



**Dr Caicai Zhang**

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**Biography**

Dr Caicai Zhang is Associate Professor in the Research Centre for Language, Cognition, and Neuroscience in the Department of Chinese and Bilingual Studies at The Hong Kong Polytechnic University.

Dr Zhang's work broadly concentrates on how language is processed and represented in the human brain, and how it interacts with other cognitive domains such as music and memory. At a more specific level, her research focuses on: (1) the relationship of language, music and brain, investigated from the perspective of how congenital amusia (commonly known as tone deafness), an innate musical pitch disorder, affects speech processing from behavioral to neural levels; (2) the learning of Chinese tones by nonnative speakers as a second language (L2), and how sleep contributes to the consolidation and formation of tonal representations in the brain of L2 learners; and (3) the neurocognitive mechanisms of learning and memory problems in children with developmental disorders of speech and language. She uses a broad range of tools including behavioral methods, electroencephalograph (EEG) and functional MRI (fMRI) to study these questions.