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Autore	Altenmuller Eckart
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Sommario/riassunto	<p>Music is an important source of enjoyment, learning, and well-being in life as well as a rich, powerful, and versatile stimulus for the brain. With the advance of modern neuroimaging techniques during the past decades, we are now beginning to understand better what goes on in the healthy brain when we hear, play, think, and feel music and how the structure and function of the brain can change as a result of musical training and expertise. For more than a century, music has also been studied in the field of neurology where the focus has mostly been on musical deficits and symptoms caused by neurological illness (e.g., amusia, musicogenic epilepsy) or on occupational diseases of professional musicians (e.g., focal dystonia, hearing loss). Recently, however, there has been increasing interest and progress also in adopting music as a therapeutic tool in neurological rehabilitation, and many novel music-based rehabilitation methods have been developed to facilitate motor, cognitive, emotional, and social functioning of infants, children and adults suffering from a debilitating neurological illness or disorder. Traditionally, the fields of music neuroscience and music therapy have progressed rather independently, but they are now beginning to integrate and merge in clinical neurology, providing novel and important information about how music is processed in the damaged or abnormal brain, how structural and functional recovery of the brain can be enhanced by music-based rehabilitation methods, and what neural mechanisms underlie the therapeutic effects of music.</p>

Ideally, this information can be used to better understand how and why music works in rehabilitation and to develop more effective music-based applications that can be targeted and tailored towards individual rehabilitation needs. The aim of this Research Topic is to bring together research across multiple disciplines with a special focus on music, brain, and neurological rehabilitation. We encourage researchers working in the field to submit a paper presenting either original empirical research, novel theoretical or conceptual perspectives, a review, or methodological advances related to following two core topics: 1) how are musical skills and attributes (e.g., perceiving music, experiencing music emotionally, playing or singing) affected by a developmental or acquired neurological illness or disorder (for example, stroke, aphasia, brain injury, Alzheimer's disease, Parkinson's disease, autism, ADHD, dyslexia, focal dystonia, or tinnitus) and 2) what is the applicability, effectiveness, and mechanisms of music-based rehabilitation methods for persons with a neurological illness or disorder? Research methodology can include behavioural, physiological and/or neuroimaging techniques, and studies can be either clinical group studies or case studies (studies of healthy subjects are applicable only if their findings have clear clinical implications).
