



## Mediators of Inflammation

### Special Issue on **Neuroinflammation in Viral Diseases of the Central Nervous System**

# CALL FOR PAPERS

Virus infection of the central nervous system (CNS) can cause severe and life-threatening disease. Despite this, few therapies beyond intensive supportive care are available to treat patients with encephalitis. Though induction of neuroinflammation is an active defense reaction against neurotropic viruses, it is also recognized as a major contributor of neuropathogenesis. Despite the diversity of viruses that invade the CNS, many infections induce common pathogenic cascades such as breakdown of blood-brain barrier (BBB) and release of several proinflammatory and neurotoxic mediators including cytokines, chemokines, arachidonic acid, and its metabolites. These universal mediators could serve as therapeutic targets to manage the pathogenesis associated with many different CNS viral infections.

Here, we invite authors to submit manuscripts describing the role played by different mediators of inflammation produced during CNS viral infections and their importance in disease outcome. We are particularly interested in manuscripts describing critically important neuroinflammatory cells in CNS viral infections (infiltrating immune cells; resident microglia and astrocytes; and BBB), receptors (toll-like receptors; inflammasomes; and cytokine receptors), signaling pathways, and effector mechanisms. Knowledge and understanding of the cellular and molecular mechanisms involved in the inflammatory reactions triggered in the CNS in response to virus infection will lead to the development of novel therapies against these globally significant health problems. We invite investigators to contribute original research articles and reviews.

Potential topics include, but are not limited to:

- ▶ Identifying key mediators regulating the inflammation in CNS viral infection
- ▶ Identification of inflammatory mediators involved in the trafficking of effector cells (NK, CD8, and others) in the CNS
- ▶ Source(s) (e.g., infiltrating immune cells and resident brain cells) of inflammatory mediators in CNS viral infection
- ▶ New in vitro and in vivo models to understand the pathogenesis of CNS viral diseases
- ▶ Development of potential therapeutic targets or pharmacological approaches for CNS viral diseases

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/mi/nvd/>.

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#### **First Round of Reviews**

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