



Lousin Moundjian

A joint PhD student in Belgium in Rehabilitation Research Center (REVAL), Hasselt University and Institute of Psychoacoustics and Electronic Music, Gent University.

The overall objective of my PhD is to investigate the efficacy of systematic musicology concepts (sensorimotor entrainment and synchronization and embodied associations) using music compared to sounds on motor, perceived fatigue and cognitive functions in PwMS. The research is based on previous empirical findings and preliminary evidence of neural mechanisms of music. This project consists of two observational and one pilot intervention study. I'm am guided by promoter's from both disciplines of s Rehabilitation sciences in MS (Prof. dr. Peter Feys) and systematic musicology (Prof. dr. Marc Leman).

Collaborations

- Dr. Teppo Särkämö, Cognitive Brain Research Unit, University of Helsinki, Finland
- Upcoming collaboration: Prof. dr. Simone Dalla Bella, International Laboratory for Brain, Music and Sound Research, Montreal University, Canada

REFERENCES TO PUBLICATIONS

International A1 peer-reviewed Publications

Moundjian, L., Buhmann, J., Willems, I, Feys, P., Leman, M. Synchronisation to auditory stimuli during walking in healthy and neurological populations: A methodological systematic review. Submitted to *Frontiers in human neuroscience*, Feb 2018. Article in review post revision.

Moundjian, L., Sarkamo, T., Leone, C., Leman, M. Feys, P. Effectiveness of music-based interventions on motricity and cognitive functioning in neurological populations: a systematic review. *European Journal of Physical and Rehabilitation Medicine* (IF,2.06). 2017; 53: 466-82

Feys, P., **Moundjian, L.**, Van Halewyck, F., Wens, I., Op' Eijnde, B., Van Wijmeersch, B., Popescu, V., Van Asch, P. Effects of an individual 12 weeks community located 'start-to-run' program on physical capacity, walking, fatigue, cognitive function, brain volumes and structures in persons with Multiple Sclerosis. *Multiple Sclerosis Journal* (IF. 4,882). 2017

Leone, C., Feys, P., **Moundjian, L.**, D'Amico, E., Zappia, M., Patti, F. Cognitive-motor dual-task interference: a systematic review of neural correlates. *Neuroscience & Biobehavioral Reviews* (IF 9,440). 2017; 75: 348-60.