Introduction to Genomics

Arthur M. Lesk
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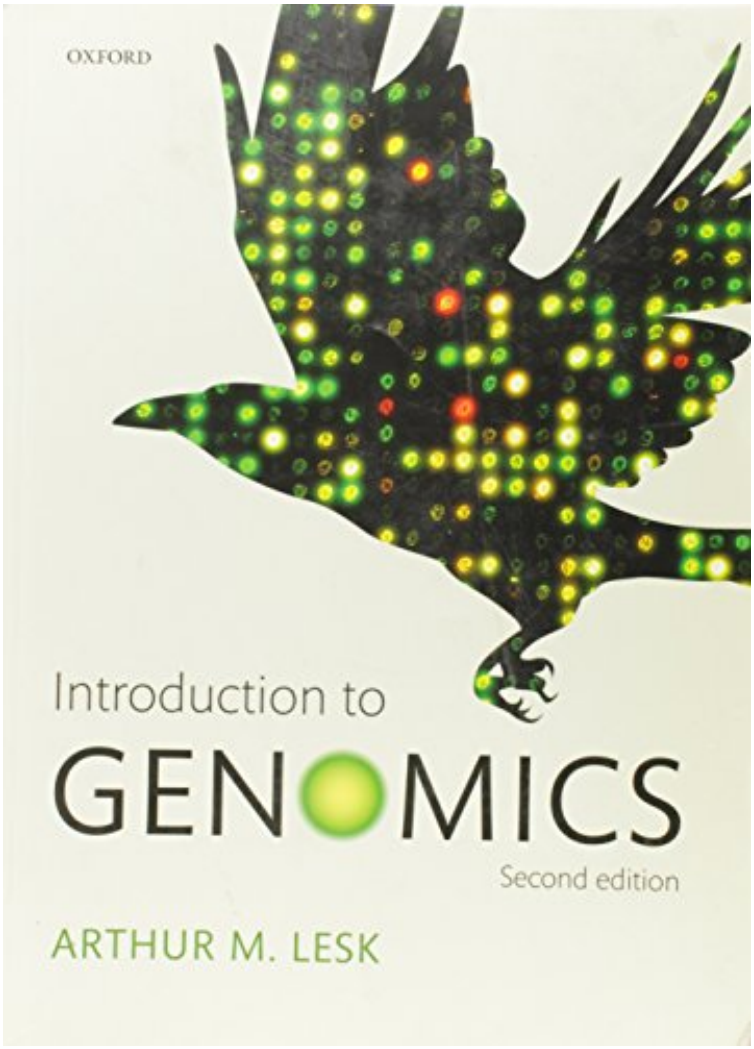

#723196 in Books Oxford University Press, USA 2012-04-26Original language:EnglishPDF # 1 7.70 x .80 x 10.40l, 2.20 #File Name: 0199564353397 pages | File size: 35.Mb

Arthur M. Lesk : Introduction to Genomics before purchasing it in order to gage whether or not it would be worth my time, and all praised Introduction to Genomics:

10 of 10 people found the following review helpful. Well written but for biologistsBy I Teach TypingBecause I do biostatistics for a living and it has been decades since my last formal biology class, I got this book to help me understand the biology of modern high-throughput genomics research. I am impressed with the writing. The author's presentation of history and the framing of ethical issues could not be better. Unfortunately for people like me the author assumes that you have a background in molecular cellular biology. Many terms are not defined or defined long after they first appear. Because the writing is excellent you can usually read through the sections with undefined terms with the help of the web but it is a slow difficult read. The index is good but there is no glossary. The web support for

the book is fair (with expanded graphics and answers to some problems) but not really great. There are questions that are supposed to be answered using the web (like how the field has grown since the book was published) but the publisher does not provide hyperlinks to support those questions. With a glossary for non-biologists and better web support this would be an ideal book for everyone interested in the field. Without those features, it is still very good.2 of 2 people found the following review helpful. I love it and I would recomned it to othersBy anelove it, good organization, nice examples, nice writing, up to date, nice illustrations (I love the cross-eyes stereo images of molecules). Wide variety of different concepts covered. Congratulation to the author.PS I am a professional in biomedical sciences, and use this book to design some of my lectures13 of 15 people found the following review helpful. Best introduction to genomicsBy Pedro V. MarcalThe book takes the reader gently through the intricacies of genomics. It is a easy read for the computer scientist with little background in Bio-chemistry. The genetic material is always introduced and illustrated with examples before its importance in the scheme of things is explained. I highly recommend this book.

Our genome is the blueprint to our existence: it encodes all the information we need to develop from a single cell into a hugely complicated functional organism. But how do we identify the genes that make up our genome? How do we determine their function? And how do different genes form the regulatory networks that direct the processes of life?Introduction to Genomics is a fascinating insight into what can be revealed from the study of genomes: how organisms differ or match; how different organisms evolved; how the genome is constructed and how it operates; and what our understanding of genome structure and function means in terms of our future health and wellbeing.Thoroughly revised and brought up to date, the second edition features:* Coverage of the latest techniques and developments in the field* Rich pedagogy: End-of-chapter exercises, web-based problems ("weblems"), and lab assignments; "Special Topic" boxes; engaging case studies new "Ethics" boxes exploring the ethical issues surrounding the study of genomics; highlighted key terms; and an end-of-book glossary* A larger format provides greater clarity to the text and accompanying figures* Five new chapters, including one dedicated to metabolomics* An updated Companion Website (www.oup.com/uk/orc/bin/9780199564354) offering a range of resources, including figures from the book in electronic format, answers to end-of-chapter exercises, hints to end-of-chapter problems, a guided tour of web sites in genomics, and rotating figuresThe field of genomics is enabling us to analyze life in more detail than ever before; and Introduction to Genomics tackles this conceptually challenging--and fascinating--subject in a clear, lucid way.

from previous edition: "This is an excellent book for students studying this exciting and fast paced subject. It has a number of chapters covering all aspect of genomics, from comparative genomics and evolution to mapping, sequencing and databases through to microarrays and proteomics,finally bringing it all together with systems biology. Suitable for final year undergraduates and masters students, it will also make a good reference book for PhD students" --Dr Dawn L. Arnold, University of the West of England"This is a very versatile textbook that offers a good overview of genomics in different areas of biological research. It is an excellent introduction for students from different degrees who have an interest in genomics and its underlying techniques." --Dr Thomas Caspari, Bangor University"Arthur Lesk is an eloquent writer. I am impressed by his use of specific examples, analogies, and humour to illuminate scientific principles. His writing in Introduction to Genomics is fluid and easy to read." --Dr Daniel G. Peterson, Mississippi State University"Introduction to Genomics provides an excellent, broad and comprehensive overview of genomics research in biology. The field of genomics is highly technology driven and moves extremely fast and this book stands out in translating all this technological information into biological, meaningfulconcepts. It is highly appropriate to support genomics education to undergraduates." --Dr Dick Roelofs, VU University, AmsterdamAbout the AuthorArthur M. Lesk is Professor of Biochemistry and Molecular Biology at The Pennsylvania State University.