Rehabilitation Research and Practice

Hindawi

Special Issue on

Personalized Neurorehabilitation with Advanced Engineering Tools

CALL FOR PAPERS

The growing field of neurorehabilitation and preventive medicine continually seeks to define and promote the generalizability of reliable assessment and effective intervention techniques of neurological and/or neuromusculoskeletal disease/injury, which can eventually be implemented into clinical practice and daily lives. In this regard, reliable assessment tools to understand sensorimotor functions of human bodies and to evaluate pathophysiology of diseases are of particular interest using broad spectrum of various engineering techniques. With the elderly population growing, developing innovative neurorehabilitation intervention strategies and quantifying progressions of improvement through particular neurorehabilitation intervention strategies could be potential key strategies and parameters for the future strategies of modern health care in rehabilitation. The main goal for this special issue is to motivate multidisciplinary researchers, engineers, scientists, and clinicians to contribute to the fast-growing field of personalized medicine. Reports on new and clinically applicable methods in assessment tools to understand sensorimotor functions of human bodies, and to evaluate pathophysiology of diseases, and innovative and clinically applicable neurorehabilitation intervention strategies are strongly encouraged.

Potential topics include but are not limited to the following:

- Neuromechanics
- Assessment of sensorimotor functions
- Measurements of spasticity, reflex, and muscle coordination
- Robot guided rehabilitation
- Neuromodulation based assessment and neurorehabilitation
- Functional electrical stimulation-based assessment and neurorehabilitation
- Clinic based and home based therapy of neuromusculoskeletal diseases/injuries
- Neuromuscular control and neural plasticity
- Rehabilitation in neurological disorders and neuromusculoskeletal injuries

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/rerp/pnet/.

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

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