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“Dyslexia, Rhythm, Language and the Developing Brain”

Abstract: Recent insights from auditory neuroscience provide a new perspective on how the brain encodes speech. Using these recent insights, I will provide an overview of key factors underpinning individual differences in children’s development of language and phonology, providing a context for exploring atypical reading development (dyslexia). Children with dyslexia are relatively insensitive to acoustic cues related to speech rhythm patterns. This lack of rhythmic sensitivity is related to the atypical neural encoding of rhythm patterns in speech by the brain. I will describe our recent data from infants as well as children, demonstrating developmental continuity in the key neural variables.