1. Record Nr. UNINA9910467714803321

Autore	Mandelbaum Michael
Titolo	The nuclear future / / Michael Mandelbaum
Pubbl/distr/stampa	Ithaca, New York ; ; London : , : Cornell University Press, , [1983] ©1983
ISBN	1-5017-4528-X
Descrizione fisica	1 online resource (131 pages)
Disciplina	355.0217
Soggetti	Nuclear weapons Nuclear warfare Arms race - History - 20th century Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Original paper was published as The future of nuclear weapons in the September-October 1982 issue of the Naval War College review"--Pref.
Nota di bibliografia	Includes bibliographical references (pages [129]-131).
Nota di contenuto	Front matter -- Contents -- Preface -- 1. The Nuclear Future -- 2. The Arms Race -- 3. Nuclear Proliferation -- 4. The Anti-Nuclear Weapons Movements -- 5. The Nuclear Future Revisited -- Glossary -- Selected Bibliography
Sommario/riassunto	While specifically defining many of the technical terms that have made this subject so inaccessible, Michael Mandelbaum discusses the weapons systems and nuclear doctrine of both the United States and the Soviet Union along with their predicted impact on the future of the arms race.

2. Record Nr. UNINA9910829917603321

Autore	Schumann Wolfgang, Prof. Dr. rer. nat.
Titolo	Dynamics of the bacterial chromosome [[electronic resource]] : structure and function / / Wolfgang Schumann
Pubbl/distr/stampa	Weinheim, : Wiley-VCH [Chichester, : John Wiley, distributor], c2006
ISBN	1-280-72333-5 9786610723331 3-527-60849-4 3-527-60843-5
Descrizione fisica	1 online resource (450 p.)
Disciplina	579.3135
Soggetti	Bacterial genetics Bacterial genomes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Dynamics of the Bacterial Chromosome; Contents; Foreword; Bacterial Species and their Abbreviation; Color Plates; 1 Structure of the Bacterial Cell; 1.1 The Cytoplasm Compartment; 1.2 The Cytoplasmic Membrane Compartment; 1.3 The Cell Wall Compartment; 1.4 The Outer Membrane Compartment; 1.5 The Periplasmic Compartment; 1.6 Extracellular Matrices; 1.7 Appendages; 2 Organization of the Bacterial Chromosome; 2.1 Structure of the Chromosomes; 2.2 Principles to Compact the Bacterial Chromosome; 2.2.1 Superhelicity; 2.2.2 Histone-like Proteins in E. coli 2.3 Organization of the Bacterial Chromosome into Genes and Repetitive Sequences2.3.1 Genes; 2.3.2 Repetitive Sequences; 2.4 Large Rearrangements Within the Chromosome; 2.4.1 Duplications; 2.4.2 Deletions; 2.4.3 Inversions; 3 The Bacterial Cell Cycle: Replication of the Chromosome, Partitioning and Cell Division; 3.1 Replication; 3.1.1 Replication of Circular Chromosomes; 3.1.2 Replication of Linear Chromosomes and Plasmids; 3.2 Partitioning (Segregation) of the Daughter Chromosomes; 3.3 Cell Division; 3.4 Plasmid- and Chromosome-encoded Toxin-Antitoxin Modules

3.4.1 Postsegregational Killing of Plasmid-free Cells3.4.2 Chromosomal Toxin-Antitoxins; 4 Recombination; 4.1 Homologous Recombination; 4.1.1 The RecBCD Pathway of Homologous Recombination; 4.1.2 The RecF Pathway of Homologous Recombination; 4.1.3 Additional Homologous Recombination Functions; 4.1.4 Recovery of Replication at a Blocking DNA Lesion; 4.2 Sequence-specific Recombination; 4.2.1 Integration/Excision Systems; 4.2.2 Resolvase Systems; 4.2.3 Inversion Systems; 4.2.4 Shufflons; 4.2.5 Integrons; 4.2.6 Homing Endonucleases; 4.3 Illegitimate Recombination
4.3.1 Insertion Sequence Elements4.3.2 Transposons; 4.3.3 Transposing Bacteriophages; 4.3.4 Mechanisms of Transposition; 4.3.5 Conjugative and Integrative Elements; 4.3.6 Nonhomologous Endjoining (NHEJ); 5 Origin of Mutations and Repair of DNA Lesions; 5.1 Classes of Mutations; 5.2 Origin of Mutations; 5.2.1 Spontaneous Mutations; 5.2.2 Induced Mutations; 5.2.3 Detection Systems for Mutations; 5.2.4 Adaptive Mutations; 5.3 Repair of DNA Lesions; 5.3.1 The Methyl-mediated Mismatch Repair System; 5.3.2 Very Short Patch Repair; 5.3.3 The Nucleotide Excision Repair Systems
5.3.4 Pathways of Base Excision Repair5.3.5 Repair of Oxidized Nucleotides; 5.3.6 Photoreactivation of Cyclobutane Dimers; 5.3.7 Transcription-coupled Nucleotide Excision Repair; 5.3.8 The Adaptive Response; 5.3.9 The SOS Response; 5.3.10 Replication and Repair; 5.3.11 Repair of Interstrand Crosslinks in DNA; 5.3.12 Deinococcus radiodurans; 6 Principles of Gene Regulation; 6.1 Regulation at the Level of DNA; 6.1.1 Alterations of the Structure of the DNA; 6.1.2 GATC Methylation and Gene Expression; 6.1.3 Programmed DNA Rearrangements Within the Chromosome
6.1.4 Transcriptional Silencing and Cryptic Genes

Sommario/riassunto

This book provides an unique overview on bacterial genetics, bacterial genome projects and gene technology and its applications in biological and biomedical research and medicine. The author guides the reader up the front in research within the different fields of bacterial genetics, based mainly on results received with Escherichia coli and Bacillus subtilis.