Record Nr. UNINA9910373908303321 The Biology of mRNA: Structure and Function / / edited by Marlene Titolo Oeffinger, Daniel Zenklusen Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-31434-0 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (318 pages) Collana Advances in Experimental Medicine and Biology, , 2214-8019; ; 1203 Disciplina 572.88 Soggetti Medicine—Research Biology—Research Molecular genetics **Proteins** Neurosciences Post-translational modification Biomedical Research Molecular Genetics Protein Biochemistry Neuroscience Post-translational Modifications RNA Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Regulation of co-transcriptional mRNP assembly -- mRNA export Nota di contenuto through the NPC -- Roles of mRNA modifications in gene regulation --Studying mRNPs using single molecule approaches -- Difference between mRNPs and IncRNAs? -- RNPs and/or sequence motives in mRNA localization -- mRNP structure -- New RNA binding proteins: mRNP composition -- Aggregation of repeats RNAs in

neurodegenerative diseases -- mRNA structural organization and translation -- How to decide to make an mRNA - degradation --

Methods to study mRNP composition -- mRNA-DNA kisses - R-loops

-- Forms of mRNA editing and their role in disease.

Sommario/riassunto

The book provides an overview on the different aspects of gene regulation from an mRNA centric viewpoint, including how mRNA is assembled and self-assembles in a complex consisting of RNA and proteins, and how its ability to be translated at the right time and space depends on many processes acting on the mRNAs, leading to a properly folded complex. This book shows how new technologies have led to a better understanding of these processes and their connected diseases. The book is written for scientists in fundamental and applied biomedical research working on different aspects of gene regulation. It is also targeted to an audience that is not implicated in these fields directly, but wants to gain a better understanding of mRNA biology.