

Lewin's GENES XI / Jocelyn E. Krebs et. al.

ISBN: 9781449659851

Part 1 Genes and Chromosomes

Chapter 1 Genes Are DNA

Chapter 2 Genes Encode RNAs and Polypeptides

Chapter 3 Methods in Molecular Biology and Genetic Engineering

Chapter 4 The Interrupted Gene

Chapter 5 The Content of the Genome

Chapter 6 Genome Sequences and Gene Number

Chapter 7 Clusters and Repeats

Chapter 8 Genome Evolution

Chapter 9 Chromosomes

Chapter 10 Chromatin

Part 2 DNA Replication and Recombination

Chapter 11 Replication Is Connected to the Cell Cycle

Chapter 12 The Replicon: Initiation of Replication

Chapter 13 DNA Replication

Chapter 14 Extrachromosomal Replicons

Chapter 15 Homologous and Site-Specific Recombination

Chapter 16 Repair Systems

Chapter 17 Transposable Elements and Retroviruses

Chapter 18 Somatic Recombination and Hypermutation in the Immune System

Part 3 Transcription and Posttranscriptional Mechanisms

Chapter 19 Prokaryotic Transcription

Chapter 20 Eukaryotic Transcription

Chapter 21 RNA Splicing and Processing

Chapter 22 mRNA Stability and Localization

Chapter 23 Catalytic RNA

Chapter 24 Translation

Chapter 25 Using the Genetic Code

Part 4 Gene Regulation

Chapter 26 The Operon

Chapter 27 Phage Strategies

Chapter 28 Eukaryotic Transcription Regulation

Chapter 29 Epigenetic Effects Are Inherited

Chapter 30 Regulatory RNA