

1. Record Nr.	UNINA9910633968403321
Titolo	Gene Expression : edited by Fumiaki Uchiumi
Pubbl/distr/stampa	London : , : IntechOpen, , [2022] ©2022
ISBN	1-80355-622-6
Descrizione fisica	1 online resource (216 pages)
Disciplina	572.865
Soggetti	Gene expression
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introductory Chapter: Gene Expression in Eukaryotic Cells. 2. Transcription Elongation Factors in Health and Disease. 3. Biophysical and Biochemical Approaches for R-Loop Sensing Mechanism. 4. lncRNAs: Role in Regulation of Gene Expression. 5. Gene Expression and Transcriptome Sequencing: Basics, Analysis, Advances. 6. APC and MSH2 mRNA Quantitative Gene Expression and Bayesian Analysis of Proband in Hereditary Colorectal Carcinoma. 7. Circular DNA: How Circular DNA Assists Cancer Roll with Therapeutic Punches. 8. Genetics of Colorectal Cancer Racial Disparities. 9. Bayesian Random-Effects Meta-Analysis Models in Gene Expression Studies.
Sommario/riassunto	Gene expression is dependent on multiple steps, including transcription, RNA processing, and translation. Importantly, recent studies revealed that gene expression is regulated by chromatin structures and non-coding RNA profiles. Elucidating the molecular mechanisms may contribute to the development of novel therapeutics for aging-related diseases, including cancer and neurodegenerative diseases. This book provides a comprehensive overview of gene expression and its role in human disease. It consists of nine chapters organized into two sections on molecular mechanisms in controlling gene expression and the relationships between transcriptional control and human disease.