

Naturally occurring RNA always contains numerous biochemically altered nucleotides. They are formed by enzymatic modification of the primary transcripts during the complex RNA maturation process designated *RNA modification*. A large number of enzymes catalyzing the formation of these modified nucleosides or converting one canonical base into another at the posttranscriptional level have been studied for many years, but only recently have systematic and comparative studies begun. The functions of individual enzymes and/or the modified/edited nucleosides in RNA, however, have remained largely ignored.

This book provides advance information on RNA modification, including the associated editing machinery, while offering the reader some perspective on the significance of such modifications in fine-tuning the structure and functions of mature RNA molecules and hence the ability to influence the efficiency and accuracy of genetic expression. Outstanding scientists who are actively working on RNA modification/editing processes have provided up-to-date information on these intriguing cellular processes that have been generated over the course of millions of years in all living organisms. Each review has been written and illustrated for a large audience of readers, not only specialists in the field, but also for advanced students or researchers who want to learn more about recent progress in RNA modification and editing.

ISBN 3-540-24495-6



Available online at
SpringerLink.com