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Titolo	From genes to genomes : concepts and applications of DNA technology // Jeremy W. Dale and Malcolm von Schantz
Pubbl/distr/stampa	Chichester, West Sussex ; ; Hoboken, N.J., : John Wiley & Sons, c2007
ISBN	9786612348273 9786610622023 9780470856901 0470856904 9781282348271 1282348272 9780470518700 0470518707 9780470017340 0470017341 9781280622021 1280622024 9780470856918 0470856912
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (396 p.)
Altri autori (Persone)	SchantzMalcolm von
Disciplina	660.6/5
Soggetti	Genetic engineering DNA Genes 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	Introduction -- Basic molecular biology -- How to clone a gene -- Cutting and joining DNA -- Vectors -- Genomic and cDNA libraries -- Finding the right clone -- Polymerase chain reaction -- Characterization of a cloned gene -- Analysis of gene expression -- Products from native and manipulated cloned genes -- Genomic

analysis -- Analysis of genetic variation -- Post-genomic analysis --
Modifying organisms; transgenics.

Sommario/riassunto

Rapid advances in our understanding of genetics have required that new books contain topics such as the concept and theory of gene cloning, transgenics, genomics, and various other coverage of traditional and contemporary subjects. Although there is an abundance of textbooks that cover introductory genetics and advanced courses in genetics, there is a noticeable gap at the intermediate (second year) level. In the past gene structure, function and expression were taught at final year /postgraduate level, but the rapid advances in our understanding of genetics has encouraged courses to change considerably. Over recent years these topics have filtered down the curriculum and are currently taught as core topics at second year, with a corresponding change in textbook requirements. Where once second year students were restricted to learning about the concept and theory of gene cloning, now they routinely clone genes for themselves as part of their practical assignments. Genes to Genomics will fill the gap, cover much of the same ground as previous titles, but go further on contemporary topics like transgenics, sequence comparison and analysis of variation.; A concise, up to date textbook that provides a balanced coverage of traditional and contemporary topics taught within intermediate courses in molecular genetics Jeremy Dale has a proven track record as the successful author of Molecular Genetics of Bacteria Genes to Genomics will include a series of feature box-outs that will examine some of the topical issues related to the scientific concepts and examples explored within the text A range of questions and exercises including worked examples and web-based practicals An accompanying web site will allow the authors to keep their audience up to date in the areas that are prone to date most rapidly between successive editions of the textbook. It will also include the illustrations and images from the textbook, in addition to worked examples, answers to questions within the book, and links to related websites of key interest.
