# Workshop on "Basic Techniques in Molecular Biology in Clinical perspective" –2018



Molecular techniquies have introduced a new dimension to the medical research laboratory and clinical diagno-

sís laboratory.

Developments in molecular tools and techniques has revolutionized to researcher in basic and applied clinical field. In this regard it is of atmost important for clinical and non-clinical medical professionals' to gain fundamental knowledge of basic molecular techniques.

In view of the importance of basic molecular techniqueis in clinical application, the division of Genetic, Malabar Cancer Centre Thalassery is organizing three days hands-on workshop in molecular techniques in clinical perspective during 24-27 Oct 2018

The aim of this workshop is to provide participant with basic training in molecular biology tools and bioinformatics techniques and scientific concept through a blend theoretical and hands on experimentation. The techniques that will be covered in workshop includes genomic DNA and total RNA isolation from different biological samples, PCR, Real time PCR, Sequencing and 2D electrophoresis. This technologies are the basics for any discoveries in the molecular biology and clinical application.

The training course has been designed especially for the young member with clinical background. We pleaser to invite you to participate in this clinical oriented workshop in molecular techniques.

# **Objectives**

- Provide training in basic molecular tools required in clinical perspective and medical research.
- ⊗ Provide basic concepts of bio-informatics
- ⊗ Lectures and discussion on some recent developments in molecular biology.
- Provide a knowledge base platform for medical genetics and related research.

**Targeted participants:-** Students doing MD/MDS or those who completed MD/MDS

Duration of workshop: - 4days

**Workshop Fee: -** Registration fee - Rs. 7,500/-.

Study material: - Included

Accommodation: - Not Included

Food: - Tea, Snacks and Lunch

Important dates :-

Last date for registration:- 5 th Oct 2018

Date of conformation—10 Oct 2018

Date of workshop-24-28 Oct 2018

**Venue**:- Division of Genetics; MCC, Thalassery

Fee Deposition Details:-

DD in favor of Director , Malabar Cancer Centre

Payable at Thalassery (only Nationalized Banks)

**Note:-** Make the payment after provisional confirmation. For provisional confirmation:- send mail to divofgeneticsmcc@gmail.com or online registration—

https://goo.gl/forms/LiNoLXrWa9fY6csl2

Final confirmation will be given after receipt of payment

**Chief Patron:-** Prof. Satheesan B (MCh) Director MCC **Organizing Chairperson:-** Prof. Sangeetha K Nayanar (MD Pathology) HOD Dept of CLS&TR

Co-Organizing Secretary :- Dr Vipin Gopinath

Name	gisu audii roriii
INdITIE	
Age	
Sex	
Qualification:	
Designation	
Institute	
E-mail:	
Address for corre	espondence:
Phone	
Payment Details	
•	nce in molecular biology: Yes / No
If Yes details	
If Yes details  Technique to wh	
If Yes details  Technique to whe  Proposed future  Details	ich you are interest in this worksho

Dept of Clinical Laboratory Services & Translational

Malabar Cancer Centre, Thalassery 670 103

Division of Genetics

Research

D - -: - + - - + : - - - F - -

## Course details

Practical & demonstrations and hands-on training in molecular biology techniques

### Technique:-

DNA and RNA extraction,

Quality check and quantification of DNA and RNA, Polymerase chain reaction,

Gel electrophoresis: horizontal and vertical,

Real time-PCR.

DNA sequencer (Demonstrations)

2D electrophoresis. (Demonstrations)

### Bioinformatics:-

locating the gene sequence of interest,

SNP and somatic mutation database

Identification of the PCR product,

primer designing.

### Lectures :-

Elements of medical genetics,

Real time& PCR, DNA sequencing,

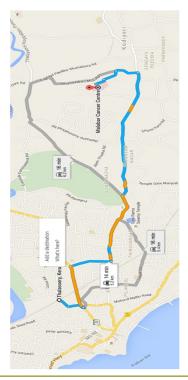
High throughput screening for detection of mutations.

Statistical methods used to calculate sample size and analysis of genotype-phenotype data.



Workshop on "Basic Techniques in Molecular Biology in Clinical perspective" 2015

### How to Reach



Travel Time from Thalassery Railway Station to Malabar Cancer Centre is 0 hour(s) 13 min(s) Thalassery Railway Station to MCC auto fair Rs80/-

## Trains and timing

## From Trivandrum (Time at thalassery)

MALABAR EXP (16629) - 06:02AM MAVELI EXPRESS (16604) - 04:44AM MANGALORE EXP (16347) - 07:11 AM

## From Mangalapuram (Time at thalassery)

MNGLA LKSDP EXP (12618)- 05:30 AM PARASURAM EXP (16649) - 07:44 AM

### Hotels for Stay and distance from MCC

The Pearlview Regency-0490 232 6702 (7KM) Soubhagya Residency-094460 82278 (6KM) Hotel Paris Presidency- 0490 234 2667 (5KM) Sree Gokulam Fort-490-2321222 (6KM)

### MALABAR CANCER CENTER

Malabar Cancer Centre, an autonomous institution under Health and Family welfare department of Government of Kerala, thrives for excellence in the field of early detection, diagnosis and treatment of cancer. The institution is being developed as a state of art cancer centre with equal thrust on clinical care, education and research. Various therapeutic, diagnostic and research departments are enriched with state of art equipment.

Vision "The development of an exponentially progressing high quality institution with equal trust on clinical care, oncology related education and multifaceted research."

### **DIVISION OF GENETICS & CYTOGENETICS**

Division started functioning during end 2014 under department of clinical laboratory services and translational research. Division is fully equipped with the state of art equipment for molecular studies. Division is mainly focusing to understand the molecular mechanism of tumorigenesis. Along with molecular research, division is also involved in the molecular diagnosis. Division is also focused on the HR development by providing short-term training for BSc, MSc life Science and B Sc MLT students and dissertation works for MSc/MD/MDS course.



Malabar Cancer Center, Moozhikkara (PO) Thalassery, Kannur Kerala -PIN 670103 Phone No 0490 2355881