## ACOUSTICS2008/1667 Enhancement of voiced and voiceless stop categories in infant-directed speech to 11-month-old infants

Gina Cardillo, Jennifer Perry and Patricia Kuhl

University of Washington, Dept. of Speech & Hearing Sciences, and Institute for Learning & Brain Sciences, Box 357988, Seattle, WA 98195, USA

It has been proposed that infant-directed speech (IDS) increases the discriminability of phonetic categories by exaggerating the acoustic differences between phonetic units (Kuhl et al., 1997, Science). However, reports show conflicting results on whether this principle holds for consonants. The current study measured English /p//b//t//d/ in both IDS and adult-directed speech (ADS) from connected speech in 27 mothers addressing their 11-month-old infants. Findings supported the exaggeration hypothesis. The mean VOT of /p/ was longer in IDS than ADS, and approached significance for /t/. The mean VOT difference between /p/ and /b/ was greater in IDS than in ADS. Similarly, when phonemes were grouped into voiceless and voiced categories, the difference between categories was significantly greater in IDS than ADS. We will discuss ways to measure AD-ID differences. [Work supported by NIH HD37954]