



## 7 - DAY HIGH-END WORKSHOP (KARYASHALA)

on

### Hands-on Training on Flow Cytometry for a Comprehensive Understanding of its Usefulness in Basic, Applied & Clinical Research

December 21-27, 2022

Department of Biochemistry, Institute of Science,  
BHU, Varanasi

#### Organized By

Department of Biochemistry, Institute of Science,  
Banaras Hindu University, Varanasi - 221005, India

#### Sponsored By

Science and Engineering Research Board (SERB),  
Department of Science and Technology (DST),  
Govt. of India, New Delhi

### Course Overview

Flow cytometry is an efficient tool for single cell analysis, which is highly preferred in immunological research in the area of Life and Medical Sciences. A flow cytometer can be used to quantify the number of a specific cell population & its functional characteristics, simultaneously from the heterogenous cell population along with other important applications such as identification of apoptotic, necrotic, stem cells, cell cycle analysis etc. This course is designed to thoroughly understand the theory behind the genesis of flow cytometry, its principle and research applications in various areas. This course will cover theoretical & practical learning of this technique with a detailed understanding of instrumental & technical parts. A big emphasis will be made on practical work to acquaint the participants with a-z of this technique so that they could efficiently learn the designing, development & execution of experiments & analysis of results.

#### Topics To be Covered

- Principle of Flow cytometry
- Understanding the flow cytometer (instrumentation & software)
- Selection of labeled antibodies & panel designing
- Apoptosis Assay
- Cell proliferation and counting
- Surface and intracellular staining
- Clinical applications
- Data Acquisition and Analysis
- Detailed Understanding of Third party analysis software

#### Eligibility criteria and Registration

- Person of Indian origin.
- Postgraduate (PG) students & Ph.D. scholars, passed or pursuing, in any subjects of Life, Biological, Medical, Chemical, and Pharmaceutical Sciences.
- Applicants are requested to submit a No Objection Certificate from the head of the department/Ph.D. thesis supervisor in the attached prescribed format (Annexure 1).

### How to Register

To register please fill out the registration form appended below.

#### Registration link:

[https://docs.google.com/forms/d/e/1FAIpQLScHYyRv6lmxJGiwE9qANieGFO7QMXqWyHvhwxGw2M4Y4A6oQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLScHYyRv6lmxJGiwE9qANieGFO7QMXqWyHvhwxGw2M4Y4A6oQ/viewform?usp=sf_link)



You can also send your application directly along with a duly filled/signed NOC\*, a hundred-word write-up to strengthen your application along with a brief CV to the email id : [flowkaryashala@gmail.com](mailto:flowkaryashala@gmail.com)

**Last date of registration:** Dec. 12, 2022

Notification to selected participants on or before: Dec. 13, 2022.

The shortlisted candidate will be intimated through email.

#### Registration fee (to be paid after selection)

**Ph.D. Scholars: 5000/-, PG Students: 2500/-**  
Online Transfer: Bank: **State Bank of India, Main Branch, BHU; Ac No. : 41390372976; IFSC code: SBIN0000211**

#### Bank Draft (in favour of): "Flow Karyashala"

Boarding/lodging (in the university guest houses) and travel allowances (train second class sleeper) to outstation candidates will be provided. Snacks and lunch will also be served during the entire period of the workshop.

*\*NOC format is linked with google form and also available at [www.bhu.ac.in](http://www.bhu.ac.in)*

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### For any queries:

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