RNA and the Regulation of Gene Expression

A Hidden Layer of Complexity

Edited by: **Kevin V. Morris** *(La Jolla, USA)*

x + 228 pp. (+ 3 pages colour), March 2008
ISBN 978-1-904455-25-7 $300/£150
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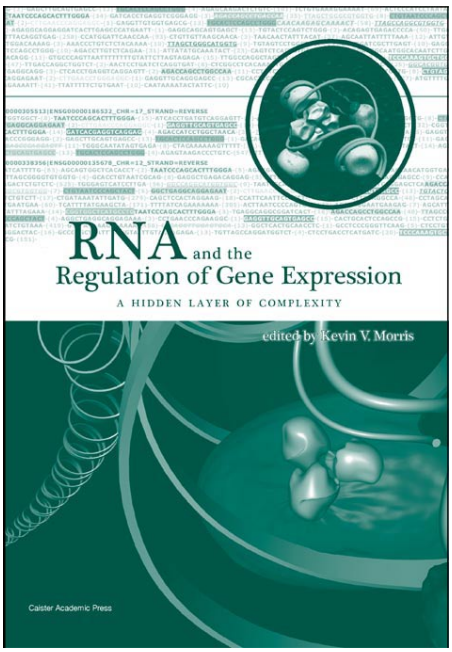

The role of RNA in regulating gene expression has become a topic of intense interest. In this book internationally recognized experts explore and discuss the methods whereby RNA can regulate gene expression with examples in yeast, *Drosophila*, mammals, and viral infection, and highlight the application of this knowledge in therapeutics and research. Topics include: gene silencing and gene activation, the hammerhead ribozyme, epigenetic regulation, RNAi, microRNA, and pyknons. This comprehensive publication is intended for readers with teaching or research interests in RNA, the regulation of gene expression, epigenetics, genetics, genomics or molecular biology.

Essential reading for everyone interested in the regulation of gene expression. A recommended text for all bioscience, molecular biology and genetics libraries.

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Edited by: **Jörg Tost** *(Evry, France)*

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The field of epigenetics has gained great momentum in recent years and is now a rapidly advancing field of biological and medical research. Epigenetic changes play a key role in normal development as well as in disease. The editor of this book has assembled top-quality scientists from diverse fields of epigenetics to produce a major new volume on current epigenetics research.

In this book the molecular mechanisms and biological processes in which epigenetic modifications play a primordial role are described in detail. The first seven chapters describe the different biological mechanisms of the epigenetic machinery including: DNA methylation, histone tails, chromatin structure, nucleosome occupancy, Polycomb group proteins, siRNAs and miRNAs. The following chapters cover the epigenetic systems of plants, the epigenetic profile of embryonic stem cells, cell differentiation, imprinting marks, and random X chromosome inactivation. Further chapters deal with epigenetics in relation to cancers, premature aging, longevity and the developmental origins of disease. The final chapter, describes the fascinating potential transfer of epigenetic information across generations.

This up-to-date volume is a major resource for those working in the field and will stimulate readers of all levels to dive into the fascinating and fast moving field of epigenetics.

"A recommended text for all bioscience and medical libraries"

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Insights in Molecular Biology

Edited by: **G. San-Blas and R. A. Calderone**
264 pp., July 2008
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A panel of expert international mycologists critically review the most important cutting-edge topics. Topics include: gene expression and regulation, heterozygosity in Candida, molecular diagnosis, regulation of the host-fungal interaction, the development of anti-fungals, signal transduction, and mechanisms of multi-drug resistance.

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Edited by: **Ian M. Mackay**
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Current Research and Future Trends

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