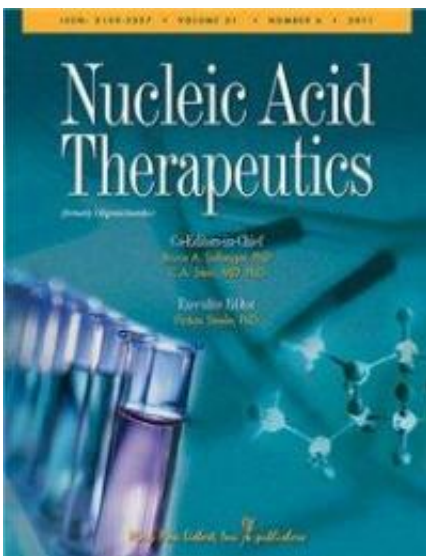


# New RNA-based therapeutic strategies for controlling gene expression

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*Nucleic Acid Therapeutics* is an authoritative, peer-reviewed journal published bimonthly in print and online that focuses on cutting-edge basic research, therapeutic applications, and drug development using nucleic acids or related compounds to alter gene expression. ©2012, Mary Ann Liebert Inc., publishers

Small RNA-based nucleic acid drugs represent a promising new class of therapeutic agents for silencing abnormal or overactive disease-causing genes, and researchers have discovered new mechanisms by which RNA drugs can control gene activity. A comprehensive review article in [Nucleic Acid Therapeutics](#), a peer-reviewed journal published by Mary Ann Liebert, Inc., details these advances.

Short strands of [nucleic acids](#), called small RNAs, can be used for targeted gene silencing, making them attractive drug candidates. These small RNAs block [gene expression](#) through multiple [RNA interference](#) (RNAi) pathways, including two newly discovered pathways in which small RNAs bind to Argonaute proteins or other forms of RNA present in the [cell nucleus](#), such as long non-coding RNAs and pre-mRNA.

Keith T. Gagnon, PhD, and David R. Corey, PhD, University of Texas Southwestern Medical Center, in Dallas, review common features shared by RNAi pathways for controlling gene expression and focus in detail on the potential for Argonaute-RNA complexes in gene regulation and other exciting new options for targeting emerging forms of non-coding RNAs and pre-mRNAs in the article "[Argonaute and the Nuclear RNAs: New Pathways for RNA Mediated Control of Gene Expression](#)."

"The field of RNA mediated control of gene expression is rapidly evolving and the article by Gagnon and Corey provides a highly informative and up to date review of this exciting and often surprising area of biomedical research. We are delighted to publish this important review for the field," says Co-Editor-in-Chief Bruce A. Sullenger, PhD, Duke Translational Research Institute, Duke University Medical Center, Durham, NC.

Provided by Mary Ann Liebert, Inc.

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