Record Nr. UNINA9910298349903321 Pathological Potential of Neuroglia: Possible New Targets for Medical **Titolo** Intervention / / edited by Vladimir Parpura, Alexei Verkhratsky Pubbl/distr/stampa New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 **ISBN** 1-4939-0974-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (546 p.) 610 Disciplina 612.8 612.8042 616.8 Soggetti Neurosciences Neurochemistry Neurology **Psychiatry** Neurology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. General Pathophysiology of Neuroglia: Neurological and Psychiatric Nota di contenuto Disorders as Gliopathies -- Ionic Signaling in Physiology and Pathophysiology of Astroglia -- Pathophysiology of Vesicle Dynamics in Astrocytes -- Glial Glutamate and Metabolic Transporters as a Target for Neurodegenerative Therapy and Biomarkers -- Alexander Disease and Astrotherapeutics -- Role of Astrocytes in Central Nervous System Traum -- Astroglial and Neuronal Integrity During Cortical Spreading Depolarization -- Crucial role for astrocytes in epilepsy -- Microglial Biology in Neuroinflammatory Disease: Pharmaco-industrial Approach to Target Validation -- The Role of Astrocytes in Huntington's Disease -- Amyotrophic Lateral Sclerosis: A Glial Perspective -- Complex and Associated Astroglial and Microglial Changes during the Progression of Alzheimer's Disease -- Possible Therapeutic Targets in Microglia --

Novel Therapeutic Approaches to Malignant Gliomas -- Hepatic encephalopathy: A Primary Neurogliopathy -- Astroglia and Severe

Mental Illness: A Role for Glutamate Microdomains -- Emerging Roles for Glial Pathology in Addiction -- Astroglial Connexins as Elements of Sleep-wake Cycle Regulation and Dysfunction -- Experimental Treatment of Acquired and Inherited Neuropathies -- Satellite glial cells as target for chronic pain therapy -- Enteric Glial Cells: Implications in Gut Pathology.

## Sommario/riassunto

Pathophysiological states, neurological and psychiatric diseases are almost universally considered from the neurocentric point of view, with neurons being the principal cellular element of pathological process. The brain homeostasis, which lies at the fulcrum of healthy brain function, the compromise of which invariably results in dysfunction/disease, however, is entirely controlled by neuroglia. It is becoming clear that neuroglial cells are involved in various aspects of initiation, progression and resolution of neuropathology. In this book we aim to integrate the body of information that has accumulated in recent years revealing the active role of glia in such pathophysiological processes. Understanding roles of glial cells in pathology will provide new targets for medical intervention and aide the development of much needed therapeutics. This book will be particularly useful for researchers, students, physicians and psychotherapists working in the field of neurobiology, neurology and psychiatry.