

1. Record Nr.	UNINA9910830246503321
Titolo	The Bacterial Chromosome // edited by N. Patrick Higgins
Pubbl/distr/stampa	Washington, District of Columbia : , : John Wiley & Sons, Inc., , 2014
ISBN	1-68367-204-6
Descrizione fisica	1 online resource (xv, 559 pages) : illustrations
Collana	Maxi Bilderbuch
Disciplina	572.87293
Soggetti	Bacterial chromosomes Bacterial genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Where's the beef? looking for information about bacterial chromosomes / John R. Roth -- The dynamic bacterial genome / Jeffrey G. Lawrence John R. Roth -- Bacteriophages and the bacterial genome / Sherwood Casjens and Roger W. Hendrix John R. Roth -- Global approaches to the bacterial cell as an integrated system / Michael T. Laub, Lucy Shapiro, and Harley H. McAdams John R. Roth -- Major nucleoid proteins in the structure and function of the Escherichia coli chromosome / Reid C. Johnson [and others] John R. Roth -- Domain behavior and supercoil dynamics in bacterial chromosomes / N. Patrick Higgins [and others] John R. Roth -- Stationary-phase chromosomes / Abraham Minsky and Roberto Kolter John R. Roth -- Replication hits 50 / Kenneth J. Marians John R. Roth -- Initiation of chromosomal replication / Johanna Eltz Camara and Elliott Croke John R. Roth -- DNA elongation / Manju M. Hingorani and Mike O'Donnell SeqA protein binding and the Escherichia coli replication fork / Therese John R. Roth Brendler and Stuart Austin John R. Roth -- Reinitiation of DNA replication / Kenneth N. Kreuzer and Benedicte Michel John R. Roth -- The terminus region of the Escherichia coli chromosome, or all's well that ends well / Jean-Michel Louarn, Peter Kuempel, and Francois Cornet John R. Roth -- Overview of transcription / Jeffrey Roberts John R. Roth -- The structure of bacterial RNA polymerase / Kati Geszvain and Robert Landick John R. Roth -- How transcription initiation can be regulated in bacteria / Simon L. John R. Roth -- Dove and Ann Hochschild John R. Roth -- Control of transcription termination and antitermination / Irina

Artsimovitch John R. Roth -- mRNA decay and processing / Sidney R. Kushner John R. Roth -- Overview of homologous recombination and repair machines / Andrei Kuzminov and Franklin W. Stahl John R. Roth -- The RecA protein / Michael M. Cox John R. Roth -- Homologous recombination by the RecBCD and RecF pathways / Maria Spies and Stephen C. Kowalczykowski John R. Roth -- Recombination machinery: Holliday junction-resolving enzymes / Malcolm F. White John R. Roth -- Dr. Jekyll and Mr. Hyde: how the MutSLH repair system kills the cell / M. G. Marinus John R. Roth -- Excision repair and bypass / Bernard S. Strauss John R. Roth -- Misalignment-mediated mutations and genetic rearrangements at repetitive John R. Roth -- DNA sequences / Susan T. Lovett John R. Roth -- DNA transposons: different proteins and mechanisms, but similar rearrangements / Keith M. Derbyshire and Nigel D.F. Grindley John R. Roth -- Potential mechanisms for linking phage Mu transposition with cell physiology / Stella N. North and Hiroshi Nakai CJohn R. Roth -- chromosome dimer resolution / Francois-Xavier Barre and David J. Sherratt John R. Roth -- Linear chromosomes in bacteria: no longer going around in circles / George Chaconas and Carton W. Chen.

Sommario/riassunto

Covers the fundamental systems that are required for all bacterial cells to replicate chromosomes and organize and utilize genetic information- Provides a link between classical experiments in chromosome physiology and new developments in genetic research- Includes and interprets structural information from recent X-ray crystal studies in a format that is logical for broad understanding of the biochemical process- Presents complex biochemical reactions such as DNA replication and RNA transcription from both genetic and physical perspectives- Incorporates section overviews written by eminent scientists in the fields of genetic and biochemical research.
