Although a very fragile structure, the skin barrier is probably one of the most important organs of the body. Inward/out it is responsible for body integrity and outward/in for keeping microbes, chemicals, and allergens from penetrating the skin. Since the role of barrier integrity in atopic dermatitis and the relationship to filaggrin mutations was discovered a decade ago, research focus has been on the skin barrier, and numerous new publications have become available. This book is an interdisciplinary update offering a wide range of information on the subject. It covers new basic research on skin markers, including results on filaggrin and on methods for the assessment of the barrier function. Biological variation and aspects of skin barrier function restoration are discussed as well. Further sections are dedicated to clinical implications of skin barrier integrity, factors influencing the penetration of the skin, influence of wet work, and guidance for prevention and saving the barrier. Distinguished researchers have contributed to this book, providing a comprehensive and thorough overview of the skin barrier function. Researchers in the field, dermatologists, occupational physicians, and related industry will find this publication an essential source of information.

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Photodynamic Therapy (PDT) has become an important treatment modality in medical practice. New and exciting applications continue to emerge and the future of PDT looks brighter and brighter. Dermatologists and other health professionals around the world rely on its therapeutic effect for the treatment of actinic keratoses, non-melanoma skin cancers, acne vulgaris, and various other dermatologic conditions.

In this comprehensive yet concise book, world-renowned experts showcase all of the common, everyday uses of PDT in dermatologic offices. They also examine how this beneficial therapy can be utilized to its full capacity. The considerable knowledge presented here renders this publication an indispensable resource for all dermatologists and health professionals who offer their patients this effective, noninvasive procedure.

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The fifth revised edition of this highly successful book presents the most extensive enhancement since Using and Understanding Medical Statistics was first published 30 years ago. Without question, the single greatest change has been the inclusion of source code, together with selected output, for the award-winning, open-source, statistical package known as R. This innovation has enabled the authors to de-emphasize formulae and calculations, and let software do all of the ‘heavy lifting’.

This edition also introduces readers to several graphical statistical tools, such as Q-Q plots to check normality, residual plots for multiple regression models, funnel plots to detect publication bias in a meta-analysis and Bland-Altman plots for assessing agreement in clinical measurements. New examples that better serve the expository goals have been added to a half-dozen chapters. In addition, there are new sections describing exact confidence bands for the Kaplan-Meier estimator, as well as negative binomial and zero-inflated Poisson regression models for over-dispersed count data.

The end result is not only an excellent introduction to medical statistics, but also an invaluable reference for every discerning reader of medical research literature.

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