



Special Issue Reprint

Acute and Chronic Changes in Neural Excitability During Physical Activity in Non-Pathological States

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ISBN 978-3-03928-796-3 (Hardback) ISBN 978-3-03928-797-0 (PDF) brain sciences Acute and Chronic Changes in Neural Excitability During Physical Activity in Non-Pathological States

Neural control of human motor output and how it is modified by alterations in physical activity levels is complex and multidimensional. The use of various experimental designs has vastly increased our knowledge of how the nervous system integrates descending, segmental, and ascending information to produce motor outputs, yet there is still much to learn. A more complete picture of the neurophysiology underlying the control of human motor outputs may prove useful in guiding rehabilitation programs aimed at reducing motor impairments following disease or injury. The purpose of this Special Issue is to collect original articles that explore neural excitability in various states. Studies examining neural excitability on a moment-to-moment basis (acute) or following prolonged periods of exercise or skill training and disuse (chronic) are encouraged. Original research studies using various experimental measures (e.g., transcranial magnetic stimulation, transmastoid electrical stimulation, single motor unit recordings, electroencephalography, and measures of spinal reflexes) in various states (e.g., fatigued, non-fatigued, and resting) during different types of motor outputs (tonic or dynamic) are encouraged. Experimental studies and literature reviews are welcome.



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