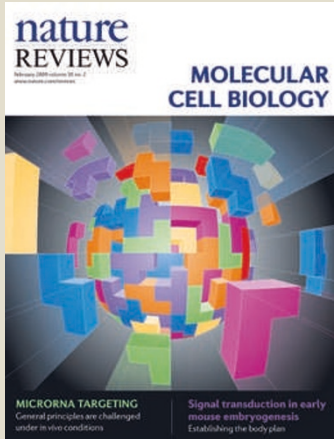




nature publishing group



► **COVER:** 'Assembly' by Vicky Askew, inspired by the Review on p104



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Post-transcriptional regulation of gene expression is much more intricate than previously thought, and the underlying mechanisms need to be elucidated to gain a full understanding of how gene expression is regulated at different levels and of the interplay between these mechanisms. Continuing our special Article Series on Post-transcriptional control (<http://www.nature.com/nrm/series/posttranscription>), this issue features two Series articles. On page 141, Peter Brodersen and Oliver Voinnet challenge, on the basis of recent genetic and biochemical studies, the general principles that are thought to govern microRNA (miRNA) target recognition and mode of action. They also propose new functions for target-site-specific endonucleolytic cleavage, an mRNA degradation mechanism that is used in RNA interference and by some miRNAs, in generating biologically functional, non-coding RNA fragments.

In a second article, V. Narry Kim, Jinju Han and Mikiko C. Siomi (page 126) discuss the biogenesis mechanisms of three classes of endogenous small RNAs in animals: miRNAs, endogenous small interfering RNAs and Piwi-interacting RNAs. Accompanying their Review, Kim and Siomi present a Poster entitled 'Production and actions of small RNAs' (<http://www.nature.com/nrm/posters/smallrnas>), which was produced with generous support from Abcam.

Finally, you may have noticed a new feature in the Research Highlights section called Journal Club. Whereas Research Highlights are written by the editors and focus on the most recent literature, Journal Club pieces are written by research scientists and can cover older papers that have a specific significance — for example, a report that provided the inspiration to enter a field or to pursue a course of research, or a particularly surprising, or underrated, article. We hope you'll enjoy this new addition!

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