1. Record Nr. UNINA9910140604503321 Autore Logan Murray Titolo Biostatistical design and analysis using R [[electronic resource]]: a practical guide / / Murray Logan Hoboken, N.J., : Wiley-Blackwell, 2010 Pubbl/distr/stampa **ISBN** 1-4443-6247-X 1-282-54792-5 9786612547928 1-4443-1962-0 1-4443-1963-9 Edizione [1st ed.] Descrizione fisica 1 online resource (576 p.) Disciplina 570.1/5195 Soggetti **Biometry** R (Computer program language) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Biostatistical Design and Analysis Using R; Contents; Preface; R quick reference card: General key to statistical methods: 1 Introduction to R: 2 Datasets; 3 Introductory statistical principles; 4 Sampling and experimental design with R: 5 Graphical data presentation: 6 Simple hypothesis testing - one and two population tests; 7 Introduction to Linear models; 8 Correlation and simple linear regression; 9 Multiple and curvilinear regression; 10 Single factor classification (ANOVA); 11 Nested ANOVA; 12 Factorial ANOVA 13 Unreplicated factorial designs - randomized block and simple repeated measures14 Partly nested designs: split plot and complex repeated measures; 15 Analysis of covariance (ANCOVA); 16 Simple Frequency Analysis; 17 Generalized linear models (GLM); Bibliography; R index; Statistics index R - the statistical and graphical environment is rapidly emerging as an Sommario/riassunto important set of teaching and research tools for biologists. This book draws upon the popularity and free availability of R to couple the theory and practice of biostatistics into a single treatment, so as to provide a

textbook for biologists learning statistics, R, or both. An abridged

description of biostatistical principles and analysis sequence keys are combined together with worked examples of the practical use of R into a complete practical guide to designing and analyzing real biological research. Topics covere