



## Genome Evolution

---

By Meyer, Axel / Peer, Yves van de

Book Condition: New. Publisher/Verlag: Springer Netherlands | Gene and Genome Duplications and the Origin of Novel Gene Functions | In the years since the publication of Susumu Ohno's 1970 landmark book *Evolution by gene duplication* tremendous advances have been made in molecular biology and especially in genomics. Studies of genome structure and function prerequisite to testing hypotheses of genome evolution were all but impossible until recent methodological advances. This book evaluates newly generated empirical evidence as it pertains to theories of genomic evolutionary patterns and processes. Tests of hypotheses using analyses of complete genomes, interpreted in a phylogenetic context, provide evidence regarding the relative importance of gene duplication. The alternative explanation is that the evolution of regulatory elements that control the expression of and interactions among genes has been a more important force in shaping evolutionary innovation. This collection of papers will be of interest to all academic and industry researchers working in the fields of molecular biology, biotechnology, genomics and genome centers. | Foreword; A. Meyer, Y. Van de Peer. Early events in genome evolution. 1. Gene duplication and other evolutionary strategies: from the RNA world to the future; J. Brosius. 2. Major transitions in evolution by genome fusions: from prokaryotes...



**READ ONLINE**  
[ 1.75 MB ]

### Reviews

*This book is great. it was writtern quite flawlessly and helpful. You will not truly feel monotony at whenever you want of your time (that's what catalogs are for concerning if you ask me).*

-- **Sterling Kris**

*It is really an incredible ebook that we have actually go through. I actually have go through and i also am sure that i am going to likely to read again again in the foreseeable future. Your way of life period will be convert the instant you complete reading this article pdf.*

-- **Prof. Adrain Rice**