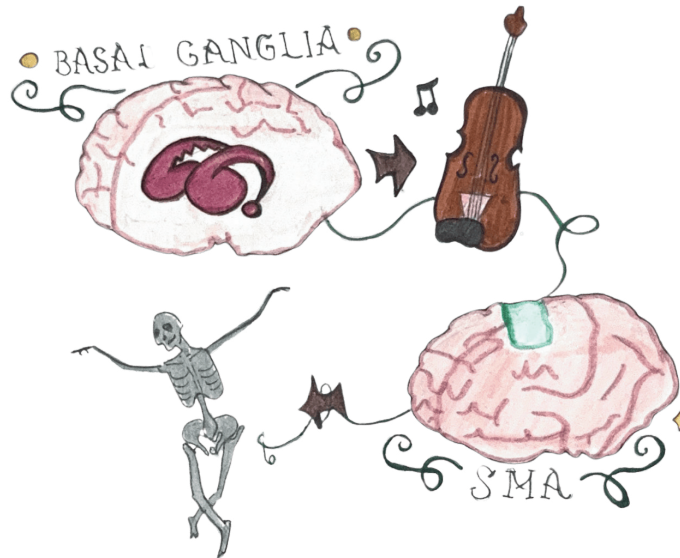


Music, Rhythm, and the Brain

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Art by Maria Delgado

The perception of rhythm in periodic sounds and movements can be explained by an interaction between motor brain regions. The basal ganglia track rhythmic patterns in auditory stimuli, like beats, and relay this information to the supplementary motor area (SMA) of the brain. The SMA then guides motor actions to coincide with the rhythmic information. This auditory-motor interaction has many applications, from improving cyclic motor actions to advancing our understanding of brain disorders. Further research on the neural mechanisms of music and rhythm could lead to new treatments for movement disorders, such as Parkinson's disease.

References

Cannon, J. (2023). *Physiology and theory of motor and covert rhythm entrainment*. Lecture presented in PNB 2XD3 at McMaster University, Hamilton, Ontario, January.