

Neurospora

Genomics and Molecular Biology

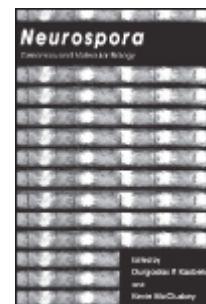
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Building on over 70 years of genetics research, *Neurospora* continues to be the leading model for the study of the genomics and molecular biology of filamentous fungi. The ease of culture, amenability to genetic and molecular genetic analysis, and 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 had led to a deluge of information on the genomics and molecular biology of *Neurospora*. This timely book aims to distil the most important findings to provide a snapshot of the current research landscape.

In this book, internationally recognised *Neurospora* experts critically review the most important research and demonstrate the breadth of applications to industrial biology, biofuels, agriculture, and human health. The opening chapter is an introduction to the organism. Following chapters cover topics such as: carotenoid biosynthesis, polysaccharide deconstruction, genome biology, genome recombination, gene regulation, signal transduction, self-recognition, development, circadian rhythms and mutation. The book closes with a fascinating look at the history and future trends for research on *Neurospora* gene and genome analysis.

This volume is essential for everyone working with *Neurospora* and other filamentous fungi. A recommended book for all biology, agriculture and medical libraries.

Chapter 1. *Neurospora*: The Organism, its Genes and its Genome. *A J F Griffiths*

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Chapter 3. Control of Branching in *Neurospora crassa*. *Michael K. Watters*

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Chapter 5. Quantitative genetics in *Neurospora*. *Charles Hall*

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Chapter 7. *Neurospora* Duplications, and Genome Defense by RIP and Meiotic Silencing. *Durgadas P. Kasbekar*

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