

# University of Maryland

## Neuroscience and Cognitive Science Seminar

### *Rhythm and the brain: The role of the motor system in auditory sequence perception*

**Dr. Jessica Grahn**

Western University



Moving to musical rhythm is an instinctive, often involuntary activity, but how does the brain produce this behaviour? In this talk I will describe how perception of musical rhythms activates motor areas, both cortical and subcortical, even when no overt movement is made. I will discuss neuropsychological studies and brain stimulation studies that attempt to tease apart the role of particular motor areas, such as the basal ganglia, cerebellum, and premotor cortex, in rhythm perception. I will also consider behavioural and fMRI studies of individual differences in rhythmic ability, examining how motor and auditory activity relate to important behavioural components of rhythm ability.

**Friday, September 22, 2017**

10:15am, Room 1103 Bioscience Research Building

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