



Patrick E. Brookhouser, M.D.
DIRECTOR

Contact: Brooke Wittrock
Manager, Marketing Communications
(402) 498-6640
wittrockb@boystown.org

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Immediate Release

Infant Development Lab Recognized for Hearing Research

The Infant Development Lab Team at Boys Town National Research Hospital has received the 2007 Editor's Award from Ear and Hearing for their research articles on development of speech in infants with normal and impaired hearing. The articles describe one of the first studies to examine longitudinal outcomes in young infants with hearing loss.

The research study included two groups of infants (those with normal hearing and those with hearing loss) and their mothers. The infants were seen in the lab every 6 weeks from 9 to 30 months of age. Mother-infant interaction sessions were recorded and compared across the two groups, examining first babbles, strings of babble, number consonant sounds, and first words.

The study found that in spite of early intervention, infants with hearing loss are slower than normal hearing infants to progress through these early vocal stages. This affects the rate at which infants with hearing loss learn their first 50 to 100 words. In addition, the authors found that infants with hearing loss produced fewer high pitched sounds (s, sh, f) in their babble than infants with normal hearing. Researchers believe that this demonstrates the need to expand the bandwidth of hearing aids to make these sounds more audible to infants with hearing loss.

The research being recognized is a joint effort of the Infant Development Laboratory and the Hearing Aid Research Laboratories at Boys Town National Research Hospital.

2007 Editor's Award Articles:

Moeller, M.P., Hoover, B., Putman, C., Arbataitis, K., Bohnenkamp, G., Peterson, B., Wood, S., Lewis, D., Pittman, A. & Stelmachowicz, P. (2007). Vocalizations of infants with hearing loss compared to infants with normal hearing: Part I—Phonetic development. *Ear & Hearing*, 28(5), 605-627.

Moeller, M.P., Hoover, B., Putman, C., Arbataitis, K., Bohnenkamp, G., Peterson, B., Lewis, D., Estee, S., Pittman, A. & Stelmachowicz, P. (2007). Vocalizations of infants with hearing loss compared to infants with normal hearing: Part II--Transition to words, *Ear & Hearing*, 28(5), 628-642.

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555 North 30th Street
Omaha, Nebraska 68131
(402) 498-6511

14000 Boys Town Hospital Road
Boys Town, Nebraska 68010
(402) 778-6000

boystownhospital.org

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