

## Special Issue on **Reorganizing the Lesioned Brain to Induce Optimal Motor Control in Stroke: Evidences and Challenges**

# CALL FOR PAPERS

Neuroplasticity-based therapies for inducing motor control are progressively developing in stroke. Various regimes are under investigation to explore the underlying neuromechanism and related motor recovery. Motor therapies vary from specific-movement protocol to noninvasive brain stimulation that may reorganize the lesioned brain. The changes have been observed at various levels ranging from gene coding, cortical presentation, and brain-laterality to voluntary motor control. However, there is still a long translational gap between laboratory findings and their application in clinical practice. On the other side, there is not enough evidence supporting the cellular basis of motor recovery.

Although the techniques are getting evident to induce certain amount of recovery, none of them have been proved to be successful in regaining the normal motor control, usually expected by the stroke survivors. In spite of devoting numerous therapy hours for years, the recovery may get obstructed at a certain stage causing disability and disappointment.

We invite researchers to contribute original research and review articles that will lead to discovery of neuroplasticity-based potent therapies for substantial sensorimotor recovery.

Potential topics include but are not limited to the following:

- ▶ Neural-plasticity based interventions to improve motor recovery
- ▶ Neural and cellular basis of motor recovery (association between changes in the neuroanatomy/neurophysiology and changes in the motor recovery)
- ▶ Factors influencing the stages of motor recovery (acute, subacute, and chronic)
- ▶ Somatosensory deficit and its management affecting motor output
- ▶ Subcranial, noninvasive brain stimulation
- ▶ Innovative rehabilitation techniques
- ▶ Basic science interventions to enhance the self-repair mechanisms after stroke

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

### **Lead Guest Editor**

Kamal N. Arya, Pandit Deendayal Upadhyaya Institute for the Physically Handicapped, New Delhi, India  
*kamalnarya@yahoo.com*

### **Guest Editors**

Rajnish Chaturvedi, CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India  
*rajnish@iitr.res.in*

Amit Sethi, University of Pittsburgh, Pittsburgh, USA  
*asethi@pitt.edu*

### **Manuscript Due**

Friday, 30 December 2016

### **First Round of Reviews**

Friday, 24 March 2017

### **Publication Date**

Friday, 19 May 2017