

## **Perceptual processes for dealing with variation in speech input**

A central concern to speech perception researchers has been how listeners deal with variability in speech input. In my work, I have focused on two types of mechanisms. 1) our ability to normalize speech input by using auditory information that is available in context (also termed auditory context effects). 2) our ability to learn about particular speakers' pronunciation characteristics (also termed lexically-guided perceptual learning). In this talk I will focus on both. I will argue that auditory context effects influence speech sound perception at a pre-categorical level. This conclusion follows from discrimination experiments and the observation that context effects are observed in an EEG experiment during the N1 time-window. Next, I will introduce work on lexically guided perceptual learning and present new data where we investigated whether auditory context effects and lexically guided perceptual learning originate from functionally different levels in the processing hierarchy.

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