Chaturvedi, Dr

Vinod Verma, Dr Naresh Tripathy, Dr Jalaj Gupta, Dr Kulwant Singh.

Contact Us

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TETC AWARD 2024

FOR THE BEST PUBLISHED PAPER RESEARCH (1) & CLINICAL (1)

LAST DATE OF SUBMISSION: 20[™]JANUARY 2024 OPEN FOR ALL

AWARD GUIDELINES AND CRITERIA

PURPOSE: The purpose of the **TETC Best Published Paper Award** is to recognize and promote quality contributions to academic and clinical research among students, scholars and scientists.

ELIGIBILITY: All full papers published or under publication in the peer reviewed journals between years 2021-2024, regardless of the status of the first authors (i.e., scholar, student, educator, clinician, scientist or professional, etc.) are eligible for competition for the TETC Best Published Paper Award.

EXCLUSIONS: The papers authored or co-authored by TETC committee and TETC members will not taken into consideration.

AWARD SELECTION COMMITTEE WORK: The Scientific Committee members formed by the TETC committee will score candidate papers. The accepted paper receiving the highest scores in the review process in research and clinical category (one each) will be chosen for the award.

AWARD CANDIDATES ANNOUNCEMENT: Author of the selected paper will be informed on or before 25th Jan 2024 and the winner candidates will be also announced on the TETC homepage.

AWARD CRITERIA: The Scientific Committee will consider innovation, significance to the research community, scientific impact and technical excellence.

SUBMISSION: The paper should be submitted at indiatetc@gmail.com on and before 20th January 2024.

Winners Will Be Awarded At The 25th INDO-US Flow Cytometry Workshops, February 2024, Lucknow

WINNERS WILL PRESENT THEIR WORK

○ Clinical: SGPGI, Lucknow, 4th February 2024
 ○ Research: CSIR-CDRI, Lucknow, 6th February 2024

Winner will be awarded and will be entitled for : • Certificate • Memento • Cash Prize & TETC will provide Support of Rs. 5000 for Travel and accommodation (For Awardees from outside Lucknow)

ISSUES: In case of any issue arising, TETC holds the right for final decision.

For more information, please visit our website www.tetc.in/2024

CONTACT DETAILS

25th INDO US FCM WORKSHOP SGPGI, Lucknow

Workshop-1: Leukemia & Lymphoma

	Faculty Incharge: Dr Namrata Awasthi/Dr Rashn	•	-
	Venue: CORE Lab, SGPGI, Lucknow		-
	DAY 1: 02.02.2024		
Time	Topic	Faculty	Venue will be
0830 - 0900	Registration		telemedicine
0900-0915	Inauguration of workshop		Auditorium for
0915-1000	Basics of FCM - The technology	Hemant Agrawal	these lectures
1000-1045	Brief over view of Equipments & Instrument settings	Kunal Sehgal	
1045-1115	Tea		
1115-1150	Panel Designing - Details of Antibodies and Flurochrome	Jasmita Das	
1150-1225	Overview of Sample Processing	Sitaram Ghogale	
1225-1300	How to approach a flow cytometry data	Hemant Aggarwal	
1300-1400	LUNCH		
1400-1445	FCM in Acute Leukemia- Case based Studies	Rashmi Kushwaha	
1500-1630	Sample Prepration and Staining	All Fac/Kaushal K	
			_
	DAY 2: 03.02.2024		
Time	Topic	Faculty	
0930-0945	Recap of Day 1	KR/RG/SR	
0945-1010	Clonality assays for B and T cells	Jasmita Das	
1010 - 1045	FCM in B cell Lymphomas - Case based studies	Namrata Awasthi	
1045-1120	FCM in Tcell Lymphomas - Case based studies	Jasmita Das	
1120-1145	Tea		
1145-1300	Acquisition of stained sample	All Fac/Kaushal K	
1300-1400	Lunch		
1400-1630	Live case analysis	All Fac	
1630-1700	Quiz for Dr Awtar Krishan Award	All Fac	

25th INDO US FCM WORKSHOP SGPGI, Lucknow

Workshop-2: Non Malignant Hematology

	Faculty Incharge: Dr Ruchi Gupta/Dr Kusum Gup	ta	_
	Venue: Flow Lab, Dept of Hematology, SGPGI, Luck	now	_
DAY 1: 02.02.2024			
Time	Topic	Faculty	
0830 - 0900	Registration		
0900-0915	Inauguration of workshop		
0915-1000	Basics of FCM - The technology	Hemant Agrawal	Venue will be
1000-1045	Brief over view of Equipments & Instrument settings	Kunal Sehgal	telemedicine Auditorium fo
1045-1115	Теа		these lectures
1115-1150	Panel Designing - Details of Antibodies and Flurochrome	Jasmita Das	
1150-1225	Overview of Sample Processing	Sitaram Ghogale	
1225-1300	How to approach a flow cytometry data	Hemant Aggarwal	
1300-1400	LUNCH		
1400-1430	FCM in PNH Screening	Geeta Yadav	
1430-1515	Sample Processing - Hands on (in Batches)	Manoj/Shobha	
1515-1530	TEA Break		
1530-1600	FCM based OFT & EMA Binding assay	RG/KR/DC/Kusum	
	Sample Processing/Acquisition/Analysis and Case	Manoj/Shobha	
1600-1700	discussion		
	DAY 2: 03.02.2024		
0915-0930	Recap of Day 1		
0930-1000	Study of Surface glycoprotein for inherited disorders	RG/KR/DC	
1000-1045	Platelet function/Activation assay	Ramya V	
1045-1115	Теа		
1115-1300	Sample Processing/Acquisition/Analysis	Ramya V/Manoj	
1300-1345	Lunch		
1345-1415	FCM based HLA Cross match - Basic Principles and case		
	studies	Nitin Dayal	
1415-1445	Donor Specific Antibody Screening using FCM - with case		
	studies	Nitin Dayal	
1445-1515	CD34+ Stem cell enumeration using Flow cytometry	Ruchi Gupta	
1515-1530	Tea	·	
1530-1645	Sample Processing/Acquisition/Analysis	Manoj/Shobha	
1645-1700	QUIZ for Dr Awtar Krishan Award	All Fac	

25th INDO US FCM WORKSHOP SGPGI, Lucknow

Workshop-3: Measurable Residual Disease Workshop

	Workshop-3: Wicasarable Residual Disease Worksh		
	Faculty Incharge: Dr Khaliqur Rahman/Dr Anu/Dr Mona		
	Venue: e-Tumor borad room, Telemedicine, SGPGI, Lucknow		
	2nd and 3rd of February 2024		
	DAY 1: 02.02.2024		
0830 - 0900	Registration		
0900-0915	Inauguration of Workshop		
0915-1000	MRD Evaluation using flow cytometry- Why, when and How	Brent Wood	
1000-1030	MRD evaluation in Hematological neoplasm- The Clinician's Perspective	Anshul Gupta	
1030-1100	Sample processing - Tips and tricks for getting appropriate data	Sitaram Ghogale	
1100-1130	Break		
1130-1230	B ALL MRD: Principle/Panels/Advances/Case demonstration	Prashant Tembhare	
1230-1330	BALL MRD_ Representative case analysis	All fac	
1330-1430	LUNCH		
1430-1530	T ALL MRD: Principle/Panels/Advances/Case demonstration	MUS Sachdeva	
1530-1630	T ALL MRD_ Representative case analysis	All fac	
	DAY 2: 03.02.2024		
0915-1000	Assay Validation and Quality assurance in FCM based MRD assay	Anil Handoo	
1000-1045	Newer tools in the MRD analysis- The Machine Learning and Al	Prashant Tembhare	
1045-1130	MRD assessment in the era of targeted therapies	Brent Wood	
1130-1200	Break		
1200-1250	AML MRD: Principle/Panels/Advances/Case demonstration	Brent Wood	
1250-1345	AML MRD_ Representative case analysis	All fac	
1345-1430	LUNCH		
1430-1520	MM MRD : Principle/Panels/Advances/Case demonstration	Paul Wallace	
1520-1620	MM MRD : Representative case analysis	All fac	
1620-1645	Quiz for Dr Awtar Krishan Award	All Fac	

25th INDO US FCM WORKSHOP SGPGI, Lucknow

Workshop-4: Primary Immunodeficiency Disorders

	Faculty Incharge: Dr Amita Agarwal/Ms Ma	ya Gupta	
	Venue: Dept of Immunology, C Block, SGPGI	, Lucknow	
Time	Topic	Faculty	Venue will be
<mark>0830 - 0900</mark>	Registration		telemedicine
0900-0915	Inauguration of workshop		Auditorium for
0915-1000	Basics of FCM - The technology	Hemant Agrawal	these lectures
1000-1045	Brief over view of Equipments & Instrument	Kunal Sehgal	
1045-1115	settings Tea		
1115-1150	Panel Designing - Details of Antibodies and Flurochrome	Jasmita Das	
1150-1225	Overview of Sample Processing	Sitaram Ghogale	
1225-1300	How to approach a flow cytometry data	Hemant Aggarwal	
1300-1400	LUNCH		
1400-1500	Clinical scenarios of Inborn errors of Immunity	Amita Aggarwal	
1500-1600	Lab diag of IEI and the role of FCM	Maya Gupta	
1600-1630	Group Discussion		
	DAY 2: 03.02.2024		
Time	Topic	Faculty	
0930-1130	Lymphocytes subset analysis (Bench work)	Maya Gupta/Phd Immunology	
1130-1200	Break	,	
1200- 1400	LAD, DHR and perforin assays (Bench Work)	Maya Gupta/Phd Immunology	
1400-1445	Lunch		†
1445 -1530	Interesting cases presentation	Surabhi	7
1530-1600	Group Discussion		
1600-1630	QUIZ for Dr Awtar Krishan Award		

CME

	CIVIE	
	Venue - Har Gobind Khurana Auditorium, LT Complex	
Date: 4th February 2023		
0900-0930	Journey of Clinical flow cytometry- The past, present and the future	Brent Wood
0930-1000	Laboratory validation of a flow cytometric assay - The dos and donts	Paul Wallace
1000-1030	Immunophenotypic characterisation and Aberrancies of myeloid lineage	Gaurav
	cells- The Non AML setting	Chatterjee
1030-1110	Innauguration and high Tea	
1110-1140	Immunophenotypic characterisation of T cell proliferations - T cell NHL and reactive mimicks	MUS Sachdeva
1140-1210	Screening and pertinent classification of Inborn errors of immunity using the FCM	Manisha Madkaikar
1210-1240	FCM in transplant Immunology	Anil Handoo
1240-1310	Platelet function assay using flow cytometry	Rutvi Dave
1310-13-50	Lunch	Lunch
1350-1430	Selected Oral Presentation (5 Abstracts) (6+2 minutes)	
1430-1500	AML MRD analysis using FCM- The conventional and the New	Brent Wood
1500-1530	Quality assurance in flow cytometry- The available QA program in India	Anil Handoo
1530-1545	Tea	
1545-1615	Newer tools in FCM data analysis - The role of Machine learning and artificial Intelligence	Hemant Agrawal
1615-1645	Panel Discussion: Scope of hormonisation in FCM based assay in India	S. Gujral & K. Rahman
1645-1700	Valedictory and vote of thanks	