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   Disciplina   006.312
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   Soggetti   Biometry
                     Statistics
                     Biomathematics
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                     Mathematical and Computational Biology
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   Note generali   Description based upon print version of record.

   Nota di bibliografia Includes bibliographical references at the end of each chapters and index.

   Nota di contenuto The problem of simultaneous inference -- Part I General Theory -- Some theory of p-values -- Classes of multiple test procedures -- Simultaneous test procedures -- Stepwise rejective multiple tests -- Multiple testing and binary classification -- Multiple testing and model selection -- Software solutions for multiple hypotheses testing -- Part II From Genotype to Phenotype -- Genetic association studies -- Gene expression analyses -- Functional magnetic resonance imaging -- Part III Further Applications in the Life Sciences -- Further life science

applications.

Sommario/riassunto	This monograph will provide an in-depth mathematical treatment of modern multiple test procedures controlling the false discovery rate (FDR) and related error measures, particularly addressing applications to fields such as genetics, proteomics, neuroscience and general biology. The book will also include a detailed description how to implement these methods in practice. Moreover, new developments focusing on non-standard assumptions are also included, especially multiple tests for discrete data. The book primarily addresses researchers and practitioners but will also be beneficial for graduate students.