

IS NEUROSCIENCE HELPFUL FOR MUSICOLOGISTS?

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Research into the neurobiological foundations of music learning and musical performance has developed dramatically during the last decade. The term neuromusical research itself hallmarks the new approach to music and music learning in neurobiology and music psychology. Musicologists hope that neuroscience can help them to understand the ways humans perceive and produce music, Music educators hope that brain research can provide them with arguments against the continuing shortage of public funding of music education, musicians hope that neuroscience can teach them strategies to better perform.

Can neuroscience be regarded as the new "Leitdisziplin" – the leading discipline in musicology?

The aim of the paper is to give a short update of some of the most urgent questions in the field of neuromusicology: Why is music such a powerful stimulus for plastic adaptation of the brain? What is the role of the training parameters that lead to successful learning and plasticity? Can these parameters be exploited in music education or to enhance learning in other domains? Is music processing mainly reflecting the individuals' auditory biography or exist inter-individual constant factors?