

Special Issue on **Brain Plasticity in Cerebral Tumors: Evidences from Neuropsychology and Neuroimaging**

CALL FOR PAPERS

The ability of the brain to reorganize itself in response to illness is defined as neuroplasticity. This concept has mainly been studied in patients with strokes. Data from patients with brain tumors indicate that there are two types of reshaping, one occurring due to tumor growth and the other occurring following resection. For example, it is commonly observed that functional activation related to object naming task can be reshaped in the contralateral hemisphere. However, the underlying mechanisms for functional reorganization are not fully understood.

In order to promote the development of the neuroscientific investigation and discussion on how brain tumors can modify brain areas, this special issue aims to bring together contributions from researchers whose interests focus on neural mechanisms involved in neuroplasticity.

We are particularly interested in collecting contributions addressing this issue from a neuroimaging and a neuropsychological perspective. We welcome contributions in which a meta-analytic approach of brain imaging studies has been used. In addition, behavioral and neuropsychological studies in which cognitive changes have been found will be privileged together with data obtained by using direct electrical stimulation during awake surgeries. Contributions discussing the main implications of neuroplasticity in terms of clinical strategies are highly encouraged: what are the consequences of detecting in a patient neuroplasticity potentials on surgery? How does neuroplasticity contribute to increasing survival and quality of life? Lastly, we welcome contributions in which the implications of neuroplasticity for surgical *neurooncology* and postsurgery therapies are discussed.

Potential topics include but are not limited to the following:

- ▶ Studies addressing plasticity changes and neuropsychological recovery by using functional imaging (*fMRI*)
- ▶ Exploratory study of the effect of brain tumors on the default mode network
- ▶ Impact of brain tumor location on emotion/personality/mentalization processes by using voxel based morphometry (*VBM*)
- ▶ Functional connectivity (e.g., psychophysiological interactions, PPIs, and dynamic causal modelling, *DCM*)
- ▶ Diffusion tensor imaging (*DTI*) of network plasticity

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

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

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