
Contents

Preface	v
Acknowledgments	vii
Contributors	xi
1 Study Design: The Basics <i>Hyun Ja Lim and Raymond G. Hoffmann</i>	1
2 Observational Study Design <i>Raymond G. Hoffmann and Hyun Ja Lim</i>	19
3 Descriptive Statistics <i>Todd G. Nick</i>	33
4 Basic Principles of Statistical Inference <i>Wanzhu Tu</i>	53
5 Statistical Inference on Categorical Variables <i>Susan M. Perkins</i>	73
6 Development and Evaluation of Classifiers <i>Todd A. Alonzo and Margaret Sullivan Pepe</i>	89
7 Comparison of Means <i>Nancy Berman</i>	117
8 Correlation and Simple Linear Regression <i>Lynn E. Eberly</i>	143
9 Multiple Linear Regression <i>Lynn E. Eberly</i>	165
10 General Linear Models <i>Edward H. Ip</i>	189
11 Linear Mixed Effects Models <i>Ann L. Oberg and Douglas W. Mahoney</i>	213
12 Design and Analysis of Experiments <i>Jonathan J. Shuster</i>	235
13 Analysis of Change <i>James J. Grady</i>	261

14	Logistic Regression <i>Todd G. Nick and Kathleen M. Campbell</i>	273
15	Survival Analysis <i>Hongyu Jiang and Jason P. Fine</i>	303
16	Basic Bayesian Methods <i>Mark E. Glickman and David A. van Dyk</i>	319
17	Overview of Missing Data Techniques <i>Ralph B. D'Agostino, Jr.</i>	339
18	Statistical Topics in the Laboratory Sciences <i>Curtis A. Parvin</i>	353
19	Power and Sample Size <i>L. Douglas Case and Walter T. Ambrosius</i>	377
20	Microarray Analysis <i>Grier P. Page, Stanislav O. Zakharkin, Kyoungmi Kim, Tapan Mehta, Lang Chen, and Kui Zhang</i>	409
21	Association Methods in Human Genetics <i>Carl D. Langefeld and Tasha E. Fingerlin</i>	431
22	Genome Mapping Statistics and Bioinformatics <i>Josyf C. Mychaleckyj</i>	461
23	Working with a Statistician <i>Nancy Berman and Christina Gullion</i>	489
	Index	505



<http://www.springer.com/978-1-58829-531-6>

Topics in Biostatistics

Ambrosius, W.T. (Ed.)

2007, XII, 528 p., Hardcover

ISBN: 978-1-58829-531-6

A product of Humana Press