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Altri autori (Persone)	DittmarKatharina LiberlesDavid A
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Nota di contenuto	EVOLUTION AFTER GENE DUPLICATION; CONTENTS; Contributors; Preface; 1 Understanding Gene Duplication Through Biochemistry and Population Genetics; 2 Functional Divergence of Duplicated Genes; 3 Duplicate Retention After Small- and Large-Scale Duplications; 4 Gene Dosage and Duplication; 5 Myths and Realities of Gene Duplication; 6 Evolution After and Before Gene Duplication?; 7 Protein Products of Tandem Gene Duplication: A Structural View; 8 Statistical Methods for Detecting Functional Divergence of Gene Families 9 Mapping Gene Gains and Losses Among Metazoan Full Genomes Using an Integrated Phylogenetic Framework 10 Reconciling Phylogenetic Trees; 11 On the Energy and Material Cost of Gene

Duplication; 12 Fate of a Duplicate in a Network Context; 13 Evolutionary and Functional Aspects of Genetic Redundancy; 14 Phylogenomic Approach to the Evolutionary Dynamics of Gene Duplication in Birds; 15 Gene and Genome Duplications in Plants; 16 Whole Genome Duplications and the Radiation of Vertebrates; Index

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## Sommario/riassunto

Gene duplication has long been believed to have played a major role in the rise of biological novelty through evolution of new function and gene expression patterns. The first book to examine gene duplication across all levels of biological organization, *Evolution after Gene Duplication* presents a comprehensive picture of the mechanistic process by which gene duplication may have played a role in generating biodiversity. Key Features:Explores comparative genomics, genome evolution studies and analysis of multi-gene families such as Hox, globins, olfactory

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