Neural Plasticity

Special Issue on

Postinjury Neuroplasticity in Central Neural Networks 2016

CALL FOR PAPERS

Trauma, ischemia, or degenerative disorders can damage neuronal cell bodies, axons, or synapses in the complex circuitry of the central nervous system (CNS). The CNS possesses plasticity to respond to injury to the peripheral nerves, spinal cord, or brain. Although the capacity of central neurons to be regenerated is limited, extensive changes in neural circuitry can occur in the CNS after injury, reflecting neuroplasticity. Neuroplasticity can modify the functions of the CNS including the brain and spinal cord, thereby providing opportunities for improving the limited ability of the CNS to recover from functional deficits. Axonal sprouting of surviving neurons, new synapse formation, and factors produced by neurons and glia help to reestablish the neural networks and functions. Furthermore, a variety of strategies to manipulate the neuroplasticity may be beneficial to improve functional recovery.

We invite investigators to contribute original research articles as well as review articles that cover the field of neuroplastic changes in the CNS after injury and functional recovery.

Potential topics include, but are not limited to:

- Molecular and cellular mechanistic understanding of postinjury plasticity
- Gene expression profiling and proteomic analysis of neuroplasticity after injury
- Connectomic understanding of changes in central neural networks after injury
- Contribution of peripheral injury to central plasticity
- Neural engineering to modulate injury-induced plastic changes
- Biomedical techniques for objective and quantitative studies on neuroplasticity

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/np/pin16/.

Lead Guest Editor
Bae H. Lee, Yonsei University College of Medicine, Seoul, Republic of Korea
bhlee@yuhs.ac

Guest Editors
Tae-Hong Lim, University of Iowa, Iowa, USA
talim@engineering.uiowa.edu

Young W. Yoon, Korea University College of Medicine, Seoul, Republic of Korea
ywyoon@korea.ac.kr

Midori A. Yenari, University of California, San Francisco, USA
yenari@alum.mit.edu

Yong Jeong, Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea
yong@kaist.ac.kr

Manuscript Due
Friday, 22 July 2016

First Round of Reviews
Friday, 14 October 2016

Publication Date
Friday, 9 December 2016