



## COVID-19 and its neurological implications

Current research and evidence state that there are numerous novel overlapping pathways shared by neurodegenerative disorders and diseases like cancer. These diseases are defined by a set of molecular determinants that are either complementarily deregulated or share remarkably overlapping functional paths. The inter-dependent regulation of brain cancers and neurodegeneration mediated by intercellular communication between tumor and neuronal cells in the brain through the extracellular microenvironment is necessary in understanding this unique connection. One of such pivotal pillars which plays a huge role in both maladies is unfolded protein response (UPR). Coronavirus Disease (COVID-19) caused by SARS-CoV-2 infection, is known to affect a variety of organs leading to irreversible pathological conditions. By direct infection of neural cells causing distortion in the functioning of the neuronal networks and profound damage of nervous tissue in both, central (CNS) and peripheral nervous system (PNS), SARS-CoV-2 significantly affects functions of human brain by triggering systemic inflammation, ischemia, and evoking anosmia, cognitive problems, meningitis, encephalopathy, stroke, paralysis, cranial nerve deficits, sleep disturbances, dizziness, hallucinations, delirium, seizures, and on a long run - depression, insomnia, cognitive decline, accelerated aging, OCD, memory loss, and fast progressing Parkinson's or Alzheimer's disease. The main scope of this special issue is focused on the critical overview of the neuronal, cellular, and molecular basis of several neurological problems cause by SARS-CoV-2 available up to date, from which we will be able to create future hypotheses, gain deep understanding of detailed mechanisms for its neurological implications, and build on a solid platform for the further development of the most effective therapeutic strategies.

**Submission Deadline:** 4 August 2021

**Submission:** <https://jin.imrpress.com>

**Impact Factor:** 1.193

**Contact us:** [JINeditorial@imrpress.org](mailto:JINeditorial@imrpress.org)

### Guest Editor:

**Ph.D., Dr. Sc. Mila Emerald**

Founder & CEO,  
PHYTOCEUTICALS  
International<sup>TM</sup> and NOVOTEK  
Global Solutions<sup>TM</sup>, Canada  
[milaemeraldphddrsc@gmail.com](mailto:milaemeraldphddrsc@gmail.com)



**Mila Emerald**

[milaemeraldphddrsc@gmail.com](mailto:milaemeraldphddrsc@gmail.com)



**IMR PRESS**

Journal of Integrative Neuroscience Online ISSN: 1757-448X

©2021 IMR Press. All rights reserved.

Rm. 19C, Lockhart Ctr., 301-307 Lockhart Rd., Wan Chai, Hong Kong.