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# **Applied RNAi**

# From Fundamental Research to Therapeutic Applications

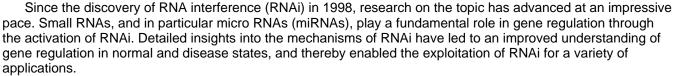
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In this book an international panel of RNAi experts critically reviews the most interesting advances in basic applied RNAi research, highlighting the applications in RNAi-based therapies and discussing the technical hurdles that remain. Topics covering the fundamental biological aspects of applied RNAi research include: the role of miRNAs in trinucleotide repeat disorders; miRNAs and HIV pathogenesis; miRNAs for epigenetic gene silencing; the role of miRNAs in virus-related cancers; non-canonical miRNA biogenesis. In the area of RNAi-based therapy, topics include: harnessing RNAi for the treatment of viral infections; optimising the design of exogenous RNAi activators; blocking miRNA function with synthetic agents; somatic cell reprogramming; high-content miRNA-based screening tools and the use of miRNA target sites for control of transgene expression.

Essential reading for everyone involved in RNAi research, drug discovery and delivery, biomedical engineering and biomaterials.

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