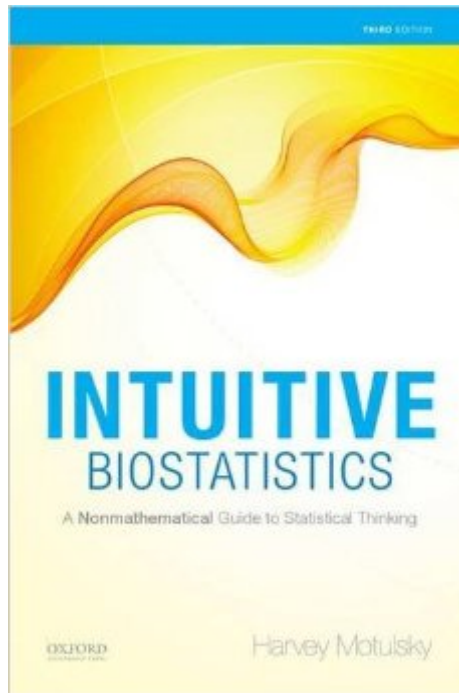


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# Intuitive Biostatistics: A Nonmathematical Guide To Statistical Thinking, 3rd Edition



## Synopsis

Thoroughly revised and updated, the third edition of *Intuitive Biostatistics: A Nonmathematical Guide to Statistical Thinking* retains and refines the core perspectives of the previous editions: a focus on how to interpret statistical results rather than on how to analyze data, minimal use of equations, and a detailed review of assumptions and common mistakes. With its engaging and conversational tone, this unique book provides a clear introduction to statistics for undergraduate and graduate students in a wide range of fields and also serves as a statistics refresher for working scientists. It is especially useful for those students in health-science related fields who have no background in biostatistics.

**CONTENT**

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1. Statistics and Probability Are Not Intuitive
2. The Complexities of Probability
3. From Sample to Population

**Part B: Confidence Intervals**

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**Part C: Continuous Variables**

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45. Statistical Traps to Avoid
46. Capstone Example
47. Review Problems
48. Answers to Review Problems

## Book Information

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## Customer Reviews

I used this as a supplementary book to my statistics textbook and it has the most thorough explanations. It helps you really understand the material--not just the "how?", but also the "why?". It was the second favorite supplementary book I used. My most useful supplementary books for statistics class (in order of usefulness) were: 1) Statistics in Plain English: clearest explanations 2) Intuitive Biostatistics: most thorough explanations 3) Statistics in a Nutshell: good summaries for reviewing for tests 4) What is p-value anyway?: nice stories but not in-depth enough about many concepts

For over a decade, I have been searching for a clear, lucid guide to statistics that I can use in my research and share with my students. Finally, after combing through dozens of books, I can say I found an excellent book. Harvey Motulsky seems to have pulled off the trick of writing a book with high explanatory power that will not intimidate the busy undergraduate, graduate student, postdoc, or primary investigator who wants to learn the necessary information but does not want to drown in esoteric details, problem sets, or unhelpful information. As a practicing neuroscientist, I appreciate a guide that is informative but also a pleasure to read (I don't have time to read through the standard statistic texts I have come across). It is not surprising that Motulsky is also the CEO of GraphPad Software, the company that makes Prism. This software intuitively guides scientists into using the appropriate statistical tests for their data, and it is easily the best and most user-friendly statistical software on the market. I have used Prism for years and was unaware that Motulsky also wrote this book. Now I plan on recommending this book to my students and colleagues, and I purchased a copy for my office and lab. If you are a bioscientist intimidated by statistics (or feel like you could use

a refresher after a long ago forgotten stats class), this book is a gem.

I was taking an intro graduate level statistics course from a professor that focused only on the math and formulas. I am not a "numbers" person and I was struggling with the material. However, when I read Dr. Motulsky's book I finally could connect what my professor was trying to teach us with the practical implications of what Statistics can (and cannot) tell us about our data. Statistics is a tool and nothing more, it does not prove or disprove anything but it does quantify to a particular degree if your sample can be trusted. Also, even though this book talks about biostats, it is not limiting ... every discussion here can be applied to all subjects using statistics.

This is a fantastic book. It is well written and enjoyable to read. I bought it to complement Fundamentals of Biostatistics by Rosner I was reading at the time. This is the book you need to read if you want to understand the "why", but not necessarily the "how" behind different statistical approaches or if you want to be able to interpret the results of a statistical analysis.

I will admit to having bought at least 10 copies of this book since it was published - it's that good. I give them to my employees so that they can have a gut feel for the statistics of clinical studies. Honestly, anyone who reads anything about the efficacy or safety of a drug, device, or procedure (which is pretty much any adult who can read) ought to read this book.

I did not care for this book. Intuition, for me, comes with rigor. I did not learn this until I compared what I learned from this book with what I learned from more rigorous books, such as Casella and Berger and Alan Agresti. I left 5 stars instead of 4 because some people may learn better from this approach and I did not want to hurt the rating based on my personal learning style. If you normally learn math concepts from math books this text may not be for you. That being said the author did do a great job at explaining statistical topics in a non technical way.

The best explanations I have ever seen in a statistics textbook. Starts at the very basics and goes all the way through advanced concepts like logistic regression. And it is actually pleasant to read - not dry and wordy like most stats books. I particularly like the author's focus on including "common mistakes" to watch out for - if you're going to be doing anything with biostatistics, these are things that you really need to know, and might not get from other books. I bought this book after several semesters in a program that had a truly horrible biostats instructor - I managed to pass his classes,

but hadn't actually learned any of the concepts. Reading this book was the first time I really understood a lot of these topics, and thanks to this book, I am now feeling MUCH better about how prepared I will be for my PhD comprehensive exams!

Before reading this book, I despised biostatistics and did not understand it. Dr. Motulsky's book is very easy to understand for a beginner. The book is very comprehensive and detailed, covering biostatistics concepts from A to Z. Each chapter contains a FAQ section which I found very helpful. I recommend this book to anyone interested in solidifying their biostatistics knowledge.

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