

Andrew J. Lotto

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DEGREES

University of Wisconsin – Madison	B.S. Mathematics & Psychology, May 1990
University of Wisconsin – Madison	Ph. D., May 1996 Department of Psychology Cognitive Science, Computational Linguistics Minor Dissertation Title: <i>General auditory constraints in speech perception</i>

EMPLOYMENT

Associate Professor	University of Arizona (Speech, Language and Hearing Sciences & Psychology)	2009- Present
Consultant	Salus University	2009-Present
Courtesy Appointment	University of Arizona (Linguistics)	2008-Present
Faculty Member	University of Arizona Cognitive Science Prog.	2006-Present
Assistant Professor	University of Arizona (Speech, Language and Hearing Sciences & Psychology)	2006-2009
Research Fellow	University of Texas (Center for Perceptual Syst)	2005-2006
Coordinator of Speech Research	Boys Town National Research Hospital	2003-2005
Adjunct Associate Professor	University of Nebraska (Communication Dis.)	2003-2005
Visiting Assistant Professor	University of Texas (Psychology)	2003
Assistant Professor	Washington State University (Psychology)	2001-2003
Visiting Assistant Professor	Washington State U (Psych; Speech & Hear)	2000-2001
Adjunct Faculty	Parmly Hearing Research Institute	1997-2001
Assistant Professor	Loyola University Chicago (Psychology)	1997-2001
Post-Doctoral Researcher	University of Wisconsin (Neurophysiology)	1996-1997
Research Assistant	University of Wisconsin (Psychology)	1990-1996

AWARDS & HONORS

Outstanding Mentor of Graduate/Professional Students (Honorable Mention)	Graduate and Professional Student Council (U of A)	2009
Pre-Tenure Research Productivity Award	Speech, Language & Hearing Sciences (U of A)	2008, 2009
Sigma Xi Young Investigator Award (Northwest)	Sigma Xi	2005
Parmly Research Faculty of the Year	Parmly Hearing Research Institute	1998
PHS National Research Service Award	National Institutes of Health	1996
Sigma Xi Dissertation Research Award	Sigma Xi (Wisconsin Chapter)	1995

RESEARCH AWARDS

ONGOING:

Principal Investigator, with co-PI Dr. Lori L. Holt, *Formation and tuning of complex auditory categories*, National Institutes of Health (R01), \$1,597,659, 12/01/05-11/30/10.

Principal Investigator, *Collaborative Research: Learning complex auditory categories*, National Science Foundation, \$149,982, 04/01/08-3/31/10.

Co-Investigator, *Auditory and cognitive factors in speech perception and category learning* (Randy Diehl, PI), National Institutes of Health, \$36,476, 9/01/09-8/31/10 (Subcontract)

PENDING:

Principal Investigator, with co-PI Dr. Lori L. Holt, *Formation and tuning of complex auditory categories (Renewal)*, National Institutes of Health (R01), \$1,918,786, 9/01/10-8/31/15.

Principal Investigator, with co-PI Dr. Julie M. Liss, *Perception of dysarthric speech*, National Institutes of Health (R01), \$810,788, 7/01/10 – 6/30/15.

PREVIOUS:

Collaborator with Dr. John Caviness (PI), *High density electroencephalographic (EEG) event-related bandpower as a biomarker for disordered speech perception*. CR5, Mayo Clinic Arizona Research Committee, April 2007-2009.

Co-Investigator with Dr. Pat Stelmachowicz (PI), *Optimizing amplification for infants and young children*, National Institutes of Health – NIDCD, 12/01/04-11/30/09.

Principal Investigator, with co-PIs, Drs. Lori L. Holt & Randy L. Diehl, *Learning complex auditory categories*, National Science Foundation, renewal, \$200,000, BCS-0345773, 05/01/04-04/30/07.

Principal Investigator, *Improving speech intervention for deaf children*, National Institutes of Health – NIDCD (R01). \$363,956 over 2 years, 09/01/03-08/30/05.

Principal Investigator, with co-PI Dr. Lori L. Holt, *Learning Complex Auditory Categories*, National Institutes of Health – NIDCD (R01), \$638,406 over 4 years, 09/01/01-8/31/04 (extended through 8/31/05).

Principal Investigator with co-PI Dr. Lori L. Holt, *Learning Complex Auditory Categories*, National Science Foundation, \$295,656 over 2 years, 09/01/01-8/31/04.

Principal Investigator, *Auditory enhancement in female speech*, Shannon Award from National Institutes of Health-NIDCD, \$100,000 over 2 years, 05/01/01-4/30/03.

Principal Investigator, *Paradigm for examining auditory category formation*, Parnly Hearing Research Institute Summer Salary, 2000.

Principal Investigator with co-PIs Drs. Debra Guinn & Deborah Holmes, *Behavioral outcomes of corticosteroid therapy to women at risk*, Loyola University Chicago Research Support Grant. 1999.

Principal Investigator, *Contrastive use of breathiness by adult females and young males*, Loyola University Chicago Summer Research Stipend \$6000, 1998.

PUBLICATIONS

Lotto, A.J., & Holt, L.L. (*under review*). Psychology of auditory perception. In L. Nadel (ed.) *Wiley Interdisciplinary reviews: Cognitive Science*. Wiley. – *Invited; Peer Reviewed*

Liss, J.M., LeGendre, S., & **Lotto, A.J.** (*under review*). Discriminating dysarthria type from envelope modulation spectra. *Journal of Speech, Language & Hearing Research*.

Liss, J.M., White, L., Mattys, S., Lansford, K., **Lotto, A.J.**, Spitzer, S., Caviness, J. (2009). Quantifying speech rhythm deficits in the dysarthrias. *Journal of Speech, Language & Hearing Research*, **52**, 1334-1352.

Hickok, G.S., Holt, L.L., & **Lotto, A.J.** (2009). What does motor cortex contribute to speech perception? *Trends in Cognitive Science*, **13**, 330-331.

Lotto, A. J., Hickok, G. S., & Holt, L. L. (2009). Reflections on mirror neurons and speech perception. *Trends in Cognitive Science*, **13**, 110-114.

Stelmachowicz, P.G., Nishi, K., Choi, S., Lewis D.E., Hoover, B.M., Dierking, D., & **Lotto, A.J.** (2008). Effects of stimulus bandwidth on the imitation of English fricatives by normal-hearing children. *Journal of Speech, Language & Hearing*

- Research*, **51**, 1369-1380/.
- Aravamudhan, R., **Lotto, A.J.**, & Hawks, J. (2008). Perceptual context effects of speech & non-speech sounds: The role of auditory categories, *Journal of the Acoustical Society of America*, **124**, 1695-1703.
- Choi, S., **Lotto, A.J.**, Lewis, D.E., Hoover, B.M., & Stemachowicz, P.G. (2008). Attentional modulation of word recognition by children in a dual-task paradigm. *Journal of Speech, Language and Hearing Research*, **51**, 1042-1054.
- Holt, L.L., & **Lotto, A.J.** (2008). Speech perception within an auditory cognitive science framework, *Current Directions in Psychological Science*, **17**, 42-46.
- Lotto, A.J.**, & Sullivan, S.C. (2007). Speech as a sound source. In W.A. Yost, R.R. Fay, & A.N. Popper (Eds.), *Springer Handbook of Auditory Research: Auditory Perception of Sound Sources*.
- McCleary, E.A., Ide Helvie, D.L., **Lotto, A.J.**, Carney, A.E., & Higgins, M.B. (2007). Effects of elicitation task variables on speech production by children with cochlear implants. *Journal of Speech, Language and Hearing Research*, **50**, 83-96.
- Kim, M.-R., **Lotto, A.J.**, & Kim, J.-K. (2006). Influence of prosody on Korean word production by non-heritage learners. *The Korean Language in America*, **11**, 102-111.
- Lotto, A.J.**, & Holt, L.L. (2006). Putting phonetic context effects into context: Commentary on Fowler (2005). *Perception & Psychophysics*, **68**, 178-183.
- Holt, L.L., & **Lotto, A.J.** (2006). Cue weighting in auditory categorization: Implications for first and second language acquisition. *Journal of the Acoustical Society of America*, **119**, 3059-3071.
- Holt, L.L., Stephens, J.D., & **Lotto, A.J.** (2005). A critical evaluation of visually-moderated phonetic context effects. *Perception & Psychophysics*, **67**, 1102-1112.
- Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. (2005). Contributions of nonhuman animal models to understanding human speech. In S. Greenberg & W. Ainsworth (Eds.), *Listening to Speech: An Auditory Perspective*. (Oxford University Press: New York, NY).
- Holt, L.L., **Lotto, A.J.**, & Diehl, R.L. (2004). Auditory discontinuities interact with categorization: Implications for speech perception. *Journal of the Acoustical Society of America*, **116**, 1763-1773.
- Lotto, A.J.**, Sato, M., & Diehl, R.L. (2004). Mapping the task for the second language learner: The case of Japanese acquisition of /r/ and /l/. J. Slifka, S. Manuel, & M. Matthies (Eds.) *From Sound to Sense: 50+ Years of Discoveries in Speech Communication*. Electronic conference proceedings.
- Lotto, A.J.** (2004). Perceptual compensation for coarticulation as a general auditory process. In A. Agwuele, W. Warren, & S-H. Park (eds.) *Proceedings of the 2003 Texas Linguistics Society Conference* (pp. 42-53). Sommerville, MA: Cascadilla Proceedings Project.
- Diehl, R.L., **Lotto, A.J.**, & Holt, L.L. (2004). Speech perception. *Annual Review of Psychology*, **55**, 149-179.
- Kim, M.-R. & **Lotto, A. J.** (2004). Acoustic measurements of Korean approximants. In H.-Y. Kim (Ed.) *The Korean Language in America* **9** (pp.70-77). American Association of Teachers of Korean.
- Lotto, A.J.**, Sullivan, S.C., & Holt, L.L. (2003). Central locus of non-speech context effects on phonetic identification. *Journal of the Acoustical Society of America*, **113**, 53-56.
- Kim, M.-R. Cho, Lee, J., & **Lotto, A. J.** (2003). An investigation of the manner contrast in inter-vocalic Korean stops. *The Korean Language in America*, **8**, 75-84.
- Williams, P.G., Wasserman, M.S., & **Lotto, A.J.** (2003). Individual differences in self-assessed health: An information processing investigation of illness cognition. *Health Psychology*, **22**, 3-11.
- Lotto, A.J.**, & Kluender, K.R. (2002). Synchrony capture hypothesis fails to account for effects of amplitude on voicing perception. *Journal of the Acoustical Society of America*, **111**, 1056-1062.

- Kim, M-R, & **Lotto, A.J.** (2002). An investigation of acoustic characteristics of Korean stops produced by non-heritage learners. In J.J. Ree (Ed.), *The Korean Language in America, Vol. 7* (pp. 177-188). American Association of Teachers of Korean.
- Holt, L.L., & **Lotto, A.J.** (2002). Behavioral examinations of the neural mechanisms of speech context effects. *Hearing Research*, **167**, 156-169.
- Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. (2001). Influence of fundamental frequency on stop-consonant voicing perception: A case of learned covariation or auditory enhancement? *Journal of the Acoustical Society of America*, **109**, 764-774.
- Lotto, A.J.** (2000). Language acquisition as complex category formation. *Phonetica*, **57**, 189-196. (invited submission).
- Holt, L.L., **Lotto, A.J.**, & Kluender K.R. (2000). Neighboring spectral content influences vowel identification. *Journal of the Acoustical Society of America*, **108**, 710-722.
- Lotto, A.J.**, & Holt, L.L. (2000). The illusion of the phoneme. In S. J. Billings, J. P. Boyle, & A. M. Griffith (Eds.), *Chicago Linguistic Society, Volume 35: The Panels*. (pp. 191-204). Chicago Linguistic Society: Chicago.
- Lotto, A.J.** (2000). Reply to "An analytical error invalidates the 'depolarization' of the perceptual magnet effect". *Journal of the Acoustical Society of America*, **107**, 3578-3580.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. (2000). Effects of language experience on organization of vowel sounds. In M. Broe & J. Pierrehumbert (Eds.), *Laboratory Phonology V: Language Acquisition and the Lexicon*. (pp. 219-228) Cambridge University Press: Cambridge.
- Kluender, K.R., & **Lotto, A.J.** (1999). Virtues and perils of empiricist approaches to speech perception. *Journal of the Acoustical Society of America*, **105**, 503-511. (invited contribution).
- Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. (1998). Incorporating principles of general learning in theories of language acquisition. In C.M. Gruber, D. Higgins, K.S. Olson, & T. Wysocki (Eds.), *CLS 34: The Panels*. Chicago: Chicago Linguistic Society, 34(2), 253-268.
- Kluender, K.R., **Lotto, A.J.**, Holt, L.L., & Bloedel, S.B. (1998). Role of experience in language-specific functional mappings for vowel sounds as inferred from human, nonhuman, and computational models. *Journal of the Acoustical Society of America*, **104**, 3568-3582.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. (1998). The Perceptual Magnet Effect depolarized. *Journal of the Acoustical Society of America*, **103**, 3648-3655.
- Lotto, A.J.**, & Kluender, K.R. (1998). General contrast effects in speech perception: Effect of preceding liquid on stop consonant identification. *Perception & Psychophysics*, **60**, 602-619.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. (1997). Animal models of speech perception phenomena. In K. Singer, R. Eggert, & G. Anderson (Eds.), *Chicago Linguistic Society, Volume 33* (Chicago Linguistic Society: Chicago). pp. 357-367.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. (1997). Perceptual compensation for coarticulation by Japanese quail (*Coturnix coturnix japonica*). *Journal of the Acoustical Society of America*, **102**, 1134-1140.
- Lotto, A.J.**, Holt, L.L., & Kluender, K.R. (1997). Effect of voice quality on perceived height of English vowels. *Phonetica*, **54**, 76-93.
- Lotto, A.J.**, Kluender, K.R., & Green, K.P. (1996). Spectral discontinuities and the vowel length effect. *Perception & Psychophysics*, **58**(7), 1005-1014.
- Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. (1995). Effect of voice quality on the tense/lax distinction for English vowels. In *Proceedings of the XIIIth International Congress of Phonetic Sciences* edited by K. Elenius and P. Branderud (Stockholm University, Stockholm). Vol. 4, pp. 164-167.

Lotto, A.J., & Kluender, K.R. (1995). General auditory processes may account for the effect of preceding liquid on perception of place of articulation. In *Proceedings of the XIIIth International Congress of Phonetic Sciences* edited by K. Elenius and P. Branderud (Stockholm University, Stockholm). Vol. 2, pp. 522-525.

Kluender, K.R., **Lotto, A.J.**, & Jenison, R.L. (1995). Perception of voicing for syllable-initial stops at different intensities: Does synchrony capture signal voiceless stop consonants? *Journal of the Acoustical Society of America*, 97(4), 2552-2567.

Kluender, K.R., & **Lotto, A.J.** (1994). Effects of first formant onset frequency on [-voice] judgments result from general auditory processes not specific to humans. *Journal of the Acoustical Society of America*, 95(2), 1044-1052.

INVITED ADDRESSES

Liss, J.M., **Lotto, A.J.**, & Lansford, K. "Disordered speech as a testing ground for listener learning and adaptation." 158th Meeting of the Acoustical Society of America, San Antonio, TX; October 28, 2009.

Lotto, A.J. "Tuning speech perception to the speaker: The problem of the stubborn phoneme." Center for Perceptual Systems, University of Texas-Austin, Jan. 30, 2009.

Lotto, A.J. "Rhythm in speech". Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.

Lotto, A.J. "Talker normalization: The good, the bad and the average." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 10, 2009.

Lotto, A.J. "Relating phonetic categorization to spoken language perception: Sometimes a [ga] is only a [ga]", Linguistics Colloquium Series, University of Arizona, March 14, 2008.

Lotto, A.J. "Moving beyond audibility in attempts to improve speech perception," Auditory Sciences Research Group, The Ohio State University Medical Center, Columbus, OH, January 16, 2008.

Lotto, A.J. "Speech perception as a laboratory phenomenon", 2nd Annual Meeting of the Auditory Cognitive Science Society, Tucson, AZ, January 12, 2008.

Holt, L.L., & **Lotto, A.J.** "Determinants of auditory cue weighting and selective attention", 154th Meeting of the Acoustical Society of America, New Orleans, LA, November 28, 2007.

Lotto, A.J., & Liss, J.M. "Auditory Cognitive Science: Applications and implications of basic research into the processes of complex sound perception", NSSLHA-Sponsored Tucson Speech-Language Pathology Educational Forum, Tucson, AZ, October 30, 2007.

Lotto, A.J. "Speech perception as categorization", Kerry Green Memorial Lecture, University of Arizona Psychology Department, Tucson, AZ, April 13, 2007.

Lotto, A.J. "The theory of auditory relativity", 1st Meeting of the Auditory Cognitive Science Society, Tucson, AZ, January 8, 2007.

Lotto, A.J., "When a /da/ is not a /da/: Context Effects in Auditory Perception" Pennsylvania College of Optometry, School of Audiology, March 2, 2006.

Lotto, A.J. "Cue weighting in speech and non-speech sound categorization", CUNY Graduate Center, Speech and Hearing Sciences Program Colloquium, New York, March 1, 2006.

Holt, L.L. & **Lotto, A.J.** "What are the statistics in statistical learning?" Address to the 146th Meeting of the Acoustical Society of America, Austin, TX, November 13, 2003

Lotto, A.J. "Perceptual compensation for coarticulation as a general auditory process". Address to the Conference of the Texas

Linguistic Society, Austin, TX, March 8, 2003.

Lotto, A.J. "Animal models of speech sound categorization". Address to the 143rd Meeting of the Acoustical Society of America, Pittsburgh PA, June 4 2002.

Lotto, A.J. "Speech perception as auditory categorization". Address to the Center for Perceptual Sciences, University of Texas – Austin, May 10 2002.

Williams, P.G., **Lotto, A.J.**, & Wasserman, M.S. "The use of laboratory information processing paradigms to study health and illness cognition" In P.G.Williams (Chair), Health and illness cognition: Assessment methodologies and applications. Symposium conducted at the meeting of the Society of Behavioral Medicine, Washington, D.C., April, 2002.

Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. "Contributions of general auditory processes to perceptual accommodation of coarticulation". Address to the Workshop on the Nature of Speech Perception, Utrecht University, The Netherlands, July 4, 2000.

Lotto, A.J. "Language acquisition as complex category formation." Address to the special Symposium on Speech Communication and Language Development, Stockholm University, June 17, 1999.

Lotto, A.J. & Holt, L.L. "The illusion of the phoneme." Special Phonetics Panel (ChiPhon) of 35th Conference of the Chicago Linguistic Society, University of Chicago, April 23, 1999.

Lotto, A.J. "Speech perception, language instincts, and Marilyn Monroe." Keynote Address at Loyola University Sigma Xi Graduate Forum, Loyola University Chicago, May, 19, 1998.

Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. "Contributions of general auditory processes to perceptual accommodation of coarticulation." Address to the Institute of Linguistics, Stockholm University, Stockholm, Sweden, March, 1998.

Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. "Effects of language experience in perceptual organization for vowel sounds as inferred from human, nonhuman, and computational models." Address to the European Speech Communication Association Workshop on the Auditory Basis of Speech Perception, Keele University, England, July 18, 1996.

Lotto, A.J. "How talkers may change their glottal source to enhance perception of vowels in English and some African languages." Invited address to the Department of Neurophysiology, University of Wisconsin, August, 1995.

Kluender, K.R., **Lotto, A.J.**, & Holt, L.L. "Effect of voice quality on the tense/lax distinction for English vowels." Address to XIIIth International Congress of Phonetic Sciences, August 18, 1995, Stockholm.

Lotto, A.J. "Frequency contrast effects in speech perception." Address to the Wisconsin chapter of the Society of Sigma Xi, May 1, 1995.

Lotto, A.J. "Frequency contrast effects in speech perception." Address to the Department of Neurophysiology, University of Wisconsin, March 3, 1995.

CONFERENCE PRESENTATIONS

Huang, J., Holt, L.L., & **Lotto, A.J.** "Adaptation to a spoken passage's long term spectral average." 158th Meeting of the Acoustical Society of America, San Antonio, TX; October 28, 2009.

Vitela, A.D., **Lotto, A.J.**, & Story, B.H. "Normalization for vocal tract differences using long term average spectrum." 158th Meeting of the Acoustical Society of America, San Antonio, TX; October 27, 2009.

LeGendre, S.J., Liss, J.M., **Lotto, A.J.**, & Utianski, R.. "Talker recognition using envelope modulation spectra." 158th Meeting of the Acoustical Society of America, San Antonio, TX; October 26, 2009.

Monson, B. B., Ternström, S., & **Lotto, A. J.** "Audibility of high frequency in voice", Voice Foundation's 38th Annual

- Symposium: Care of the Professional Voice, Philadelphia, PA, June, 2009.
- Vitela, A.D., Sullivan, S.C., & **Lotto, A.J.** "Perceptual normalization for variation in speaking style." 157th Meeting of the Acoustical Society of America, Portland, OR, May 20, 2009.
- LeGendre, S.J., Liss, J.M., & **Lotto, A.J.** "Discriminating dysarthria type and predicting intelligibility from amplitude modulation spectra." 157th Meeting of the Acoustical Society of America, Portland, OR, May 18, 2009.
- Monson, B.B., Ternström, S., & **Lotto, A.J.** "Audibility of high frequency energy in speech and voice." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.
- Vitela, A.D., & **Lotto, A.J.** "Perceptual normalization for reduced speech: Phonetic tuning vs. spectral contrast." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.
- Caviness, J.N., Lotto, A.J., Liss, J.M., Lansford, K., Spitzer, S., & Kittelson, M. "Developing a neurocognitive model of spoken language perception using high density EEG: First step." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.
- LeGendre, S., Liss, J.M., & **Lotto, A.J.** "The envelope modulation spectrum and its application in rhythm studies." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.
- Liss, J.M., White, L., Mattys, S.L., Lansford, K., Spitzer, S., **Lotto, A.J.**, & Caviness, J.N. "Classifying dysarthrias by speech rhythm metrics." Third Annual Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ, Jan. 9, 2009.
- White, L., Liss, J.M., Mattys, S.L., Lansford, K., **Lotto, A.J.**, Spitzer, S., & Caviness, J.N. "Distinguishing dysarthrias using rhythm metrics." The British Association of Clinical Linguistics, University of Reading, Reading, UK, December 2008.
- Lotto, A.J.**, Vitela, A., Sullivan, S., & Leibold, L. "Perceptual insertion of phonetic segment induced by speech-shaped noise," 2008 Meeting of the American Auditory Society, Scottsdale, AZ, March 7, 2008.
- Leibold, L., & **Lotto, A.J.** "Effects of noise on children's speech identification," 2008 Meeting of the American Auditory Society, Scottsdale, AZ, March 8, 2008.
- Aravamudhan, R., & **Lotto, A.J.** "Phonetic context effects in normal-hearing listeners using acoustic simulations of cochlear implant signal." 153rd Meeting of Acoustical Society of America, Salt Lake City, UT, June 6, 2007.
- Aravamudhan, R., & **Lotto, A.J.** "Cochlear implant simulations of speech context effects." ResearchPOD presentation, AudiologyNOW, Denver, CO, April 19th, 2007.
- Aravamudhan, R., & **Lotto, A.J.** "It's all about the context - phonemic identification in NH and CI listeners". 13th Annual Pennsylvania Academy of Audiology Convention, Harrisburg, PA, September 29, 2006. (Winner of PAA, *Best Professional Poster*)
- Kim, M-R. Cho, **Lotto, A.J.**, & Kim, J-K. "Korean word prosody produced by non-heritage learners". 11th Annual Conference of the American Association of Teachers of Korean, New Brunswick, NJ, June 2006.
- Lotto, A.J.**, Ide-Helvie, D.L., McCleary, E.A., & Higgins, M.B. "Acoustics of clear speech from children with normal hearing and cochlear implants". 151st Meeting of the Acoustical Society of America, Providence, RI, June 7, 2006.
- Aravamudhan, R., & **Lotto, A.J.** "Context effects in adult cochlear implant users". 18th Meeting of the American Academy of Audiology, Minneapolis, MN, April 7, 2006.
- Aravamudhan, R., & **Lotto, A.J.** "Phonetic context effects in adult listeners with cochlear implants." 150th Meeting of the Acoustical Society of America, Minneapolis, MN. October 19, 2005.
- Sullivan, S.C., **Lotto, A.J.**, Newlin, E.T., & Diehl, R.L. "Sensitivity to changing stimulus distribution characteristics in auditory

- categorization” 150th Meeting of the Acoustical Society of America, Minneapolis, MN, October 18, 2005.
- Aravamudhan, R., & **Lotto, A.J.** “Phonetic context effects in adults with cochlear implant”. 2005 Conference on Implantable Auditory Prostheses. Asilomar, CA, August 2, 2005.
- Sullivan, S.C., **Lotto, A.J.**, Newlin, E.T., & Diehl, R.L. “Sensitivity to stimulus-distribution characteristics in auditory categorization.” 149th Meeting of the Acoustical Society of America, Vancouver, Canada, May 20, 2005.
- Hay, J.F., Holt, L.L., **Lotto, A.J.**, & Diehl, R.L. “How auditory discontinuities and linguistic experience affect the perception of speech and non-speech in English-and Spanish-Speaking listener.” 149th Meeting of the Acoustical Society of America, Vancouver, Canada, May 17, 2005.
- Aravamudhan, R., & **Lotto, A.J.** “Phonetic context effects in adult cochlear implant listeners.” 10th Symposium on Cochlear Implants in Children, Dallas, TX, March 17, 2005.
- Ide Helvie, D., McCleary, E.A., Higgins, M.B., & **Lotto, A.J.** “Acoustic correlates of clear speech from children with cochlear implants.” 10th Symposium on Cochlear Implants in Children, Dallas, TX, March 17, 2005.
- McCleary, E.A., Ide Helvie, D., Higgins, M.B., & **Lotto, A.J.** “Effects of simultaneous signing on speech production by children with cochlear implants.” 10th Symposium on Cochlear Implants in Children, Dallas, TX, March 17, 2005.
- Holt, L.L., & **Lotto, A.J.** “Factors affecting perceptual weighting of acoustic cues in a categorization task.” 28th Midwinter Meeting of the Association for Research in Otolaryngology, New Orleans, LA, February 24, 2005.
- Holt, L.L., & **Lotto, A.J.** “Auditory categorization: cue weighting and dimension bias.” 148th Meeting of the Acoustical Society of America, San Diego, CA, November 18, 2004.
- Aravamudhan, R., & **Lotto, A.J.** “Perceptual overshoot in listeners with cochlear implants.” 148th Meeting of the Acoustical Society of America, San Diego, CA, November 16, 2004.
- Ide Helvie, D.L., McCleary, E.A., Sullivan, S.C., **Lotto, A.J.**, & Higgins, M.B. “Strategies used to increase speech clarity by normal-hearing children.” 148th Meeting of the Acoustical Society of America, San Diego, CA, November 16, 2004.
- Sullivan, S.C., **Lotto, A.J.**, & Diehl R.L. “Optimal auditory categorization on a single dimension.” 26th Annual Meeting of the Cognitive Science Society, Chicago, August 7, 2004.
- Kim, M.-R. C., & **Lotto, A. J.** “Acoustic measurements of Korean approximants”. 9th Annual Conference of the American Association of Teachers of Korean, Raleigh, NC, June 24, 2004.
- Lotto, A.J.**, Sato, M., & Diehl, R.L. “Mapping the task for the second language learner: The case of Japanese acquisition of /r/ and /l/”. From Sound to Sense: 50+ Years of Discoveries in Speech Communication, Boston, MA, June 12, 2004.
- Holt, L.L., & **Lotto, A.J.** “Temporally non-adjacent acoustic histories shift identification of speech.” 27th Midwinter Meeting of the Association for Research in Otolaryngology, Daytona Beach, FL, February 25, 2004.
- Sato, M., **Lotto, A.J.**, & Diehl, R.L. “Patterns of acoustic variance in native and non-native phonemes: The case of Japanese production of /r/ and /l/.” 146th Annual Meeting of the Acoustical Society of America, Austin, TX, November 12, 2003.
- Kim, M.-R. Cho, Lee, J., & **Lotto, A. J.** “An investigation of the manner contrast in inter-vocalic Korean stops.” 8th Annual Conference of the American Association of Teachers of Korean, Berkeley, CA, June 26, 2003.
- Holt, L. L., **Lotto, A. J.**, Diehl, R. L. “Perceptual discontinuities and categorization: Implications for speech perception.” 145th Annual Meeting of the Acoustical Society of America. Nashville, TN, April 30, 2003.
- Holt, L. L., **Lotto, A. J.**, Diehl, R. L. “Perceptual discontinuities and categorization: Implications for speech perception.” 10th Annual Meeting of the Cognitive Neuroscience Society. NY, NY, March, 2003.

- Lotto, A.J.**, & Holt, L.L. "Speech perception as a paradigmatic case of auditory cognition." First Auditory Perception, Cognition and Action Meeting, Kansas City, MO, November 22, 2002.
- Kim, M-R. C., & **Lotto, A.J.** "An investigation of acoustic characteristics of Korean stops produced by non-heritage learners." 7th Annual Conference of the American Association of Teachers of Korean, Orlando, FL, August 2, 2002.
- Sullivan, S.C., & **Lotto, A.J.** "Peripheral and central locus of a nonspeech phonetic context effect" 143rd Meeting of the Acoustical Society of America, Pittsburgh PA, June 4 2002.
- Williams, P.G., **Lotto, A.J.**, & Wasserman, M.S. "The influence of neuroticism on the processing of health-relevant information" Poster session presented at the annual meeting of the Society of Behavioral Medicine, Washington, D.C., April, 2002.
- Lotto, A.J.**, & Holt, L.L. "Respective roles of spectral and phonemic representations in phonetic context effects" 13th Annual Meeting of the American Psychological Society, Toronto, June 16, 2001.
- Lotto, A.J.**, & Holt, L.L. "Experimental paradigm for examining the formation of complex auditory categories" 141st Meeting of the Acoustical Society of America, Chicago, IL, June 4, 2001.
- Holt, L.L., & **Lotto, A.J.** "Auditory context effects for nonequivalent sources" 141st Meeting of the Acoustical Society of America, Chicago, IL, June 4, 2001.
- Holt, L.L., & **Lotto, A.J.** "Perceptual context effects in speech perception" Cognitive Neuroscience Society, New York, NY, March 2001.
- Janega, J., & **Lotto, A.J.** "Explicit training of complex auditory categories". 72nd Meeting of the Midwestern Psychological Association, Chicago, IL, May 5, 2000.
- Lotto, A.J.** "Behavioral examinations of neurophysiological explanations for speech context effects" 23rd Midwinter Research Meeting of the Association for Research in Otolaryngology, St. Petersburg Beach, FL, February 22, 2000.
- Lotto, A.J.**, Holt, L.L., & Kluender, K.R. "Structure of phonetic categories produced by general learning mechanisms" 138th Meeting of the Acoustical Society of America, Columbus, OH, November 4, 1999.
- Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. "Influence of fundamental frequency on stop-consonant voicing perception: A case of learned covariation or auditory enhancement?" 138th Meeting of the Acoustical Society of America, Columbus, OH, November 4, 1999.
- Holt, L.L. & **Lotto, A.J.** "Simultaneous detection and identification of vowels: A case of unconscious perception?" 71st Meeting of the Midwestern Psychological Association, Chicago, IL, April 29, 1999.
- Lotto, A.J.** & Holt, L.L. "The illusion of the phoneme." Special Phonetics Panel (ChiPhon) of 35th Conference of the Chicago Linguistic Society, University of Chicago, April 23, 1999.
- Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. "Spectral contrast in perception of VCV syllables." 136th Meeting of the Acoustical Society of America, Norfolk, VA, October 13, 1998.
- Lotto, A.J.**, Holt, L.L., & Kluender, K.R. "Perceptual-magnet effect as categorical perception." 134th Meeting of the Acoustical Society of America, San Diego, CA, December 2, 1997.
- Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. "Discrimination of single-formant stimuli by chinchillas (*Chinchilla villidera*)." 134th Meeting of the Acoustical Society of America, San Diego, CA, December 4, 1997.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. "Animal models of speech perception phenomena." Special Phonetics Panel of 33rd Conference of the Chicago Linguistic Society, University of Chicago, April 19, 1997.
- Lotto, A.J.**, Kluender, K.R., & Holt, L.L. "Context effects in speech perception by Japanese quail (*Coturnix japonica*)." Midwinter Research Meeting of the Association for Research in Otolaryngology, St. Petersburg Beach, FL, February 5, 1997.

Lotto, A.J., Holt, L.L., & Kluender, K.R. "General auditory processes may accommodate kinematic consequences of speech coarticulation." European Speech Communication Association Workshop on the Auditory Basis of Speech Perception, Keele University, England, July 16, 1996.

Lotto, A.J., Kluender, K.R., & Holt, L.L. "Effects of language experience on perceptual organization of vowel sounds." Paper presented at the Fifth Conference on Laboratory Phonology, Evanston, Illinois, July 6, 1996.

Lotto, A.J., & Kluender, K.R. "Effects of amplitude on voicing contrast may not be explained by VIIIth nerve synchrony capture." 131st Meeting of the Acoustical Society of America, Indianapolis, Indiana, May 17, 1996.

Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. "Perceptual compensation for vowel undershoot may be explained by general perceptual principles." 131st Meeting of the Acoustical Society of America, Indianapolis, Indiana, May 17, 1996.

Lotto, A.J., Kluender, K.R., & Holt, L.L. "Animal and computational models of development of graded vowel categories." 130th Meeting of the Acoustical Society of America, St. Louis, Missouri, November 30, 1995.

Lotto, A.J., & Kluender, K.R. "General auditory processes may account for the effect of preceding liquid on perception of place of articulation." XIIIth International Congress of Phonetic Sciences, August 15, 1995, Stockholm.

Lotto, A.J., Kluender, K.R., & Holt, L.L. "Spectral discontinuities and the vowel length effect." 128th Meeting of the Acoustical Society of America, Austin, Texas, November, 1994.

Holt, L.L., **Lotto, A.J.**, & Kluender, K.R. "Effect of voice quality on the tense/lax distinction for English vowels." 128th Meeting of the Acoustical Society of America, Austin, Texas, November, 1994.

Lotto, A.J., & Kluender, K.R. "Frequency contrast and the effect of preceding liquid on perception of place of articulation." 127th Meeting of the Acoustical Society of America, Cambridge, Massachusetts, June, 1994.

Kim, M-R., Kluender, K.R., **Lotto, A.J.**, & Read, C. "Perception of syllable-initial English stops by native Korean listeners." 127th Meeting of the Acoustical Society of America, Cambridge, Massachusetts, June, 1994.

Kim, M-R., Read, C., Kluender, K.R., & **Lotto, A.J.** "Production and perception of word-initial stops by Korean adults." 126th Meeting of the Acoustical Society of America, Denver, Colorado, November 1993.

Lotto, A.J., Green, K., & Kluender, K.R. "Vowel continuity and perception of /ba-wa/." 125th Meeting of the Acoustical Society of America, Ottawa, Ontario, Canada, May, 1993.

Kluender, K.R., **Lotto A.J.**, & Jenison, R.L. "Perception of voicing in syllable-initial stops at different intensities: Does neural synchrony encode voice-onset?" 124th Meeting of the Acoustical Society of America, New Orleans, Louisiana, November, 1992.

Lotto, A.J., & Kluender, K.R. "Effects of first formant onset frequency on voicing judgments result from auditory processes not specific to humans." 124th Meeting of the Acoustical Society of America, New Orleans, Louisiana, November, 1992.

PROFESSIONAL SERVICE

Editorial Board:
Journal Reviews:

Cognition
Journal of the Acoustical Society of America
Journal of Experimental Psychology: Human Perception & Performance
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Trends In Cognitive Science
Journal of Speech, Language and Hearing Research
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Behavioral Processes
Journal of Phonetics
Applied Acoustics

	Acta Acustica united with Acustica Ear & Hearing Cognitive Science Cognition Speech Communication
Grant Panels:	NIH, Cognition & Perception Study Section, Oct. 16-17, 2008 National Institutes of Health, Biological and Physiological Sciences Special Emphasis Panel (Child Development & Disability, Small Business Innovation Grants 2005 Research Grant in Speech Science from Dennis Klatt Fund (ASA-ASHA) Washington State University Seed Grants
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Professional Conferences:	Co-Organizer & Chair First Meeting of the Auditory Cognitive Science Society (Jan. 8, 2007, Tucson, AZ) Second Meeting of the Auditory Cognitive Science Society (Jan. 11-12, 2008, Tucson, AZ) Organizing Committee 2 nd Auditory Cognition, Perception and Action Meeting (APCAM) Organized and Co-chaired Special Session of Acoustical Society of America “Models of phonetic category formation and structure” Pittsburgh, PA 06-04-2002 “Statistical patterns in speech” Austin, TX, 11-13-2004

PROFESSIONAL ORGANIZATIONS

Acoustical Society of America
Association for Research in Otolaryngology
Association for Psychological Science

Sigma Xi
Auditory Cognitive Neuroscience Society
American Auditory Society

TEACHING

Cognitive Psychology (undergraduate)
Introduction to Psychology (undergraduate)
Principles of Development (undergraduate)
Speech and Hearing Science (undergraduate)
Phonetics (undergraduate)

Introduction to Research Methods in Speech & Hearing Science
(graduate)

Laboratory in Experimental Psychology: Cognition
Information Processing (graduate)
Research Methods in Communication Disorders (graduate)
Anatomy & Physiology of the Auditory System (graduate)
Cognitive Neuroscience of Hearing (graduate &
undergraduate)
World of Sound: Speech, Music & Mp3s (undergraduate)