

Genomics and Beyond

Learning Objectives

1. List and define the goals of genomics.
2. Be able to compare genetic linkage maps, cytological maps, and physical maps in terms of their resolution and how they are constructed.
3. List and define the types of physical maps.
4. Know the historical events behind the Human Genome Project, the groups involved, and the goals of the Human Genome Project.
5. Know the findings that both major groups obtained from the Human Genome Project.
6. Know how the Human Genome Project has impacted comparative genomics and disease diagnosis.
7. Be familiar with how the Human Genome Project has impacted the compiling of genomic information from other organisms, as well as the potential applications of this new information.
8. Know how the Human Genome Project has spawned functional genomics and proteomics, and studies of other “-omes.”
9. List and define bioinformatics, the tools of bioinformatics, and be familiar with various applications of bioinformatics.