



Western

The Brain and
Mind Institute

Visiting Speaker

Candidate for Cognitive Neuroscience Position

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“Functional and structural neuroplasticity in developing auditory cortex”

Perception and cognition are highly interrelated; perceptual judgments guide the ways in which we interact with our environment, while cognitive processes can dramatically influence how we perceive sensory stimuli. In order to understand the role of early experience in these processes, it is necessary to reveal the interplay between functional and structural plasticity within sensory systems and among cortical networks that link sensory and cognitive functions. The first part of this talk will focus on a series of experiments measuring the development of pitch processing to examine the degree to which the onset of higher-level auditory perception is dependent upon anatomical maturation in early infancy. The second part of the talk inverts this relationship to assess the impact that the onset of cortical function has on shaping anatomical connectivity. Finally, I will outline a future program of research that examines how neural plasticity in development interacts with periods of abnormal experience to influence patterns of connectivity, and to give rise to cognitive functions that depend upon sensory encoding.

Date: Wednesday, February 28, 2018

Time: 10:30 am

Location: Room 4190

**Western Interdisciplinary Research Building
(WIRB)**

If you require information in an alternate format or if any other arrangements can make this event accessible to you, please contact Denise Soanes at dsoanes4@uwo.ca