

Special Issue on Rehabilitation Induced Neural Plasticity after Acquired Brain Injury

CALL FOR PAPERS

The body of knowledge on the reorganization patterns of the central nervous system (CNS) after brain lesion (e.g., stroke or traumatic brain injury) is continuously increasing and changing as a function of the development of new computational tools for data analysis. The wide availability of imaging (e.g., structural and functional MRI and MEG) and neurophysiological (e.g., PEM and TMS) techniques for the study of structural and functional modifications of the CNS after brain lesion has allowed scientists to explore whether rehabilitation modalities might act as key factors to induce neural plasticity. In neurorehabilitation, neural and cortical plasticity are mostly intended like a combination of spontaneous recovery and goal-directed reorganisation induced by therapeutic modalities.

This special issue offers the opportunity to contribute original research articles as well as review articles to discuss the mechanisms acting for the restoration of functions after acquired brain injury. We are particularly interested in articles describing new insights into neural plasticity induced by known effective rehabilitation treatments, thus promoting the recovery of neurological functions after acquired brain injury.

Potential topics include but are not limited to the following:

- ▶ Neurorehabilitation of acquired brain injury
- ▶ Imaging and neurophysiology of mechanisms underpinning the recovery of motor and cognitive functions
- ▶ Computational modelling of plasticity and learning to predict rehabilitation recovery
- ▶ Biological factors promoting neural plasticity in people undergoing neurorehabilitation
- ▶ Innovative rehabilitation modalities promoting neural reorganisation (e.g., brain/body-machine interface and invasive/noninvasive brain stimulation)

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

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Andrea Turolla, IRCCS San Camillo Hospital Foundation, Venice, Italy
andrea.turolla@ospedalesancamillo.net

Guest Editors

Annalena Venneri, University of Sheffield, Sheffield, UK
a.venneri@sheffield.ac.uk

Dario Farina, Imperial College London, London, UK
d.farina@imperial.ac.uk

Annachiara Cagnin, University of Padova, Padova, Italy
annachiara.cagnin@unipd.it

Vincent C. Cheung, Chinese University of Hong Kong, Shatin, Hong Kong
vckc@cuhk.edu.hk

Submission Deadline

Friday, 30 June 2017

Publication Date

November 2017