1. Record Nr. UNINA9910815960603321

Titolo	Neurospora : genomics and molecular biology / / edited by Durgadas P. Kasbekar and Kevin McCluskey
Pubbl/distr/stampa	Norfolk, England : , : Caister Academic Press, , [2013] ©2013
ISBN	1-908230-77-0
Descrizione fisica	1 online resource (305 p.)
Disciplina	579.567
Soggetti	Neurospora Fungi - Genetics Fungal molecular biology
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	Contents; Preface; Ch 01: Neurospora: the Organism, its Genes and its Genome; Ch 02: The Fungal Sense of Non-self; Ch 03: Control of Branching in Neurospora crassa; Ch 04: Glycosyl Hydrolases: Modular Structure, Physiological Roles, Gene Amplification and Evolution; Ch 05: Quantitative Genetics in Neurospora; Ch 06: Genetic Recombination in Neurospora crassa; Ch 07: Neurospora Duplications, and Genome Defence by RIP and Meiotic Silencing; Ch 08: Mutagen Response and Repair; Ch 09: Regulation of Gene Transcription by Light in Neurospora Ch 10: Regulation and Physiological Function of Mitogen-activated Protein Kinase and cAMP-dependent Protein Kinase PathwaysCh 11: Heterotrimeric G Proteins; Ch 12: Calcium Signalling; Ch 13: Carotenoid Biosynthesis in Neurospora; Ch 14: The Neurospora Circadian System: From Genes to Proteins and Back in Less Than 24 hours; Ch 15: Neurospora Gene and Genome Analysis: Past Through Future; Index
Sommario/riassunto	Building on over 70 years of genetics research, Neurospora continues to be the leading model for the study of the genomics and molecular biology of filamentous fungi. The ease of culture, amenability to genetic and molecular genetic analysis, and the close correlation between genetic and biochemical traits are some of its advantages. Research with Neurospora has provided insights unachievable from

work with simpler systems and difficult to extract from more complicated ones, cementing its position as a leading model system. In recent years, the application of modern high throughput analyses ha