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	Autore	McLachlan Geoffrey J. <1946->
	Titolo	Analyzing microarray gene expression data [[electronic resource] /] / Geoffrey J. McLachlan, Kim-Anh Do, Christopher Ambroise
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	Descrizione fisica	1 online resource (366 p.)
	Collana	Wiley series in probability and statistics
	Altri autori (Persone)	DoKim-Anh <1960->
		AmbroiseChristophe <1969->
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	Soggetti	DNA microarrays - Statistical methods
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	Nota di contenuto	Analyzing Microarray Gene Expression Data; Contents; Preface; 1 Microarrays in Gene Expression Studies; 1.1 Introduction; 1.2 Background Biology; 1.2.1 Genome, Genotype, and Gene Expression; 1.2.2 Of Wild-Types and Other Alleles; 1.2.3 Aspects of Underlying Biology and Physiochemistry; 1.3 Polymerase Chain Reaction; 1.4 cDNA; 1.4.1 Expressed Sequence Tag; 1.5 Microarray Technology and Application; 1.5.1 History of Microarray Development; 1.5.2 Tools of Microarray Technology; 1.5.3 Limitations of Microarray Technology; 1.5.4 Oligonucleotides versus cDNA Arrays
		1.5.5 SAGE: Another Method for Detecting and Measuring Gene Expression Levels1.5.6 Emerging Technologies; 1.6 Sampling of Relevant Research Entities and Public Resources; 2 Cleaning and Normalization; 2.1 Introduction; 2.2 Cleaning Procedures; 2.2.1 Image Processing to Extract Information; 2.2.2 Missing Value Estimation; 2.2.3 Sources of Nonlinearity; 2.3 Normalization and Plotting Procedures for

Sommario/riassunto	A multi-discipline, hands-on guide to microarray analysis of biological processes Analyzing Microarray Gene Expression Data provides a comprehensive review of available methodologies for the analysis of data derived from the latest DNA microarray technologies. Designed for biostatisticians entering the field of microarray analysis as well as biologists seeking to more effectively analyze their own experimental data, the text features a unique interdisciplinary approach and a combined academic and practical perspective that offers readers the most complete and applied coverage of the subject