This is the first book in the series

Practical Guides to Biostatistics and Epidemiology

This series of short but authoritative accounts of modern methods in biostatistics is for biomedical researchers, clinical investigators, public health researchers, epidemiologists, and non-academic and consulting biostatisticians who work with data from biomedical and epidemiological and genetic studies. The books will explain the application of techniques, including the use of computational tools, and emphasize the interpretation of the results, not the underlying mathematical and statistical theory.

Forthcoming ...

Secondary Data Sources for Public Health: A Practical Guide

Statistics in Health Economics Evaluation

www.cambridge.org/epidemiology
Essential Evidence-Based Medicine
Dan Mayer
Albany Medical College, New York, USA

Evidence Based Medicine (EBM), using the best evidence in the literature for the best care for an individual patient, sounds very simple. Yet, most medical students and physicians do not have the mathematical background or training to critically evaluate published research. This ‘users guide’ to EBM helps you become a more discriminating reader of the medical literature, and better equipped to apply EBM in practice. Accompanied by an interactive and fun-to-use CD-ROM consisting of practice problems and journal articles that reinforce the concepts taught in the book.

‘… highly accurate, and easy to read textbook about EBM, suitable for all lifelong learners of medicine. Modestly titled ‘Essential’, it contains much more than the essentials. It contains and conveys true understanding.’

BIOMEDICAL STATISTICS

Applied Longitudinal Data Analysis for Epidemiology
A Practical Guide
Jos W. R. Twisk
Institute for Research in Extramural Medicine, Amsterdam, The Netherlands

In this book the most important techniques available for longitudinal data analysis are discussed, including simple techniques, and more sophisticated techniques such as generalised estimating equations and random coefficient analysis.

‘… a welcome reference manual or practical guide for practitioners of statistical methods in (but not limited to) epidemiological and clinical studies. … Some practitioners of statistics may have struggled to learn longitudinal data analysis by reading manuals of software packages, this book is potentially of great benefit to them.’

JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION


2003 318pp 203 illustrations 978 0 521 52580 0 • PB • £27.99

Principles of Statistical Inference
D. R. Cox
Nuffield College, Oxford, UK

Presenting a comprehensive and balanced appraisal of statistical inference. D.R. Cox develops the key concepts, describing and comparing the main ideas and controversies over foundational issues that have been keenly argued for more than two-hundred years.

Continuing a sixty-year career of major contributions to statistical thought, no one is better placed to give this much-needed account of the field. The book will be valued by every user or student of statistics who is serious about understanding the uncertainty inherent in conclusions from statistical analyses.

2006 236pp 5 illustrations 978 0 521 68567 2 • (0 521 68567 2) • PB • £19.99

Medical Statistics from A to Z
A Guide for Clinicians and Medical Students
B. S. Everitt
Institute of Psychiatry, London, UK

From ‘Absolute risk’ to ‘Zero-sum game’ – this accessible introduction to the terminology of medical statistics encompasses more than 1500 terms all clearly explained, illustrated and defined in non-technical language, and without any mathematical formulae! A painless guide to the bewildering world of medical statistics for doctors and students alike.

Features
• An accessible, user friendly, non-technical introduction to statistics
• 1500 terms and definitions, supplemented with suggested further reading and references, helpful tips and asides, and illustrated throughout
• Cross-referencing between related entries provides easy navigation and a deeper insight into the topic

2003 236pp 84 illustrations 978 0 521 52004 4 • (0 521 52004 3) • PB • £22.99

Now in Paperback
The Cambridge Dictionary of Statistics
3rd edition
B. S. Everitt
King’s College London, UK

Easy access to simple, reliable definitions and explanations of modern statistical and statistics-related concepts. Over 3600 terms are defined, covering medical, survey, theoretical, and applied statistics, including computational aspects. Many definitions include a reference to an extended account of the term; many are accompanied by graphical material to aid understanding.

Earlier edition: ‘This is a valuable reference book for all statisticians and medical researchers who use and who need to understand statistics … It should be purchased by statisticians, libraries that support medical and veterinary departments, and research workers in medicine.’

2006 442pp 134 illustrations 978 0 521 69027 7 • (0 521 69027 7) • PB • £17.99

2006 482pp 134 illustrations 978 0 521 86039 0 • (0 521 86039 3) • HB • £45.00
Statistical Modeling for Biomedical Researchers
A Simple Introduction to the Analysis of Complex Data
William D. Dupont
Vanderbilt University, Nashville, USA
This text will enable biomedical researchers to use several advanced statistical methods that have proven valuable in medical research.


2002 404pp 101 illustrations 74 exercises
978 0 521 65578 1 (0 521 65578 1) • PB • £33.00

Quick Facts
978 0 521 54985 1   (0 521 54985 X) • PB • £27.99   |   978 0 521 84051 4   (0 521 54985 X) • HB • £60.00

Epidemiological Studies
A Practical Guide
2nd edition
Alan J. Silman
and Gary J. Macfarlane
Both from University of Manchester, UK
This successful book explains the principles and practice of epidemiology, serving as a handbook for those who wish to do epidemiology; it uses relevant exercises and examples, taken from real life, to illustrate how to set up a study; it serves to produce valid results that will satisfy grant bodies, ethical committees and journal editors; ultimately it bridges the gap between theory and practice.

From a review of the first edition: ‘… lucid explanations and succinct, well-chosen examples … make the book a rapid read … Readers who follow his guidance will indeed learn painlessly to do epidemiology.’

BRITISH MEDICAL JOURNAL

Contents:
Part I. Introduction; Part II. Measuring the Occurrence of Disease; Part III. Study Designs: Confounding, Simulation and Bias; Part IV. Selection of Populations and Samples to Study; Part V. Information from Epidemiological Studies; Part VI. Analysis and Interpretation of Epidemiological Data; Part VII. Other Practical Issues.

2002 256pp 60 illustrations
978 0 521 00939 3   (0 521 00939 1) • PB • £26.00

Quick Facts
978 0 521 81097 5   (0 521 81097 3) • HB • £55.00

Bestseller
Multivariable Analysis
A Practical Guide for Clinicians
2nd edition
Mitchell H. Katz
University of California, San Francisco, USA
This book is a lively, compact guide that helps the reader develop a comprehensive repertoire of analytic techniques. At each stage, the author shows how to use multivariable analysis, illustrating with practical examples from the medical literature.


2006 220pp 41 illustrations
978 0 521 54985 1 (0 521 54985 X) • PB • £27.99 | 978 0 521 84051 4 (0 521 54985 X) • HB • £60.00

Quick Facts
978 0 521 54661 4   (0 521 54661 3) • PB • £24.99

Clinical Epidemiology
A Practical Guide
Penny Margaret Webb, Christopher James Bain
and Sandi Lynn Pirozzo
All from the University of Queensland
A simple, self-teaching guide to the principles and do’s and don’ts of epidemiology for medical students and healthcare professionals.

Contents:

2006 200pp 23 illustrations
978 0 521 54661 4   (0 521 54661 3) • PB • £27.99

Quick Facts
978 0 521 82675 4   (0 521 54985 X) • HB • £55.00

Essential Epidemiology
An Introduction for Students and Health Professionals
Penny Margaret Webb, Christopher James Bain
and Sandi Lynn Pirozzo
All from the University of Queensland
An accessible, modern introduction to epidemiology for students of medicine and public health. It combines a strong public health perspective with modern methodological insights. It emphasises the fundamental principles common to all areas of epidemiology, and integrates public health and clinical epidemiology and the study of infectious and chronic diseases.

Contents:

2006 220pp 41 illustrations
978 0 521 54985 1 (0 521 54985 X) • PB • £27.99 | 978 0 521 84051 4 (0 521 54985 X) • HB • £60.00

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Study Design and Statistical Analysis
A Practical Guide for Clinicians
Mitchell Katz
University of California, San Francisco, USA
This book takes the reader through the entire research process: choosing a question, designing a study, collecting the data, using univariate, bivariate and multivariable analysis, and publishing the results. It does so by using plain language rather than complex derivations and mathematical formulae. It focuses on the nuts and bolts of performing research by asking and answering the most basic questions about doing research studies. It has numerous tables, graphs and tips to help demystify the process. It is illustrated with up-to-date examples from the clinical literature.

Contents:

2006 200pp 23 illustrations
978 0 521 53407 9   (0 521 53407 0) • PB • £24.99
978 0 521 82675 4   (0 521 54985 X) • HB • £55.00

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978 0 521 54661 4   (0 521 54661 3) • PB • £24.99

Study Design and Statistical Analysis
A Practical Guide for Clinicians
2nd edition
Mitchell Katz
University of California, San Francisco, USA
This new edition has been fully revised to build on the enormous success of its popular predecessor. It now includes new features introduced by readers’ requests including a new chapter on propensity score, more detail on clustered data and Poisson regression and a new section on analysis of variance. As before it describes how to perform and interpret multivariable analysis, using plain language rather than complex derivations and mathematical formulae.


2006 220pp 41 illustrations
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PUBLIC HEALTH

Air, the Environment and Public Health
Anthony Kessel
London School of Hygiene and Tropical Medicine, UK

Tracing the theme of air and health from ancient civilisations to the present day the book explores the changing conceptions of air and health alongside historical developments in public health. The book covers areas such as air and health in early civilisations, smoke pollution, modern air pollution epidemiology, and climate change. Blending public health science, history of medicine, ethics and philosophy, the book will be of interest to those working or studying in public health, environmental health, medicine, history of medicine, and medical ethics.

Features
- Inter-disciplinary, it is a unique blend of public health science, history of medicine, ethics and philosophy
- Highly topical and relevant to contemporary concerns about air pollution and climate change
- Suitable for students of public health and professional practitioners

Contents
Part I. Whole Air; Part II. Polluted Air; Part III. Air Pollution, Epidemiology and Public Health; Part IV. New Horizons.

2005 260pp 6 illustrations
978 0 521 83146 8 (0 521 83146 6) • HB • £50.00

Public Health at the Crossroads
Achievements and Prospects
2nd edition
Robert Beaglehole and Ruth Bonita
Both from the World Health Organization, Geneva, Switzerland

An introduction to public health as a discipline and a critique of its recent development. This extensively revised edition reviews major health trends, the current state of the world’s health, and the latest estimates of the global burden of disease. With examples drawn widely from rich and poor countries, the authors argue for an inclusive vision of public health based on the application in public policy of improved epidemiological understanding of the causes of disease. It will be essential reading for all those in public health.
‘The accessible style of this book, liberally illustrated with the bullet points and chapter summaries, should ensure its place on the reading lists of schools of public health. It may help to inspire a new generation of public health practitioners to become broader, braver and more effective than their forebears.’

HEALTH ECONOMICS


2004 298pp 31 illustrations
978 0 521 83259 5 (0 521 83259 4) • HB • £45.00

Refugee and Immigrant Health
A Handbook for Health Professionals
Charles Kemp
Baylor University, Texas, USA
and Lance Rasbridge
Parkland Health and Hospital Systems, Dallas, Texas, USA

We live in an age of constantly shifting populations, as immigrants and refugees seek a safe haven from war, famine and poverty. Based on the authors’ combined forty-plus years of work as clinicians and teachers in refugee and immigrant health, this account is practical, yet theory-based, so it can be used in the field and as a teaching text. It bridges physical health (highlighting infectious disease risks), mental health, and spiritual issues. It also details health beliefs and practices of 30 cultures from more than 40 countries.

Features
- Focus on cultural competence
- Balances theory and clinical application of theory
- Population-specific information on 30 cultures and broad background issues on immigrants and refugees

Contents: Part I. Issues and Background; Part II. Cultural Traditions and Populations.

2004 394pp 20 illustrations
978 0 521 53560 1 (0 521 53560 3) • PB • £40.00
978 0 521 82859 8 (0 521 82859 7) • HB • £80.00

Dicing with Death
Chance, Risk and Health
Stephen Senn
University College London, UK

An explanation of the whys and hows of statistical reasoning in medicine and health.
‘… thought provoking and rewarding … whether your taste is for the nitty-gritty of controversies, like the alleged link between childhood MMR vaccination and autism, or for pensive reflection on the philosophy of knowledge, you will find much of value here.’

NEW SCIENTIST


2003 264pp 64 illustrations
978 0 521 54023 0 (0 521 54023 2) • PB • £15.99
978 0 521 82359 5 (0 521 82359 4) • HB • £45.00
Hospital Infection
From Miasmas to MRSA
Graham A. J. Ayliffe
University of Birmingham, UK
Mary P. English
United Bristol Hospitals Trust, UK

This is an absorbing account of the continuing battle to control hospital infections, from the earliest days of hospital care when bad air or miasma was thought to be the cause, to the present day and the emergence of antibiotic-resistant ‘superbugs’ such as MRSA and necrotizing fasciitis.

‘Despite a daunting remit, the authors accomplish their task with panache, incorporating history and science in a book that manages to stay fresh and readable where the nature of the subject matter could have rendered it dry … full of fascinating snippets of information … the book is a valuable history of an extremely important subject, one that is often neglected in medical schools’

Outcomes Assessment in Cancer
Measures, Methods and Applications
Edited by Joseph Lipscomb
National Cancer Institute, Bethesda, Maryland, USA
Carolyn C. Gotay
Cancer Research Center, Hawaii, USA
and Claire Snyder
National Cancer Institute, Bethesda, Maryland, USA

Cancer has profound effects on patients and families, but measuring outcomes such as quality of life poses unique challenges. This book provides perspectives on the state of cancer outcomes measurement and offers a penetrating discussion on a topic critically important to evaluating and enhancing the quality of cancer care.

Reducing the Stigma of Mental Illness
A Report from a Global Association
Norman Sartorius
Université de Genève, Switzerland
and Hugh Schulze

This book details the results of the Open Doors Programme, begun in 1996 by the WPA, to fight the stigma and discrimination attached to mental illness. It provides recommendations and guidance for those seeking to join this international effort or start similar efforts.

Social Inclusion of People with Mental Illness
Julian Leff
Institute of Psychiatry, London, UK
and Richard Warner
University of Colorado, USA

People with serious mental illness no longer spend years of their lives in psychiatric institutions. In developed countries, there has been a major shift in the focus of care from hospitals into the community. However, whilst it means those with mental illness are not confined, it does not guarantee they will be fully integrated into their communities. This book analyses the causes of these barriers and suggests ways of dismantling them.

Features
• Takes an interdisciplinary approach including coverage of social, clinical and economic aspects
• Describes innovative service interventions for use in clinical practice
• Accessible to a wide range of readership groups


Reducing the Stigma of Mental Illness
A Report from a Global Association
Norman Sartorius
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This book details the results of the Open Doors Programme, begun in 1996 by the WPA, to fight the stigma and discrimination attached to mental illness. It provides recommendations and guidance for those seeking to join this international effort or start similar efforts.

Epidemiology and Culture
Theme Book
James A. Trostle
Trinity College, Hartford, Connecticut, USA

This book shows how practitioners in the emerging field of ‘cultural epidemiology’ describe human health, communicate with diverse audiences, and intervene to improve health and prevent disease. By unpacking many common disease risks and epidemiologic categories, it reveals unexamined assumptions and shows how sociocultural context influences measurement of disease.

Information is correct at time of going to press but is subject to change without prior notice.