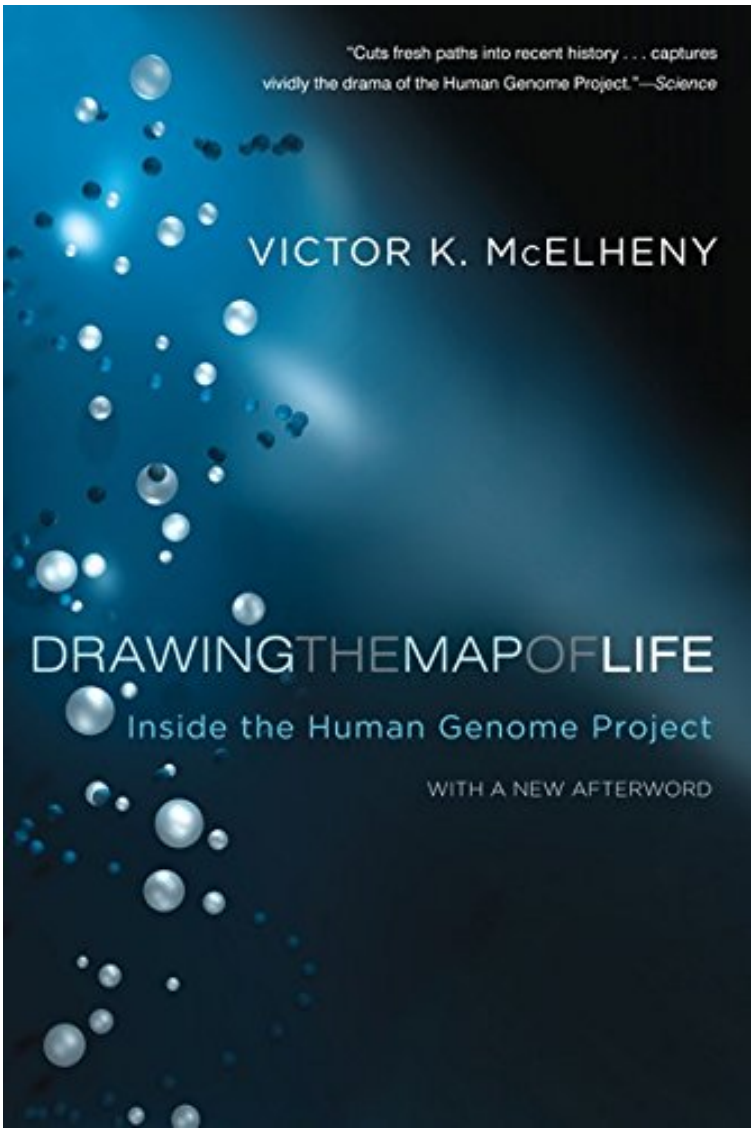
Drawing the Map of Life: Inside the Human Genome Project (A Merloyd Lawrence Book)

Victor K. McElheny
*audiobook | *ebooks | Download PDF | ePub | DOC*



#1837346 in Books Basic Books 2012-07-31Original language:EnglishPDF # 1 8.25 x 1.13 x 5.50l, .86 #File Name: 0465028950400 pages | File size: 34.Mb

Victor K. McElheny : Drawing the Map of Life: Inside the Human Genome Project (A Merloyd Lawrence Book) before purchasing it in order to gage whether or not it would be worth my time, and all praised Drawing the Map of Life: Inside the Human Genome Project (A Merloyd Lawrence Book):

1 of 1 people found the following review helpful. I like my science non-fiction to contain some depth but preferably ...By Donald J SchmitI do not have a strong biology background, but I do have a scientific one. I like my science non-

fiction to contain some depth but preferably with some narrative. This book really could have used some heavy handed editing. I think another commentary mentioned that it read like a collection of magazine essays. That said, there is a lot of information in there. It might not come where you expect it. It might not be worked in seamlessly, but its there.1 of 1 people found the following review helpful. Excellent resource.By double dExplains very well the complexity of human genes. Excellent resource.0 of 0 people found the following review helpful. Good book on the Human Genome ProjectBy H. A. M. GeertsI read other books on the Human Genome project, but this one had quite some new facts in it. Well written too!

Drawing the Map of Life takes the story of the Human Genome Project from its origins, through the race to its accomplishment, and on to today's vast efforts to exploit the complete, ordered sequence of the 3 billion subunits of DNA, the molecule of heredity. It is the first account to deal in depth and balance with the intellectual roots of the project, the motivations that drove it, and the hype that often masked genuine triumphs. McElheny profiles key people, such as David Botstein, Eric Lander, Francis Collins, Watson, Michael Hunkapiller and Craig Venter. He also shows that, besides being a major event in the history of science, one that is revolutionizing medicine, the Human Genome Project is a striking example of how new techniques and instruments (such as restriction enzymes and sequencing methods), often arriving first, shape the type of questions scientists then ask.

From Publishers WeeklyVeteran science journalist McElheny (Watson and DNA) concludes about the human genome project, the government-sponsored effort, completed in 2003, to decipher the entire human genome: "the big-scale science of genomics represents an explosion in knowledge that shows no sign of contracting." Indeed, the topic is huge and gets bigger with each passing year. By attempting to cover as much of the field as he does, McElheny makes it difficult for all readers to be fully informed: he lacks the necessary space to provide the detailed genomics background that would make the advances wholly comprehensible. Nonetheless, the author does two things very well. His description of the politics that led to the human genome project becoming the first megascale biology research program (akin in a number of ways to some large-scale physics projects supported by governmental funding) is clear and illuminating. Similarly, McElheny does an impressive job at explaining the current and future benefits likely to arise from the genetics data flooding into scientists laboratories. He is able to link pure research with medical advances, providing hope for concrete breakthroughs in individualized treatment while demonstrating that the money invested in this huge project has been well spent. From BooklistMcElheny, who has written a biography of James Watson (Watson and DNA, 2003), here discusses the scientific and bureaucratic genesis of sequencing the human genome, accomplished a decade ago, and follows up with the developments since 2000 that have potential medical applications. Careful to be technically clear, McElheny reviews a series of discoveries and inventions in molecular biology (such as polymerase chain reaction) that by the early 1990s presented possibilities for vastly accelerated analysis of DNA. Bureaucracies mobilizedtoo slowly for National Institutes of Health researcher C. Craig Venter, who left government to map the genome as an entrepreneur. Both he and his federal rival have had their say about the genome race (Venters A Life Decoded, 2007; Francis Collins The Language of Life, 2010), so McElhenys freshest information concerns post-2000 genomic news. Not aiming at readers looking for information on specific diseases or treatments, McElheny explains recent research to the science-minded and reports on new discoveries about RNA and whole new fields such as pharmacogenomics. Well practiced in presenting biological complexity, McElheny should circulate in active science collections. --Gilbert Taylor "A stirring explanation of why the Human Genome Project - which mapped our DNA - matters." (Discover) "As...Victor McElheny tells it in his racy and well-documented account, practical science can be as grubbily political and ego-driven as anything that goes on in the boardroom of international conglomerates. This is a very modern story and, ultimately, curiously heart-warming." (Sunday Times) "Comprehensive. Mr. McElheny knows almost everyone involved and describes their actions and motives fairly. This is no mean feat given the sizes of some of the egos involved, and the clashes between them." (The Economist)"