Record Nr. UNINA9910983355403321 Autore van Zundert Brigitte Titolo Neuroepigenetics Mechanisms in Health and Disease / / edited by Brigitte van Zundert, Martin Montecino Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031759802 303175980X Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (0 pages) Collana Subcellular Biochemistry, , 2542-8810 ; ; 108 Altri autori (Persone) MontecinoMartin Disciplina 612.8 153.1 Learning - Physiological aspects Soggetti Memory - Physiological aspects **Epigenetics Biochemistry** Cytology Diseases Biology - Technique Gene expression Learning and Memory Mechanisms of Disease Gene Expression Analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Basic Epigenetic Mechanisms -- Chapter 2. Epigenetics in Nota di contenuto Learning and Memory -- Chapter 3. Epigenetics in Neurodegenerative Diseases -- Chapter 4. The Promise of Epigenetic Editing for Treating Brain Disorders -- Chapter 5. Epigenetic Control in Schizophrenia --Chapter 6. Environmental Enrichment and Epigenetic Changes in the Brain: From the Outside to the Deep Inside -- Chapter 7. Remodeling the Epigenome through Meditation: Effects on Brain, Body, and Well-Being. Sommario/riassunto The book Neuroepigenetic Mechanisms in Health and Disease provides

insight into mechanisms of epigenetic control, focusing on molecular,

cellular and integrative aspects of neurobiology. Here, leading investigators in the field discuss in each chapter landmark scientific discoveries and recent advances in (neuro) epigenetics. Whereas some chapters concentrate in overviewing basic epigenetic mechanisms and the power of epigenome editing, other sections of the book discuss epigenetic control during learning and memory as well as in diverse brain related alterations, including neurodegenerative and rare neurologic diseases, and psychiatric disorders. In addition, the book covers relevant topics for modern human societies, including how drug abuse, environmental enrichment and meditation can influence brain function through epigenetic mechanisms. This book aims to serve as a useful source for junior scientists to first learn about the topic, as well as to more experienced researchers that seek for a broader view of this rapidly growing field that is beyond their area of specialization.