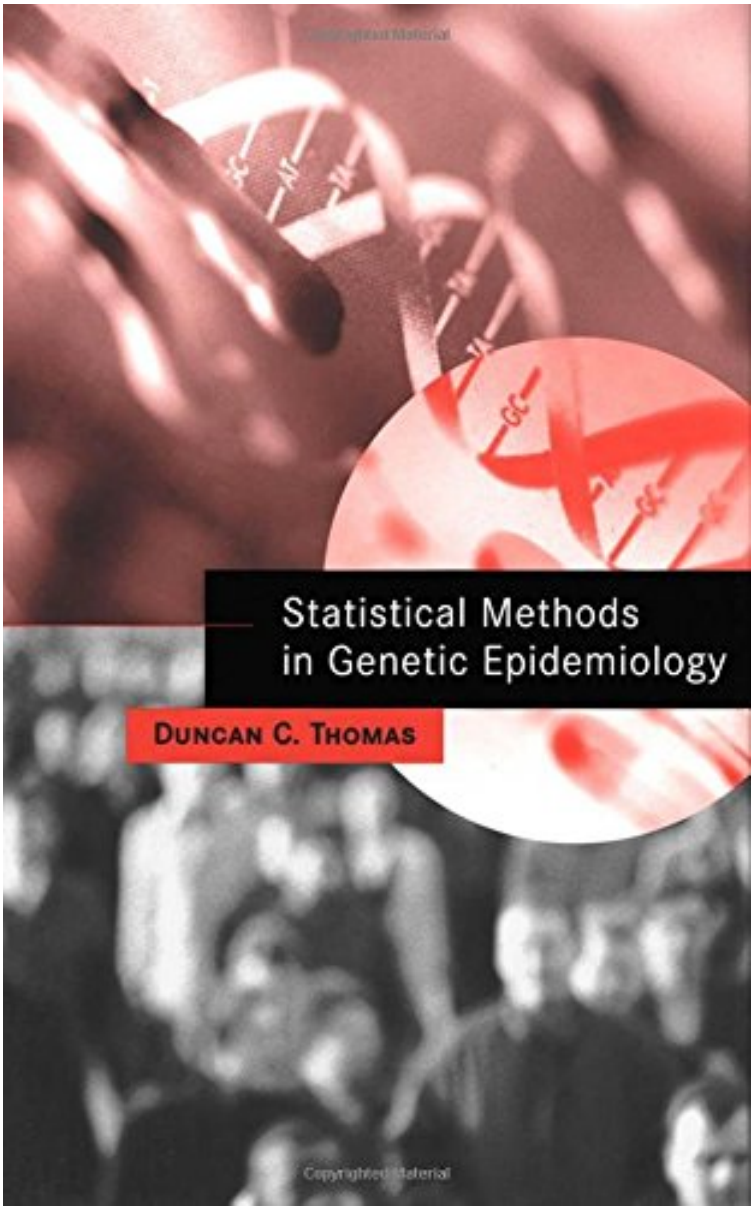
Statistical Methods in Genetic Epidemiology

Duncan C. Thomas
**Download PDF | ePub | DOC | audiobook | ebooks*



#1659064 in Books Duncan C Thomas 2004-01-29Original language:EnglishPDF # 1 6.30 x 1.20 x 9.30l, 1.76 #File Name: 019515939X464 pagesStatistical methods in genetic epidemiology | File size: 35.Mb

Duncan C. Thomas : Statistical Methods in Genetic Epidemiology before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistical Methods in Genetic Epidemiology:

1 of 2 people found the following review helpful. Lacks statistical examplesBy Don ChampagneI bought this book for a survey course I am sitting in so as to learn genetics. This book does comprehensively review the subject and its

literature, but it lacks so much as one completed example problem. Statistics is, after all, about getting the numbers right. I think this is the first time I've ever seen a book with "statistics" in its title that does not show the reader how to get the numbers right.Don Champagne, Ph.D. (statistics economics)0 of 1 people found the following review helpful. Three StarsBy HON CHUNG FUNGVery informative !3 of 3 people found the following review helpful. Great TextBy Orion GrafThis is not a book about statistics,it's a book about statistical methods employed in genetic epidemiology. In fact, I would consider this the most accessible text on the subject. The entire point of this book is to address problems facing epidemiology in relation to genetics and the environment, and suggest a means to statistically measure these variables. If you're looking for a stats book, grab Sokal Rohlf. If you're trying to address problems in genetic epi, this book is a must. Suggested equations can be found in a Multivariate Analysis Text or Sokal Rohlf.

This well-organized and clearly written text has a unique focus on methods of identifying the joint effects of genes and environment on disease patterns. It follows the natural sequence of research, taking readers through the study designs and statistical analysis techniques for determining whether a trait runs in families, testing hypotheses about whether a familial tendency is due to genetic or environmental factors or both, estimating the parameters of a genetic model, localizing and ultimately isolating the responsible genes, and finally characterizing their effects in the population. Examples from the literature on the genetic epidemiology of breast and colorectal cancer, among other diseases, illustrate this process. Although the book is oriented primarily towards graduate students in epidemiology, biostatistics and human genetics, it will also serve as a comprehensive reference work for researchers. Introductory chapters on molecular biology, Mendelian genetics, epidemiology, statistics, and population genetics will help make the book accessible to those coming from one of these fields without a background in the others. It strikes a good balance between epidemiologic study designs and statistical methods of data analysis.

"This book is well organized and logically developed, such that concepts are covered in broad strokes, revisited in greater detail, and connected together. ...this is a very thorough treatise of the spectrum of methods that collectively define genetic epidemiology." --Annals of Epidemiology"...Statistical Methods in Genetic Epidemiology is a most welcome volume that all readers...should consider having on their bookshelves. It seems likely that this will serve as a classic text for many years to come." --American Journal of Human Genetics"This is a clear succinct tour of the analytical side of genetic epidemiology. There is a suitable balance of biology and statistical details and the text is well pitched for its target audience of graduate epidemiologists, biostatisticians, and human geneticists."--International Journal of EpidemiologyAbout the AuthorDuncan C Thomas, Ph.D., is Professor of Preventive Medicine, Director of the Biostatistics Division, and Verna R Richter Chair in Cancer Research at the University of Southern California Keck School of Medicine. His primary research interest has been in the development of statistical methods for cancer epidemiology, but he also has wide-ranging interest in both environmental and genetic epidemiology. Dr Thomas also chairs organizing committees for the Genetic Analysis Workshop and the Informatics Consortium for the NCI Cooperative Family Registries for Breast and Colorectal Cancer, and he is a past President of the International Genetic Epidemiology Society.