



Society for Neuroscience–Rochester Chapter Post-doc / Faculty Seminar Series



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*How Does Structured Experience Support
Perceptual Development?
Insights from Infant Neuroimaging*

A hallmark of development is the tuning of perception to the structure of the environment. These perceptual changes support the development of key abilities early in life (e.g., language comprehension and face processing) and may also support behavioral plasticity in adulthood. The goal of my research is to elucidate the mechanisms that translate real-world experience into changes in perceptual abilities. To this end, I employ neuroimaging methods with infants (e.g., fNIRS) to examine neural activity in perceptual cortices as infants learn about the world around them. I'll present evidence that by 6-months, the infant occipital cortex can adapt to cross-modal statistical information within minutes of exposure. This data suggests that even the earliest levels of perceptual systems adapt to new experiences robustly and rapidly early in life. I'll also present preliminary findings from ongoing work suggesting these abilities are not shared in populations of infants at high risk for poor developmental outcomes.

Thursday, May 21

4:00 pm, K-307 (3-6408)

University of Rochester Medical Center

Refreshments will be provided

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