5th NATIONAL WORKSHOP ON
“PHARMACOGENOMICS: BASICS TO ADVANCED”

WORKSHOP
16th-18th December, 2022

Organized By:
Experimental Pharmacology Laboratory (EPL),
Department of Pharmacology,
PGIMER, Chandigarh

in collaboration with
Indian Pharmacological Society (IPS)

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

Registration Fees:
IPS member 5000 INR
Non IPS member 6000 INR

No SPOT Registration
In case of group registration please contact @
eplworkshops.pgimer@gmail.com
or
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.

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. Phulen Sarma
Organizing Secretary

Dr. Subodh Kumar
Co-organizing Secretary

Dr. Gurjeet Kaur
Co-organizing Secretary

Contact:
EPL PGIMER
Email: eplworkshops.pgimer@gmail.com

Registration link
# 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