



BioMed Research International

Special Issue on
**Cellular and Molecular Aspects of Viral
Neurodegeneration**

CALL FOR PAPERS

Several viruses enter the brain and either utilize it as a sanctuary or as a site of replication and cause damage to a number of different types of brain cells leading to a multitude of neurological ailments. The inaccessibility of the brain to a majority of approved antivirals with respect to controlling brain resident viruses due to the blood-brain barrier has been a difficult problem to overcome in clinical neurovirology. However, a number of viral infections have been able to bypass this barrier with the reintroduction of brain resident viruses back into systemic circulation. In the absence of a reliable animal model and diversity in receptors utilized by neurotropic viruses, the passage of viruses into the brain or egress is an active area of ongoing investigation. Furthermore, emerging viral infections and associated neuropathies represent challenges for both clinical neurologists and other scientists with regard to devising therapeutic strategies to prevent or treat these diseases and deciphering molecular and cellular aspects of viral entry into the brain.

We invite researchers and clinical neurovirologists to contribute original research articles and state-of-the-art reviews focusing on viral invasion of the brain and treatment modalities. We are particularly interested in contributions describing new data relevant to cellular and molecular aspects of viral entry into the brain, biomarkers of brain infection with viruses, and emerging virus-mediated neurological disorders. Papers describing clinical aspects of treating virus-mediated neuropathies and dementias associated with viral infections will be preferred for this issue.

Potential topics include, but are not limited to:

- ▶ Overview of viral infections in brain
- ▶ Cellular and molecular aspects of viral neuropathogenesis
- ▶ Cells involved in viral infections of brain
- ▶ Cells involved in viral transfer to brain
- ▶ Cellular receptors involved in traversing viruses into the brain
- ▶ Viral encephalopathy, meningoencephalitis, and neonatal viral encephalopathy
- ▶ Molecular markers of viral mediated neurodegeneration
- ▶ Blood-brain barrier and viral infections
- ▶ Emerging viruses and brain disorders
- ▶ Harnessing neurotrophic nature of viruses

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

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