

## The linguistics genius of bilingual babies

**Patricia Kuhl,** *University of Washington*Tuesday, May 15<sup>th</sup>, 10:00-11:00am, LSK LT6



As shown by studies on the "Critical Period" for language learning, children are geniuses at learning language(s) during their first 7 years, but the ability to learn a new language systematically declines after puberty. This "window of opportunity" for language learning can be seen in speech experiments done all over the world: we have shown that at birth infants have innate linguistic abilities that make them "citizens of the world"—they can discriminate the sounds used in all languages and are ready to learn any language. However, by the end of the first year of life, culture produces a dramatic transition. Infants' abilities narrow: their ability to discriminate sounds from other languages decreases dramatically. In this talk, I will describe new studies on bilingual language learners who have been exposed to two languages from the beginning of life. These studies suggest that bilingual infants stay "open" longer to new languages. Moreover, specific cognitive skills related to flexible thinking are enhanced in bilingual children, making bilingual children faster and more accurate at problem solving. Neuroscience measures indicate that infants' early listening experience alters brain structure fundamentally, which has implications both for typically developing children and those with developmental disabilities. The study of language learning in children may help explain the extraordinary neural plasticity of the child's mind, and also why adults are less able to learn new languages. Understanding children's extraordinary capacities to learn language may eventually allow us to create learning technologies that improve second language learning throughout the lifespan.