

Module 2: Molecular Biology

Duration: 10 days

Participant can chose either (gDNA or plasmid DNA)

1. gDNA Isolation

- a. Isolation of Genomic DNA from Bacteria/cell cultures/tissues/blood
- b. Quantification of gDNA

2. Plasmid Isolation

- a. Isolation of recombinant/native plasmids
- b. Quantification of plasmid
- c. Restriction digestion of plasmid

3. Isolation of mRNA from bacteria/cell cultures/tissues/blood
4. Quantification of mRNA
5. Purity by Agarose gel Electrophoresis
6. cDNA synthesis
7. Primer Design
8. qRT-PCR
9. Gene expression analysis
10. SNIP analysis
11. RFLP analysis