



ThermoFisher
SCIENTIFIC
The world leader in serving science



27-29 SEPTEMBER, 2019

NATIONAL HANDS ON WORKSHOP ON 'APPLICATIONS OF FLOW CYTOMETRY IN PHARMACOLOGY AND DRUG DISCOVERY'

COURSE HIGHLIGHTS:

- ❖ Cell Death and Differentiation, Cell Division
- ❖ Free Radical Flow Cytometry
- ❖ Live-Dead Cell Differentiation
- ❖ Cell Cycle
- ❖ Intra Cellular Proteins Expression
- ❖ Detection of Rare Events by Flow Cytometry and its Importance in Drug Discovery

Link: [Registration form](#)

*Workshop provides insights
on*

Importance of Flow Cytometry in Translational Research and Drug Discovery

Venue: PGIMER, Chandigarh
Date: 27-29 Sept., 2019

Under the aegis of
**Medical Pharmacologists Society
(MPS)**

An initiative of
**Experimental Pharmacology
Laboratory (EPL)**

In association with
ThermoFisher Scientific

Chairman:
Prof. Bikash Medhi,
Department of Pharmacology, PGIMER,
Chandigarh

Vice-Chairman: Dr. Ajay Prakash

Org. Secretary: Dr. Subodh Kumar

Co-Org. Secretary: Dr. Phulen Sarma

MPS Representative: Dr. Shivamurthy N

LEARNING PROGRAM SCHEDULE

Day 1

- Basics of Flow Cytometry
- Flow Cytometry in Drug Discovery
- Instrument Setup, Standardization
- Cell Death and Differentiation 1: Apoptosis by Annexin V staining
- Cell Death and Differentiation 2: Caspase 3/7 staining, JC1 staining
- Cell Death and Differentiation 2: Caspase 3/7 staining, JC1 staining
- Review and Discussion

DAY 2

- Cell Division, Free Radical Flow Cytometry
- Identification of Reactive Oxygen Species by Using Flow Cytometry
- Live-Dead Differentiation, Study of Cell Cycle
- Cell Labelling and Division by CFSE
- Discussion, Closure

DAY 3

- Cell Response Analysis by Flow Cytometry: Intra Cellular Cytokine Assay: Stimulation with PMA/Ionomycin
- Detection of Rare Events by Flow Cytometry: Importance in Drug Discovery
- Rare Event Detection by Flow Cytometry
- Discussion, Closure, Exam, Certificate Award



APPLICATIONS OF FLOW CYTOMETRY

Flow Cytometry is a means of identifying and measuring certain physical and chemical characteristics of cells or particles as they travel in suspension. Flow cytometry uses fluorescent probes to identify and characterize cells or particles. The flow cytometry is useful because of its ability to measure several parameters on a cell by cell basis rapidly.

Applications in basic research

- Apoptosis measurement
- Cell cycle analysis
- Cell proliferation
- Cell sorting
- Study of membrane potential
- Study of transfection efficiency

Applications in Clinical trial/research

- Live/dead bacteria discrimination (Indicator of bactericidal potential of an antibiotic)
- Immunophenotyping (Analysis of leukemias and lymphomas and hematological clinical trials)
- Detection of minimal residual disease (e.g. Acute Leukemia)
- Stem cell enumeration
- Solid organ transplantation (T cell cross-match, Postoperative monitoring)
- Detection of autoantibodies
- Immunodeficiency diseases (primary immunodeficiencies diseases, HIV infection: CD4+ cell counts)
- Reticulocyte analysis
- Stability of whole blood (stability of post-collection sample, in presence and absence of compound)
- Stability of stained cells
- *Ex vivo* effect of compound





Who can attend?

MD, DM, Ph.D., M.Sc. students and faculties working towards translational research in pharmacology and related streams, life sciences.

Total number of Seats:

40 (at least 10 seats reserved for MPS members. If they are not utilized they will be kept open for non members)

Registration Charges:

Students/Researchers/Ph. D/Post Doc Fellow/MD/DM

3,500 INR/ 100 USD
(MPS student members 3000 INR)

Faculty

4,500 INR/ 130 USD
(MPS life members (professionals) 4,000 INR)

Late registration charges:

500 INR/25 USD extra (after 15 Sept. 2019)

Bank details:

Account Name- Medical Pharmacologist Society,
A/c No- 185001000497 (ICICI bank)
Branch- Kothanur, Bangalore,
IFSC Code- ICIC0001850
NOTE: ONLY NEFT/RTGS.

Accommodation:

Own responsibility

As seats are limited, once registered, the registration fee is non-refundable.

ORGANIZING COMMITTEE DETAILS:

Chairman	Prof. Bikash Medhi, Department of Pharmacology, PGIMER, Chandigarh
Vice-Chairman	Dr. Ajay Prakash, Assistant Professor, Department of Pharmacology, PGIMER, Chandigarh
Organizing Secretary	Dr. Subodh Kumar, Department of Pharmacology, PGIMER, Chandigarh
Co-Organizing Secretary	Dr. Phulen Sarma, Department of Pharmacology, PGIMER, Chandigarh
MPS Representative	Dr. Shivamurthy N., President, Medical Pharmacologists Society
Member	Dr. Pramod Avti, Assistant Professor, Department of Biophysics, PGIMER, Chandigarh
Members	Sukhmeet Kaur, Ankita Semwal, Hardeep Kaur, Department of Pharmacology, PGIMER, Chandigarh



Registration form

NATIONAL HANDS ON WORKSHOP ON “APPLICATIONS OF FLOW CTOMETRY IN PHARMACOLOGY AND DRUG DISCOVERY” DATE: 27-29 SEPT. 2019 VENUE: DEPARTMENT OF PHARMACOLOGY, PGIMER, CHANDIGARH

Name of the Participant:MPS mem. No.....

Nationality:..... Age:..... Gender:.....

Email Id : Phone number:

Address:.....

.....

Name of the Institute/College:

Designation MSc Research Fellow Ph.D Post doc fellow MD/DM

Student Faculty MPS Member Not an MPS member
Designation(specify).....

Amount of fees paid

*(Note:
1. at least 10 seats are reserved for
MPS members.
2. MPS members will pay Rs.500
less than the mentioned fee)*

Student
Early registration (3500 INR/100 USD) Students should submit declaration signed by HOD/dean attached
Late registration (4000 INR/125 USD)
Faculty
Early registration (4500 INR/130 USD)
Late registration (5000 INR/155 USD)

Mode of payment: Demand draft NEFT

DD/NEFT number:..... Bank: date:.....

For further details visit:

PGIMER website: pgimer.edu.in
Experimental Pharmacology Lab, PGIMER, Chandigarh website: <http://www.eplpgi.in/>
Correspondence Email ID: epl.pgimer@gmail.com

(Visit www.mpsmdpharmac.org to know more about MPS society, its programs and getting membership. Contact mps.mdpharmacologists@gmail.com for more details/bylaws of the society)

Contact Persons:

Prof. Bikash Medhi
Ph. No.: 9815409652

Dr. Ajay Prakash
Ph. No.: 9781119969

Dr. Subodh Kumar
Ph. No.: 9216947740

How to register: Fill up the above form and send it to the address mentioned below, OR
Fill the Google form at link provided below, or also available at EPL and PGIMER website.
Send a scanned copy along with transaction details to epl.pgimer@gmail.com and hard copy along with demand draft/NEFT details to below mentioned address.

Click here to go to: [Registration form](#)

Please send your filled-up form, studentship certificate and original copy of demand draft/
printout of NEFT transaction details to

Dr. Subodh Kumar

Room No-4043, Dept. of Pharmacology, 4th Floor, Research Block B, PGIMER, Sec-12, Chandigarh-160012