



BioMed Research International

Special Issue on
**fMRI Based Neural Network : A New Biomarker for
Neuropsychiatric Disease**

CALL FOR PAPERS

As a noninvasive and novel method, functional magnetic resonance imaging (fMRI) plays a key role in current brain research. fMRI can reveal the actual brain activity without disturbance; it provides an effective way to detect the alternation in brain that underlies neuropsychiatric illness, treatment response, and properties of brain function that convey risk factor for mental diseases and related diseases. Previous studies have demonstrated that brain works via neural network instead of particular brain regions, and specific deficits of neural network have been confirmed as the core of pathogenesis of neuropsychiatric illness. For example, the disrupted limbic network is the core pathogenesis of depressive disorder.

fMRI holds great potential in unveiling the neural networks *in vivo* in neurological and psychiatric diseases. Therefore, we put forward that fMRI based neural network can be treated as a new biomarker for neuropsychiatric disease. With this new biomarker, it could be much easier to study brain mechanism of neuropsychiatric disease, which is characterized by involving various brain regions. Through studying the networks of patients with neurological and psychiatric illness, as well as the alternation of network affected by environment and medicine, more evidences in elucidating the efficiency of neural network can be found.

Therefore, we invite investigators to contribute review and original papers describing recent findings in this field.

Potential topics include, but are not limited to:

- ▶ A review of fMRI based neural network
- ▶ Brain functional alternation in neuropsychiatric disease: a study focusing on neural network
- ▶ Neuroimaging findings in comparison of the treatment effects in neuropsychiatric disease: a resting-state fMRI study
- ▶ Functional changes in stroke patients with dysphagia: a meta-analysis
- ▶ Distinguishing neuropsychiatric disease from health people by fMRI: an effective way in understanding neural network
- ▶ Neural network variation in neuropsychiatric disease: the risk factor of environment

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/radiology/fbnn/>.

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