



## Robert Zatorre

Distinguished Speaker from Montreal Neurological Institute, McGill University

## "Why do we love music? A view from cognitive neuroscience"

Music has existed in human societies since prehistory, perhaps in part because it allows expression and regulation of emotion, and evokes pleasure. In this lecture, I will present findings from cognitive neuroscience that bear on the question of how we get from perception of sound patterns to pleasurable responses. Specifically, I will discuss neuroimaging evidence from our lab focusing on the dopaminergic reward system, its involvement in musical pleasure, and what happens when that system is disrupted. I propose that pleasure in music arises from interactions between cortical loops that enable predictions and expectancies to emerge from sound patterns, and subcortical systems responsible for reward and valuation. This model integrates knowledge derived from basic neuroscience of reward mechanisms with independently derived concepts, such as tension and anticipation, from music theory. It may also serve as a way of thinking more broadly about aesthetic rewards.

Date: Thursday, October 19<sup>th</sup>, 2017

**Time:** 4:00 p.m.

Location: Room 55, Western Science Centre