

Department of Neurochemistry
National Institute of Mental Health and
Neuro Sciences (NIMHANS)
Bangalore-29

2023
HANDS ON
WORKSHOP



BASIC AND ADVANCED MOLECULAR BIOLOGY TECHNIQUES FOR ASPIRING RESEARCHERS



10-12, April 2023

### Hands on practical session

- Genomic DNA extraction from whole blood
- RNA extraction and cDNA conversion
- Nucleic acid and protein quantitation and quantification
- Polymerase Chain Reaction (PCR) (Conventional)
- Real Time PCR
- Gel electrophoresis (Agarose and SDS PAGE)

### **Lecture Topics**

- DNA and RNA isolation, principles and applications
- Polymerase chain reaction: conventional and real-time
- Agarose gel electrophoresis
- SDS PAGE and gel staining methods
- Introduction to data analysis using software's
- Introduction to high throughput sequencing technologies

## Purpose of the workshop

Biochemistry and Molecular Biology remains the most exciting branches of Bio-Sciences in the 21<sup>st</sup> Century, as it forms the basis of Biotechnology, with wide applications in modern science. Despite its importance, however, many students and researchers are still not well-versed in these techniques, probably because the techniques are typically too complex, time-consume, and expensive for individual laboratories. This hands-on workshop, therefore, aims to assist young research aspirants in India, to develop skills required for active research in the areas of Molecular Biology. It is open to all researchers, lecturers, professionals, and postgraduate students in all areas of Biological, Pharmaceutical Sciences, as well as Molecular Medicine.

### **Venue of the Work shop:**

Department of Neurochemistry, 2<sup>nd</sup> Floor, Admin block, NIMHANS, Bengaluru-29, Karnataka

## Who should attend this workshop?

Researchers, lecturers, professionals, and post-graduate students in all areas of Biological, Pharmaceutical Sciences, as well as Molecular Medicine

## **Maximum number of participants: 20**

### **Registration details**

Online registration is mandatory for all applicants and for online registration please visit

https://docs.google.com/forms/d/e/1FAIpQLSfoGjfuckAX32dMDp2deN3ToDQGzBJb3B\_Ei35Xsd1gsZHmQA/viewform?usp=sf\_link

Upon registration, the selected candidates will be requested to pay the registration fees

Payment mode and details will be shared via email to the selected candidates

### **Important Date**

Last date for registration - 20<sup>th</sup> March 2023 Announcement of selected candidates through email – 21<sup>st</sup> March 2023 Last date for registration fees payment – 24<sup>th</sup> March 2023

## **Registration Fees**

The registration fee for the workshop is Rs.3540/- (Rupees three thousand five hundred and forty only – including 18% GST). The registration fee covers the workshop participation, workshop kit, lunch, and refreshments for three days. Please note that fees paid will not be refundable under any circumstances and there is no spot payment

#### Accommodation

Limited in-house accommodation (Non-AC) will be provided only on sharing basis (2/3/6) at Kabini guest house subject to availability on a first come first serve basis. The tariff is fixed at Rs.300 per day per person and has to be paid at the guesthouse during check-in

## **Chief Patron**

Prof. Pratima Murthy Director

#### **Patron**

Prof. B.S. Shankaranarayana Rao Registrar

#### **Co-Patron**

Prof. Bindu M. Kutty Dean (Basic Sciences)

#### **Convenor**

Dr. K. Gokulakrishnan Associate Professor

# Chairperson

Prof. Nandakumar D N HOD, Dept of Neurochemistry

### **Coordinators**

Dr. Sandhya Narasimhan Mr. Thirumoorthy C Mr. Nikhil PJ

#### **Contact Details**

Dr.K. Gokulakrishnan,
Associate Professor,
DBT/Wellcome Trust India Alliance Intermediate Fellow,
Department of Neurochemistry, NIMHANS
Email: gokulnimhans@gmail.com
Mobile: +91-9962465824

Mr. Thirumoorthy C Mobile No: 9535866841 Mr. Nikhil PJ Mobile No: 9535866841 Dr. Sandhya Narasimhan Mobile No: 9535866841