

BIOLOGICAL FRAMEWORKS FOR ENGINEERS

Session #8 [nm: Genes, Decoding, and Mutations]

General Objectives:

- ✓ Introduction to genetic sequencing techniques
- ✓ Identify and discuss the basis for mutations

Central Framework:

- ✓ Decoding genetic information is technology driven and advances in understanding of sequences and mutations often come after the discover of a new approach of technique

Interactive Activity:

- ✓ Worksheet on mutation

Session Outline:

I. Genes

II. Decoding

A. Restriction endonuclease

B. Sanger Method

C. Electrophoresis

D. Automatic Sequencing

E. Splicing

F. PCR

II. Genetic Mutation

A. Point mutations

B. Rearrangement mutations