

# 6th NATIONAL WORKSHOP ON “PHARMACOGENOMICS: BASICS TO ADVANCED”



## **HANDS ON WORKSHOP**

**13th-15th OCTOBER, 2023**

### Organized By:

Experimental Pharmacology  
Laboratory (EPL),  
Department of Pharmacology,  
PGIMER, Chandigarh

*in collaboration with*

Indian Pharmacological Society (IPS)

### Important Dates

Last date of Registration:

30th September, 2023



## Organizing Committee



*Dr. Shivprakash Rathnam  
President, IPS*



*Dr. B.D.P Kala Kumar  
General Secretary, IPS*



*Prof. Bikash Medhi  
Organizing Chairman*



*Dr. Ajay Prakash  
Organizing Vice-Chairman*



*Dr. Rahul Singh  
Organizing Secretary*



*Dr. Subodh Kumar  
Co-organizing Secretary*



*Dr. Ashutosh Singh  
Co-organizing Secretary*



*Dr. Gurjeet Kaur  
Co-organizing Secretary*

## Hands on workshop

- PRIMER DESIGNING
- DNA EXTRACTION
- RNA EXTRACTION
- AGROSE GEL ELECTROPHORESIS
- SANGER SEQUENCING
- NEXT GENERATION SEQUENCING
- HAPLOTYPE
- LINKAGE ANALYSIS
- STATISTICAL ISSUES IN PHARMACOGENOMICS
- FUNCTIONAL ANALYSIS OF SNP.

### Contact:

EPL PGIMER

Email: [eplworkshops.pgimer@gmail.com](mailto:eplworkshops.pgimer@gmail.com)

## Registration link

## Registration Fees:

IPS member 5000 INR  
Non IPS member 6000 INR

### SPOT Registration Fees:

IPS member 6000 INR  
Non IPS member 7000 INR

*In case of group registration please contact  
@ [eplworkshops.pgimer@gmail.com](mailto:eplworkshops.pgimer@gmail.com)*

*or*

*[drbikashus@yahoo.com](mailto:drbikashus@yahoo.com)*

*As this is a limited seat workshop, once registered, the  
registration fee is non-refundable*

## Account Details

In favour of, Indian Pharmacological Society  
(IPS),

SBI Account No.62465635306,

IFSC: SBIN0020087,

Habsiguda. Uppal Road, Hyderabad-500 007.

# LEARNING PROGRAM SCHEDULE

## Day 1

### INTRODUCTION TO PHARMACOGENOMICS

- Inauguration
- Keynote Address: "The Future of Pharmacogenomics
- Techniques in pharmacogenomics.
- Pharmacogenomics: Basics.
- Primer designing.
- DNA/RNA extraction.
- cDNA synthesis.
- Agarose gel electrophoresis.
- Real-time PCR.
- Quantitative estimation of DNA/RNA.
- Result analysis

## Day 2

### SEQUENCING

- Detection of known and unknown mutation
- Principle of Sanger sequencing
- Basic workflow of Sanger sequencing
- Protocol
- Experimental trouble shooting
- Sanger sequencing results analysis
- Electropherograph analysis
- Informatics tools& Regulatory mutation detection tools
- Design and statistical issues in pharmacogenomic studies

## Day 3

- Data analysis of sanger sequencing
- Next generation sequencing (A) Illumina (B) Ion Torrent
- Candidate gene prioritization: Network biology approach.
- Pharmacogenomics in day-to-day clinical practice