

Special Issue on **Improving and Predicting Outcomes of Traumatic Brain Injury: Neuroplasticity, Imaging Modalities, and Perspective Therapy**

CALL FOR PAPERS

Each year, a new traumatic brain injury (TBI) event occurs in an estimated 10 million people worldwide, particularly in young adults. Not only is TBI the leading cause of long-term disability and mortality worldwide, but it is also expected to become the third largest cause of global disease burden by 2020.

TBI is a challenging disease process, both to treat and to investigate. TBI survivors often experience substantial and lifelong cognitive, physical, and behavioral impairments that require long-term access to health care and disability services.

Over the past three decades, imaging modalities, such as positron emission tomography (PET), functional MRI (fMRI), diffusion tensor imaging (DTI), and transcranial magnetic stimulation (TMS), have played a pivotal role in advancing TBI research.

Burgeoning evidences for neuroplasticity have shed light on the potential therapeutic protocols focusing on gene expression, cellular proliferation, synaptic proteins, new network connections, inflammatory reactions, and the recruitment of immune cells. Future therapies, including stem cell therapies or a combination of different pharmacologic therapies, which may benefit victims by targeting multiple mechanisms of recovery, are of utmost interest and currently under heavy investigation by devoting neuroscientists.

We invite investigators to contribute original research and review articles that will stimulate the continuing efforts to understand the pathophysiological mechanism of TBI-induced primary and secondary brain damage, the functional imaging of TBI and neuroplasticity, psychiatric symptoms and cognitive dysfunction, socioeconomic impact, and promising therapeutics.

Potential topics include but are not limited to the following:

- ▶ Basic neuroscience: the pathophysiological mechanism of TBI-induced primary and secondary brain damage
- ▶ The outcome predictors of TBI
- ▶ Behavioral and cognitive neuroscience: psychiatric symptoms and cognitive dysfunction after TBI
- ▶ Socioeconomic impact of TBI
- ▶ Functional imaging of TBI and neuroplasticity
- ▶ Neuroplasticity after TBI
- ▶ Prospective therapies for TBI

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/np/impt/>.

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