

1. Record Nr.	UNINA9910882198003321
Autore	Hua-Van Aurélie
Titolo	Transposable Elements and Genome Evolution
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	1-394-31246-6 1-394-31245-8 1-394-31244-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (305 pages)
Collana	ISTE Consignment Series
Altri autori (Persone)	CapyPierre
Soggetti	Transposons Genomes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Dedication Page -- Title Page -- Copyright Page -- Contents -- Acknowledgments -- Introduction -- Chapter 1. Transposable Elements in Eukaryotes -- 1.1. Introduction -- 1.2. Classification, structure and transposition mechanism -- 1.2.1. Class I -- 1.2.2. Class II -- 1.2.3. Autonomous, non-autonomous and relics -- 1.3. Abundance, diversity and distribution -- 1.4. Origins of transposable elements and evolutionary relationships with other genetic elements -- 1.5. Genomic impact -- 1.5.1. Genome size -- 1.5.2. Genome structure -- 1.5.3. Genome function and evolution -- 1.6. References -- Chapter 2. Prokaryotic Transposable Elements -- 2.1. Introduction -- 2.1.1. Historical -- 2.1.2. Relationship between IS and transposons -- 2.1.3. The prokaryotic TE landscape -- 2.2. Transposases: the enzymes driving transposition -- 2.2.1. DDE enzymes -- 2.2.2. HUH enzymes -- 2.3. Insertion sequences -- 2.3.1. Overview
Sommario/riassunto	This book, 'Transposable Elements and Genome Evolution,' coordinated by Aurélie Hua-Van and Pierre Capy, explores the role of transposable elements (TEs) in the evolution of genomes across various organisms. It examines both eukaryotic and prokaryotic TEs, detailing their structures, mechanisms, and evolutionary impacts. The book also

discusses the implications of TE movements in human diseases, including cancers and metabolic disorders, and their effects on gene expression and chromosomal rearrangements. Aimed at researchers and students in genetics, genomics, and evolutionary biology, it provides a comprehensive overview of the diversity and significance of TEs in genomic evolution.

---