1. Record Nr. UNINA9910298348603321

Titolo Neuroinflammation and Neurodegeneration / / edited by Phillip K.

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Pubbl/distr/stampa New York, NY:,: Springer New York:,: Imprint: Springer,, 2014

ISBN 1-4939-1071-X

Edizione [1st ed. 2014.]

Descrizione fisica 1 online resource (606 p.)

Disciplina 616.8

616.8/0471

Soggetti Neurosciences

Neurochemistry Neurobiology

Lingua di pubblicazione Ing

Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references at the end of each chapters and

index.

Nota di contenuto

Nervous System -- General Physiology and Pathophysiology of Microglia Inflammation and the Pathophysiology of Astrocytes in Neurodegenerative Diseases -- Oxidative stress, neuroinflammation, and neurodegeneration -- Peripheral Neuroimmune Interactions and Neuropathic Pain -- Innate and Adaptive Immune-Mediated Neuroinflammation and Neurodegeneration in Parkinson's Disease --Multiple sclerosis: impact on functioning of the blood-brain barrier --Neuroinflammation in Alzheimer's disease -- Neuroinflammation in Huntington's Disease -- Neuroinflammation and immune regulation in ischemic stroke: identification of new pharmacological targets --HIV/NeuroAIDS -- Herpes Simplex Virus Infections Of The Central Nervous System -- Congenital Cytomegalovirus Disease -- Japanese Encephalitis: A Tale of Inflammation and Degeneration in the Central Nervous System -- The biology and clinical consequence of infection with the human polyomavirus JCV -- Role of Retrovirus-Induced Transactivator Proteins in Neuroinflammatory Disease --Immunopathogenesis of bacterial meningitis -- Cerebral Malaria -- HIV and Cocaine Interplay in HIV-associated Neurocognitive Disorders --

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Drugs of Abuse and NeuroAIDS: Opiates -- Cannabinoids -- Alcohol and Neurodegeneration -- Cell-Based Drug Delivery for Improving Antiretroviral Therapeutic Outcomes -- Immunomodulatory Therapeutics for Neurodegenerative Diseases -- Therapeutic Potential Of Cannabinoids.

## Sommario/riassunto

State of the art reviews by experts in the fields of neuroscience, immunology, microbiology/infectious diseases, and pharmacology addressing the convergence of the immune system (neuroinflammation) and the loss of neurons (neurodegeneration). Many of the diseases that are discussed in the book are of epidemic proportion, e.g., Alzheimer's disease, Parkinson's disease, stroke, viral encephalitis, and substance abuse. In addition to discussions of the involvement of neuroinflammation and neurodegeneration in these disorders, scientific reviews are presented on the cells and mediators that participate in defense of and damage to the nervous system. With rare exception, no or inadequate treatment exists for the diseases discussed in this book. An underlying premise of the book is that understanding of their shared pathogenic mechanisms will lead to improved therapies. Given the rapid evolution of the field of Neuroimmune Pharmacology, readers will find this book to be the most timely and authoritative reference on the subject of each of its chapters.