



ELECTIVE RECOMBINANT DNA TECHNOLOGY

Duration: 60 days

Code: HRDT-60

**An introduction to Recombinant DNA Technology
Instrumentation in Biotechnology and Molecular Biology
Isolation of DNA from fruit
Isolation of DNA from Plant source by SDS and C-TAB method
Industrial Isolation and purification of Genomic DNA from animal tissue/yeast
Isolation and purification of Genomic DNA from Prokaryotes
Isolation of Plasmid DNA from prokaryotes
Purification of DNA
Separation of DNA by Gel electrophoresis technique
Southern Blotting and its application spectrum
Elution of inserts from gel
Restriction enzymes in the field of Recombinant DNA Technology
Restriction digestion
Ligation
Agarose gel Electrophoresis
Quantitative estimation of DNA
Extraction of proteins
Quantification of proteins
SDS-PAGE, a molecular separation technique
Western Blotting
Competent cell Preparation
Transformation
Screening of transformed cells
Primer designing and applications
PCR Basics
Amplification of gene of interest
Stem cells therapeutics in Cancer
DNA sequencing**

Project (Optional)