Epigenetics

C. David Allis, Thomas Jenuwein, Danny Reinberg, Marie-Laure Caparros
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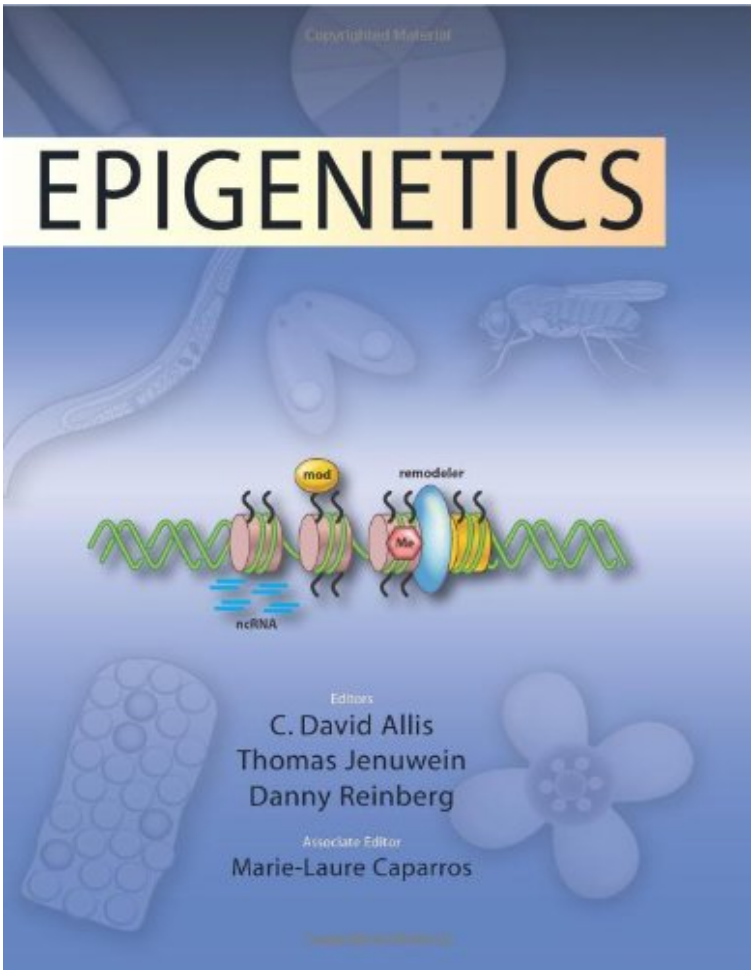

#2384384 in Books Cold Spring Harbor Laboratory Press 2007-10-31Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 1.08 x 8.68 x 11.36l, #File Name: 0879697245502 pages | File size: 42.Mb

C. David Allis, Thomas Jenuwein, Danny Reinberg, Marie-Laure Caparros : Epigenetics before purchasing it in order to gage whether or not it would be worth my time, and all praised Epigenetics:

5 of 5 people found the following review helpful. First in this fieldBy EinsteinAn invaluable resource for people going into the field of epigenetics. The first reference textbook in this quickly growing new field of biology, that has been very carefully and accurately written based on the current literature and research0 of 0 people found the following review helpful. Basic geneticsBy Carol j Montgomery-TaylorThis is a very good book for the person/student who needs a quick understanding of "what" epigenetics is all about. Good read, non-confusing, and straight to the point. Excellent book.0 of 0 people found the following review helpful. The basics and moreBy Patti LehighThis book gives the background and then takes you through the tasks to get to the next step! Well written, clear and concise.

The regulation of gene expression in many biological processes involves epigenetic mechanisms. In this new volume, 24 chapters written by experts in the field discuss epigenetic effects from many perspectives. There are chapters on the basic molecular mechanisms underpinning epigenetic regulation, discussion of cellular processes that rely on this kind of regulation, and surveys of organisms in which it has been most studied. Thus, there are chapters on histone and DNA methylation, siRNAs and gene silencing; X-chromosome inactivation, dosage compensation and imprinting; and discussion of epigenetics in microbes, plants, insects, and mammals. The last part of the book looks at how epigenetic mechanisms act in cell division and differentiation, and how errors in these pathways contribute to cancer and other human diseases. Also discussed are consequences of epigenetics in attempts to clone animals. This book is a major resource for those working in the field, as well as being a suitable text for advanced undergraduate and graduate courses on gene regulation. Related Titles from the Publisher Binding and Kinetics for Molecular Biologists; Bioinformatics; The Condensed Protocols From Molecular Cloning: A Laboratory Manual; Discovering Genomics, Proteomics, and Bioinformatics, 2e; DNA Replication and Human Disease; DNA Science; Epigenetics; Genes and Signals; Gene Transfer: Delivery and Expression of DNA and RNA, A Laboratory Manual; Genetic Variation; Genomes; Molecular Biology, 6th Edition; Recombinant DNA: Genes and Genomes - A Short Course; The RNA World

"The historical accounts of the rise of epigenetics as a field of study, combined with the inclusion of cutting-edging epigenetics research in various biological processes and model organisms, provide the reader with a clear sense of what epigenetics research is about, where it came from, where it is now, and where it is headed. It will prove to be the book that everyone with an interest in epigenetics would want to have and read." --Cell "As a whole, Epigenetics is an impressive volume. The contributors provide an accurate survey of the field, from where it began, through where it is today, to where it is heading. Their accounts help set the stage for deepening our understanding of epigenetic phenomena and mechanisms. And the volume will undoubtedly prove to be very useful for students and researchers alike." --Science "Overall, Epigenetics is a scholarly work, eminently readable and a welcome resource for anyone looking for an introduction to this new and vibrant field." --BioEssays "Beautifully illustrated, this book is a rich source of information for a diverse pool of readers, ranging from graduate students making their first steps in a new field of knowledge to more experienced scientists whose research has led them to unfamiliar grounds. ...what makes "Epigenetics" a truly remarkable and, I believe, a long-lasting achievement is the clear and accessible overview of the major concepts and mechanisms that lay in the foundation of contemporary chromatin research. New details of how specific enzymes and proteins shape chromatin structure and composition may emerge, but the general principles that define how chromatin impacts on many cellular processes are likely to hold true." --Genetical Research "In addition to the cutting-edge epigenetic research that is highlighted in this book by eminent scientists in the field, the summaries at the beginning of each chapter, and the multiple tables and colourful illustrations used throughout the book will prove useful in guiding the reader through a discussion of complex biological processes. Undoubtedly, some of these illustrations will be widely used by students and teacher of epigenetics. It is evident that the importance of epigenetics has become widely recognized and this book will be an excellent read for beginners as well as experts in this field." --Nature Cell Biology "What is epigenetics? Asking that question will likely return a number of answers that are all some variation of 'heredity that is not due to changes in DNA sequence.' In other words, epigenetics is not genetics. That seems a definition as indistinct as U.S. Supreme Court Justice Potter Stewart's statement, 'I know it when I see it,' about obscenity. The recent volume, Epigenetics, provides well-needed clarity by setting down the fundamental concepts and principles of this emerging science... With the publication of Epigenetics, this fascinating scientific field no longer needs to be defined by what it is not." --The Quarterly of Biology...an impressive volume...will undoubtedly prove to be very useful for students and researchers alike. -Armelle Corpet and Genevive Almouzni --Science...eminently readable and a welcome resource for anyone looking for an introduction to this new and vibrant field. -Joel C. Eissenberg --BioEssays