



Training in Microarray Technology (Advanced)

What participant should know ?

- Structure and function of DNA
- Central Dogma of molecular biology
- Basic knowledge of microarray

Module: Microarray Technology (Advanced)

1. Introduction of Microarray Technology
2. Preparation of Chip through combinatorial Method & Printing using Nano Drop (State of art Lecture)
3. Technical aspects and role of Affymatrix Fluidic Station
4. Technical aspects and role of Agilent Scanner
5. Technical Aspects and role of Hybridization oven
6. Sample preparation and processing
7. Differential expression analysis
8. Microarray validation through RT PCR.
9. Single/multi color data analysis
10. Microarray Image Processing
 - GRID Alignment
 - Foreground Separation
 - Quantification & Normalization
 - Identification of Differentially Expressed Genes
 - Microarray Image Validation
11. Microarray Image Processing
 - Data analysis & interpretation
 - Normalization & quality control of data
 - Classification of genes
 - Clustering of genes
 - Functional Annotations
 - Gene expression based Annotations

Instrument Handling:

- Affymetrix Fluidic Station
- Affymetrix Gene Scanner
- Affymetrix Hybridization Oven
- Bio Rad Gene Cyclor
- ABS RT PCR

Duration: 3 Months from date of joining

Eligibility: PhD / Masters / Bachelors from Life Science / Pharma (Studying or Passed out)

Service Charge: Rs 25,000/-