



## Mechanisms and Application of Clinical Neurophysiology: State of the Art

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Deadline for manuscript  
submissions:

**closed (30 December 2020)**

### Message from the Guest Editor

Despite enormous advances in neuroimaging over the past 25 years, clinical neurophysiology is still one of the main diagnostic tools of the clinical neurologist.

Examination in the clinical neurophysiology field demands specific technical training and a very precise clinical framework for patients' care: in other words, clinical neurophysiology is thought of as an extension of the neurologic evaluation.

Clinical neurophysiology is required for the diagnosis of neuromuscular/peripheral and central nervous system disorders, as well as to quantify, monitor, and follow the progression of such conditions. Moreover, non-invasive brain stimulation techniques, mainly through electric and magnetic fields, have demonstrated therapeutic efficacy due to their long-term neurobiological after-effects.

Despite a large knowledge of the technical aspects, the mechanisms leading to therapeutic benefits are far from being fully elucidated, and only the clinical and experimental application of clinical neurophysiology techniques will increase our understanding of how the central nervous system operates.





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## Message from the Editor-in-Chief

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