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Titolo	Handbook of Neurodegenerative Disorders // edited by Musthafa M. Essa
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Nota di contenuto	Epigenetics crosslink with Nutrition and brain function -- The contribution of the gut-brain-microbiota axis to brain health throughout the lifespan -- Three Neurodegenerative Diseases: A Single Hope -- Non-alcoholic steatohepatitis and the brain: how lipid accumulation and inflammation potentiate neurological manifestation -- Neuroinflammation & Microglial Activation in Schizophrenia: an overview -- The Gut Microbiota-Immune-Brain Axis and Brain Glioma: A Well-Established Connection and A Potential Strategy for Precision Oncology -- Molecular Changes and Gut-related Biomarkers in Parkinson's Disease for Early Detection -- Invitro systems for modeling neurodegeneration -- Advances in nanotechnology for drug delivery modulation in neurodegenerative diseases -- An understanding of different mechanisms leading to neurodegenerative diseases -- Pathways in AD -- Blood brain barrier in neurodegenerative disorders -- Defective mitophagy and the etiopathogenesis of Alzheimer's disease -- The Gut-Microbiotaand NDG: what is the interplay -- Nutrition and brain neurotransmitters -- Microglia in Multiple Sclerosis -- Toxic Tau Aggregation in AD -- Novel nutraceutical milk compounds in Alzheimer's prevention -- Mechanisms of Neuronal

Apoptosis and Excitotoxicity -- Biomarkers in AD -- Biomarkers of PD -- Modelling neural circuits in Parkinson's disease -- Big data and neurodegeneration disorders -- Epilepsy and Inflammation -- Epilepsy and Oxidative Stress -- Epilepsy and Neurotransmitters -- Genetic Epilepsy -- Epilepsy and Gut Microbiome.-Epileptogenesis in Post-Traumatic Epilepsy -- Infection-associated Epilepsy -- Epilepsy, Diet and Nutrition -- Epilepsy and Neurodegeneration -- Epilepsy and Neuropsychiatric Comorbidity -- Epilepsy and Infertility -- Sudden Unexpected Death in Epilepsy (SUDEP) -- Epilepsy and Prediction Devices -- Epilepsy and ASM Formulations -- Epilepsy and Diabetes -- Role of Ion Channels in SUDEP -- Treatment Strategies for Alzheimer's Disease Associated Epilepsy: Past, Present and Future Approaches -- Sleep architecture across female lifespan: A comprehensive review -- Heavy metals and neurological disorder -- Hallmarks of glioblastoma multiforme (GBM): a short review -- Integration of Artificial intelligence in the diagnosis and prevention of neurodegenerative disease: An update -- A comprehensive review of medicinal herbs improving gut brain health -- Role of sleep-in neurogenesis: A short review -- Mitochondrial transplantation as a newer therapeutic approach for neurodegenerative diseases -- An update on the long-term neurological effects observed after Covid-19 survivors -- A comprehensive review on the newer therapeutic approaches in treating Alzheimer's disease -- Review on role of diets improving the gut microbiota in Autism.

Sommario/riassunto

This Handbook discusses the pathology, etiology, pathogenesis, and therapeutic interventions of different neurodegenerative diseases. The initial section of the Handbook reviews the recent advances in understanding neurodegenerative diseases and the commonalities and differences between the major pathologies. The subsequent section presents recent developments in understanding fundamental biological mechanisms that influence the onset and development of neurodegenerative diseases. It provides current biomedical studies that are aimed at identifying the underlying causes of neurodegeneration. The book also examines the recent observations from biological, cellular, and studies from the model organisms for gaining mechanistic insights into neurodegenerative disorders. It also presents the epidemiological and genetics studies relevant to clinical aspects of neurodegenerative diseases. The book's subsequent chapters offer new and more effective therapeutic strategies to combat these devastating diseases. Towards the end, the Handbook presents recent advances in molecular diagnostics for neurodegenerative disorders and a perspective on the future directions to provide a framework for further developments and refinements of molecular diagnostics to combat neurodegenerative diseases.
