Special Issue

Advances in Neuroinflammation and Neurodegeneration

Message from the Guest Editor

The immune system of the brain and the spinal cord has a protective function against exogenous infectious agents. These functions are largely mediated by the resident immune cells of the brain parenchyma—the microglia. use surface receptors to survey the brain microenvironment, and transform into an activated state upon encountering danger signals, during which inflammatory molecules are released, and phagocytosis and proliferation is increased. Under pathological conditions of neuroinflammation, immune signalling cascades may lead to spontaneous or exaggerated activation, or lead to persistent activation that never resolves. Virtually all neurodegenerative diseases involve abnormal or chronic neuroinflammation. Scientific explanations for the underlying processes that determine these pathological varieties of neuroinflammation remain incomplete. In this Special Issue, we aim to focus on the latest research on neuroinflammation and neurodegeneration. We aim to present novel methods, findings, and theories with the goal of contributing to future mitigation strategies against pathological neuroinflammation with novel pharmacological interventions or life-style changes.

Guest Editor

Dr. William Ralvenius

Department of Brain and Cognitive Sciences, Picower Institute for Learning and Memory, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

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Brain Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
brainsci@mdpi.com

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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Prof. Dr. Stephen D. Meriney
Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA 15260, USA

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