

March 2010

## CURRICULUM VITAE

**Susan Nittrouer, Ph.D.**

### Personal data

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### Education

1985 *Ph.D.*, Speech & Hearing Sciences, City University of New York (CUNY)  
Graduate School, New York, NY

1980-1982 *Doctoral Student*, Experimental Psychology (transferred), Utah State  
University, Logan, UT

1975 *M.E.D.*, Education of the Deaf, Smith College, Northampton, MA

1974 *B.S.*, Education, with Speech Pathology specialization, West Chester State  
University, West Chester, PA

### Professional experience

2007- *Professor and Director of Research*, Otolaryngology – Head & Neck Surgery,  
Ohio State University, Columbus, OH

2005- *Professor*, Speech and Hearing Science, Ohio State University, Columbus, OH.

2002-2005 *Director*, Division of Exemplary Services, Center for Persons with Disabilities,  
Utah State University, Logan, UT.

2002-2005 *Professor*, Dept. of Communicative Disorders, Utah State University, Logan,  
UT.

1999-2002 *Professor*, Dept. of Otolaryngology and Human Communication, Creighton  
University School of Medicine, Omaha, NE.

1993-99 *Associate Professor*, same as above.

1993-2002 *Staff Scientist*, Boys Town National Research Hospital, Omaha, NE.

1993-2002 *Adjunct Faculty*, Dept. of Special Education and Communication Disorders,  
University of Nebraska at Omaha, Omaha, NE.

1991-2002 *Fellow* of the Graduate School of the University of Nebraska (systemwide  
appointment).

1990-93 *Associate Professor*, Dept. of Special Education and Communication Disorders,  
University of Nebraska at Omaha, Omaha, NE.

- 1990 *Research Associate*, Haskins Laboratories, New Haven, CT.
- 1987-90 *Staff Scientist*, Boys Town National Research Hospital, Omaha, NE.
- 1987-90 *Assistant Professor*, Dept. of Otolaryngology and Human Communication, Creighton Univ. School of Medicine, Omaha, NE.
- 1985-87 *NIH Postdoctoral Fellow*, Haskins Laboratories, New Haven, CT.
- 1983-85 *Research Assistant*, CUNY Graduate School, New York, NY. & Haskins Laboratories, New Haven, CT.
- 1982-83 *Project Coordinator*, CUNY Graduate School, New York, NY. Coordinated project providing inservice training for teachers of the deaf and speech pathologists serving the deaf.
- 1980-82 *Teaching Assistant*, Utah State Univ., Logan, UT. Assisted with graduate courses in Statistics, Speech of the Hearing Impaired, Evaluation in Educational Audiology, and Programming for the Young Hearing-Impaired Child.
- 1979-80 *Speech Coordinator*, Learning Center for Deaf Children, Framingham, MA. Coordinated the speech programs for preschool and upper school children.
- 1978-79 *Speech Coordinator*, Beverly School for the Deaf, Beverly, MA. Coordinated speech programs for the entire school.
- 1976-78 *Preschool Teacher*, Montreal Oral School for the Deaf, Montreal, Quebec.  
*Preschool speech and language specialist* (one year). Provided individual speech and language services for the children, and supervised speech and language teaching that took place in the classroom.  
*Kindergarten teacher* (one year). Classroom teacher.  
*Clinical instructor* for McGill Univ. (both years). Supervised student clinicians.
- 1975-76 *Middle School Teacher*, Clarke School for the Deaf, Northampton, MA. Classroom language teacher. Teacher-in-charge of middle school dormitory. Teacher in an experimental class designed to improve listening skills of adolescent deaf students.

### University teaching experience

- 1976-78 McGill University, Department of Human Communication, Montreal, Quebec. Taught as a clinical instructor, teaching graduate students in speech-pathology, audiology, and aural habilitation.
- 1980-82 Utah State University, Department of Communicative Disorders, Logan, UT. Taught graduate courses on evaluation and intervention with hearing-impaired children. Also assisted with graduate courses in statistics.
- 1982-83 City University of New York, Ph.D. Program in Speech and Hearing Sciences, New York, NY. Coordinated a program funded by the Department of Education. The position involved visiting schools for the deaf throughout the

- northeast United States to provide inservice workshops on teaching speech to hearing-impaired children.
- 1989-90 Boys Town National Research Hospital, Omaha, NE. Sponsored a postdoctoral fellow in the area of language development: Liz Pemberton.
- 1991 University of Nebraska at Omaha, Department of Special Education and Communication Disorders, Omaha, NE. Taught a graduate course titled Current Issues in Speech Development.
- 1992 Utah State University, Department of Communicative Disorders, Logan, UT. Taught as a visiting faculty member in the Fifteenth Annual Summer Institute for the Management of Communicative Disorders.
- 1993-2002 Boys Town National Research Hospital, Omaha, NE. Sponsored interns and taught in the Summer Program for Minority and Deaf College Students.
- 1995-96 Boys Town National Research Hospital, Omaha, NE. Sponsored a postdoctoral fellow in the area of speech perception: Court Crowther.
- 1998-99 Boys Town National Research Hospital, Omaha, NE. Sponsored a graduate research fellow in the Program for Graduate Minority Training: Jennifer Tolbert.
- 2002-2005 Utah State University Psychology program, Logan, UT. Faculty in the Research and Evaluation Methods program.
- 2003-2005 Utah State University, Logan, UT. Sponsored a postdoctoral fellow in the area of speech development: Joanna Lowenstein.
- 2005 Ohio State University. Courses in speech and language. Sponsoring a postdoctoral fellow; supervising graduate students.

## Grants

### Active:

Principal Investigator, NIDCD Individual Grant (R01): "The ontogeny of segmental speech organization." 7/1/94-12/31/10.

Principal Investigator, NIDCD Individual Grant (R01): "Early development of children with hearing loss." 9/1/03-2/28/2015.

### Previous:

Principal Investigator, NIDCD First Award (R29): "The ontogeny of segmental speech organization." 12/1/88-6/30/94.

Principal Investigator, NIDCD Research and Training Center Grant (P60): "Center for Hearing Loss in Children, Project IV: Linguistic experience and speech perception in children." 9/1/95-8/31/00.

Co-Investigator, NIDCD Research and Training Center Grant (P60): "Center for Hearing Loss in Children, Project II: Objective fitting strategies for nonlinear hearing aids." Patricia G. Stelmachowicz, Ph.D., Principal Investigator. 9/1/95-8/31/00.

Co-Investigator, NIDCD Research and Training Center Grant (P60): "Center for Hearing Loss in Children, Project IV: Articulation and phonation of children with hearing loss." Maureen B. Higgins, Ph.D., Principal Investigator. 9/1/95-8/31/00.

### **Pending:**

Principal Investigator, NIDCD Individual Grant (R01): "The ontogeny of segmental speech organization." 7/1/10-6/30/15.

### **Awards and honors**

Graduated magna cum laude, West Chester State University, 1974

Received Mary E. Numbers Fellowship, Clarke School for the Deaf, 1974-75

Received NIH Postdoctoral Fellowship, Haskins Laboratories, 1985-87

Received Editors' Award (Speech), Journal of Speech and Hearing Research, 1989

Designated as Fellow of the University of Nebraska Graduate Faculty, 1991

Received Editors' Award (Hearing), Journal of Speech and Hearing Research, 1996

Elected Fellow of the Acoustical Society of America, 2009

### **Professional service – national**

Associate Editor: *Journal of Speech, Language and Hearing Research (Speech)*, 1997-1998; *(Language)*, 2003-2005 *Volta Review*, 2002-2005

Editorial consultant for *Journal of Speech, Language and Hearing Research (both Speech and Hearing sections)*, *Perception and Psychophysics*, *Journal of the Acoustical Society of America*, *Journal of Phonetics*, *Journal of Memory and Language*, *Journal of Experimental Child Psychology*, *Language, Speech and Hearing Services in Schools*, *Applied Psycholinguistics*, *Journal of Experimental Psychology (General, Human Perception and Performance, Learning, Memory, and Cognition)*, *Developmental Medicine and Child Neurology*, *Journal of the Association for Research in Otolaryngology*, *Phonetica*, *International Journal of Audiology*

Member of the Acoustical Society Technical Committee on Speech Communication (1992-2000)

Member of the NIDCD committee for the review of small grant proposals (June 1991, February 1992, June 1992, November 1993; chair, March 2007; October, 2007; June, 2008)

Member, NIH Sensory Disorders and Language study section (1994-1996)

Ad hoc reviewer for NIH study sections on a regular basis (1996-present)

Chair of organizing committee, Special session in audiology, *Evidence for a neurological basis for central auditory processing disorders*, American Speech-Language-Hearing Convention (November, 2003)

Member of organizing committee, Hearing Loss in Children: Rehabilitation and Education Issues, American Speech-Language-Hearing Convention (November, 2005)

Member of speech science organizing committee, American Speech-Language-Hearing Convention (November, 2007)

### **Professional affiliations**

Acoustical Society of America; American Speech-Language-Hearing Association, A. G. Bell Association

### **Professional service – local**

Member, Boys Town National Research Hospital Internal Review Board (1993-1996).

Chair, Boys Town National Research Hospital Internal Review Board (1995-1996).

Member of Advisory Committee for Children's House Early Childhood Center, Utah State University (2002-2004).

Member of Promotions and Tenure committee, Shirley Leew (Communicative Disorders and Deaf Education) Utah State University (2002-2004).

Member of Promotions and Tenure committee, Peter Golato (Language, Philosophy and Speech Communication) Utah State University (2004-present).

Organized workshop on Early Intervention for Children with Hearing Loss (November, 2004)

Member of graduate studies committee, Ohio State University (2005-2007)

Member of curriculum committee, College of Social and Behavioral Sciences, Ohio State University (2005-2007)

Member of board of directors, Auditory Oral Children's Center, Dublin, Ohio (2005-2007)

### **Published papers**

**Nittrouer, S.** & Cheney, C. (1984). Operant techniques used in stuttering therapy: A review. *J. Fluency Disord.* **9**, 169-190.

**Nittrouer, S.** & Hochberg, I. (1985). Speech instruction for deaf children: A communication-based approach. *Am. Ann. Deaf* **130**, 491-495.

**Nittrouer, S.** & Studdert-Kennedy, M. (1986). The stop-glide distinction: Acoustic analysis and perceptual effect of variation in syllable amplitude envelope for initial /b/ and /w/. *J. Acoust. Soc. Am.* **80**, 1026-1029.

**Nittrouer, S.** & Studdert-Kennedy, M. (1987). The role of coarticulatory effects on the perception of fricatives by children and adults. *J. Speech Hear. Res.* **30**, 319-329.

- Boothroyd, A. & Nittrouer, S. (1988). Mathematical treatment of context effects in speech perception. *J. Acoust. Soc. Am.* **84**, 101-114.
- McGowan, R.S. & Nittrouer, S. (1988). Differences in fricative production between children and adults: Evidence from an acoustic analysis of /ʃ/ and /s/. *J. Acoust. Soc. Am.* **83**, 229-232.
- Nittrouer, S., Munhall, K., Kelso, J.A.S., Tuller, B. & Harris, K.S. (1988). Patterns of interarticulator phasing and their relation to linguistic structure. *J. Acoust. Soc. Am.* **84**, 1653-1661.
- Nittrouer, S., Studdert-Kennedy, M. & McGowan, R.S. (1989). The emergence of phonetic segments: Evidence from the spectral structure of fricative-vowel syllables spoken by children and adults. *J. Speech Hear. Res.* **32**, 120-132.
- Nittrouer, S. & Whalen, D.H. (1989). The perceptual effects of child-adult differences in fricative-vowel coarticulation. *J. Acoust. Soc. Am.* **86**, 1266-1276.
- Nittrouer, S. & Boothroyd, A. (1990). Context effects in phoneme and word recognition by young children and older adults. *J. Acoust. Soc. Am.* **87**, 2705-2715.
- Nittrouer, S., McGowan, R.S., Milenkovic, P.H. & Beehler, D. (1990). Acoustic measurements of men's and women's voices: A study of context effects and covariation. *J. Speech Hear. Res.* **33**, 761-775.
- Nittrouer, S. (1991). Phase relations of jaw and tongue tip gestures in the production of VCV utterances. *J. Acoust. Soc. Am.* **90**, 1806-1815.
- Nittrouer, S. (1992). Age-related differences in perceptual effects of formant transitions within syllables and across syllable boundaries. *J. Phonet.* **20**, 351-382.
- Nittrouer, S. (1993). The emergence of mature gestural patterns is not uniform: Evidence from an acoustic study. *J. Speech Hear. Res.* **36**, 959-972.
- Nelson, P.B., Nittrouer, S. & Norton, S.J. (1995). "Say-stay" identification and psychoacoustics performance of hearing-impaired listeners. *J. Acoust. Soc. Am.* **97**, 1830-1838.
- Nittrouer, S. (1995). Children learn separate aspects of speech production at different rates: Evidence from spectral moments. *J. Acoust. Soc. Am.* **97**, 520-530.
- Stelmachowicz, P.G., Kopun, J., Mace, A., Lewis, D.E. & Nittrouer, S. (1995). The perception of amplified speech by listeners with hearing loss: Acoustic correlates. *J. Acoust. Soc. Am.* **98**, 1388-1399.
- Nittrouer, S. (1996). Discriminability and perceptual weighting of some acoustic cues to speech perception by three-year-olds. *J. Speech Hear. Res.* **39**, 278-297.
- Nittrouer, S. (1996). The relation between speech perception and phonemic awareness: Evidence from low-SES children and children with chronic OM. *J. Speech Hear. Res.* **39**, 1059-1070.
- Nittrouer, S., Studdert-Kennedy, M., Neely, S.T. (1996). How children learn to organize their speech gestures: Further evidence from fricative-vowel syllables. *J. Speech Hear. Res.* **39**, 379-389.

- Nittrouer, S. & Miller, M.E. (1997). Developmental weighting shifts for noise components of fricative-vowel syllables. *J. Acoust. Soc. Am.* **102**, 572-580.
- Nittrouer, S. & Miller, M.E. (1997). Predicting developmental shifts in perceptual weighting schemes. *J. Acoust. Soc. Am.* **101**, 2253-2266.
- Nittrouer, S. & Crowther, C.S. (1998). Examining the role of auditory sensitivity in the developmental weighting shift. *J. Speech Lang. Hear. Res.* **41**, 809-818.
- Nittrouer, S., Crowther, C.S. & Miller, M.E. (1998). The relative weighting of acoustic properties in the perception of [s]+stop clusters by children and adults. *Percept. Psychophys.* **60**, 51-64.
- Nittrouer, S. (1999). Do temporal processing deficits cause phonological processing problems? *J. Speech Lang. Hear. Res.* **42**, 925-942.
- Nittrouer, S. & Miller, M.E. (1999). The development of phonemic coding strategies for serial recall. *Appl. Psycholing.* **20**, 563-588.
- Nittrouer, S., Miller, M.E., Crowther, C.S. & Manhart, M.J. (2000). The effect of segmental order on fricative labeling by children and adults. *Percept. Psychophys.* **62**, 266-284.
- Nittrouer, S. (2001) Challenging the notion of innate phonetic boundaries. *J. Acoust. Soc. Am.* **110**, 1581-1597.
- Nittrouer, S. & Burton, L. (2001) The role of early language experience in the development of speech perception and language processing abilities in children with hearing loss. *Volta Review* **103**, 5-37.
- Nittrouer, S., & Crowther, C.S. (2001). Coherence in children's speech perception. *J. Acoust. Soc. Am.* **110**, 2129-2140.
- Nittrouer, S. (2002). From ear to cortex: A perspective on what clinicians need to understand about speech perception and language processing. *Lang., Speech, and Hear. Services in Schools* **33**, 237-251.
- Nittrouer, S. (2002). Learning to perceive speech: How fricative perception changes, and how it stays the same. *J. Acoust. Soc. Am.* **112**, 711-719.
- McGowan, R.S., Nittrouer, S., & Manning, C. (2004). Development of [j] in young, Midwestern, American children. *J. Acoust. Soc. Am.* **115**, 871-884.
- Nittrouer, S. (2004). The role of temporal and dynamic signal components in the perception of syllable-final stop voicing by children and adults. *J. Acoust. Soc. Am.* **115**, 1777-1790.
- Nittrouer, S. (2005). Age-related differences in weighting and masking of two cues to word-final stop voicing in noise. *J. Acoust. Soc. Am.*, **118**, 1072-1088.
- Nittrouer, S. & Burton, L. (2005). The role of early language experience in the development of speech perception and phonological processing abilities: Evidence from 5-year-olds with histories of otitis media with effusion and low socioeconomic status. *J. Comm. Dis.* **38**, 29-63.

- Nittrouer, S., Estee, S., Lowenstein, J.H., & Smith, J.** (2005). The emergence of mature gestural patterns in the production of voiceless and voiced word-final stops. *J. Acoust. Soc. Am.* **117**, 351-364.
- Nittrouer, S.** (2006) Children hear the forest. *J. Acoust. Soc. Am.* **120**, 1799-1802.
- Nittrouer, S., & Lowenstein, J.H.** (2007). Children's weighting strategies for word-final stop voicing are not explained by auditory capacities. *J. Speech Lang. Hear. Res.* **50**, 58-73.
- Nittrouer, S.** (2007). Dynamic spectral structure specifies vowels for children and adults. *J. Acoust. Soc. Am.* **122**, 2328-2339.
- Lowenstein, J.H., & Nittrouer, S.** (2008). Patterns of acquisition of native voice onset time in English-learning children. *J. Acoust. Soc. Am.* **124**, 1180-1191.
- McGowan, R. S., Nittrouer, S., & Chenausky, K.** (2008). Speech production of twelve-month-old children with and without hearing loss. *J. Speech Lang. Hear. Res.* **51**, 879-888.
- Nittrouer, S.** (2008). Outcomes for children with HL: Effects of age of ID, sign support, and auditory prosthesis. *Perspectives on Hearing and Hearing Disorders in Childhood* **18**, 74-82
- Nittrouer, S., & Lowenstein, J.H.** (2008). Spectral structure across the syllable specifies final-stop voicing for adults and children alike. *J. Acoust. Soc. Am.* **123**, 377-385.
- Nittrouer, S., & Lowenstein, J.H.** (2009). Does harmonicity explain children's cue weighting of fricative-vowel syllables? *J. Acoust. Soc. Am.* **125**, 1679-1692.
- Nittrouer, S., Lowenstein, J.H., & Packer, R.** (2009). Children discover the spectral skeletons in their native language before the amplitude envelopes. *J. Exp. Psych.: Human Percep. and Perf.*, **35**, 1245-1253.
- Nittrouer, S. & Chapman, C.** (2009). The effects of bilateral electric and bimodal electric-acoustic stimulation on language development. *Trends in Amplification*, **13**, 190-205.
- Nittrouer, S. & Lowenstein, J. H.** (2010). Learning to perceptually organize speech signals in native fashion. *J. Acoust. Soc. Am.* **127**, 1624-1635.

### **Invited papers and letters**

- Nittrouer, S.** (1986). A reply to Adams' comment. *J. Fluency Disorders* **11**, 91-92.
- Nittrouer, S.** (1987). Review of *Precursors of Early Speech: Proceedings of an Int'l Symposium held at the Wenner-Gren Center, Stockholm, Sweden, Sept. 19-22, 1984.* *Lang. Speech* **30**, 83-92.
- Nittrouer, S.** (1992). Reply to Garrett and Healey. *J. Speech Hear. Res.* **35**, 96-98.
- Nittrouer, S.** (1999). Chronic OME hinders normal language development. *Special Interest Divisions (#1 and #9)*, American Speech-Language-Hearing Association.

**Nittrouer, S.** (2001). Learning to apprehend phonetic structure from the speech signal: The hows and whys. *Themes in Clinical Phonetics and Linguistics* (Proceedings of the VIIIth meeting of the International Clinical Phonetics and Linguistics Association).

**Nittrouer, S.** (2002) A reply to "Innate phonetic boundaries revisited," by Aslin, Werker, and Morgan. *J. Acoust. Soc. Am.* **112**, 1261-1264.

## Books

**Nittrouer, S.** (2009). *Early Development of Children with Hearing Loss*. Plural Publishing San Diego.

## Chapters

**Nittrouer, S.** (2002). Learning to apprehend phonetic structure from the speech signal: The hows and whys. In *Investigations in Clinical Phonetics and Linguistics*, F. Windsor, M. L. Kelly, and N. Hewlett (eds.), Lawrence Erlbaum (London).

## Papers currently in press or under review

**Nittrouer, S.** & Lowenstein, J.H. (under review). Immediate serial recall of speech and environmental sounds by adults and children. *Appl. Psycholing.*

**Nittrouer, S.**, Sefton, S., & Lowenstein, J.H. (under review). What is the deficit in specific language impairment? Auditory sensitivity, masking, or object formation. *J. Exper. Child Psychol.*

Phinney-Johnson, E., Pennington, B.F., Lowenstein, J.H., & **Nittrouer, S.** (under review). Sensitivity to structure in the speech signal by children with speech sound disorder and reading disability. *J. Comm. Dis.*

## Published abstracts

Boothroyd, A. & **Nittrouer, S.** (1984). Quantification of lexical redundancy effects in word recognition. *J. Acoust. Soc. Am.* **75**, S84.

**Nittrouer, S.** & Boothroyd, A. (1984). Quantifying syntactic and semantic redundancy effects in the recognition of words in sentences. *J. Acoust. Soc. Am.* **76**, S88.

**Nittrouer, S.** & Studdert-Kennedy, M. (1985). Acoustic analysis and perceptual effect of variation in the amplitude envelopes of /b/ and /w/. *J. Acoust. Soc. Am.* **77**, S25.

**Nittrouer, S.** (1986). Acoustic consequences of fricative-vowel anticipatory coarticulation in young children. *J. Acoust. Soc. Am.* **79**, S54.

**Nittrouer, S.**, Munhall, K., Kelso, J.A.S., Tuller, B. & Harris, K.S. (1986). Patterns of interarticulator phasing relations. *J. Acoust. Soc. Am.* **80**, S109.

**Nittrouer, S.** & McGowan, R.S. (1987). Possible production differences in children's and adults' fricatives. *J. Acoust. Soc. Am.* **81**, S68.

- Nittrouer, S. & Whalen, D.H. (1987). Qualitative separateness in children's speech. *J. Acoust. Soc. Am.* **82**, S84.
- Nittrouer, S., McGowan, R.S. & Beehler, D. (1988). Noise measurements of adult men's and women's voices. *J. Acoust. Soc. Am.* **83**, S83.
- Nittrouer, S. (1990). Age-related differences in formant-transition effects within syllables and across syllable boundaries. *J. Acoust. Soc. Am.* **87**, S117.
- Nittrouer, S. (1991). Age-related differences in the organization of articulatory gestures for /ə/#stop-vowel sequences. *J. Acoust. Soc. Am.* **90**, S2297.
- Nittrouer, S. & McGowan, R.S. (1992). Some observations of women's and children's F2 frequencies: Anatomical considerations and coarticulatory effects. *J. Acoust. Soc. Am.* **92**, S2415.
- Neely, S., Nittrouer, S. & Carney, E. (1992). Waveform editing and spectrographic display. *J. Acoust. Soc. Am.* **91**, S2460.
- Nittrouer, S., Manning, C. & Meyer, G. (1993). The perceptual weighting of acoustic cues changes with linguistic experience. *J. Acoust. Soc. Am.* **94**, S1865.
- Nittrouer, S. (1994). Speech perception by normal children. *J. Acoust. Soc. Am.* **95**, S2997.
- Nittrouer, S. (1994). Deficits in linguistic experience delay the development of mature speech perception abilities and of phonemic awareness. *J. Acoust. Soc. Am.* **96**, S3310.
- Nittrouer, S. & Crowther, C.S. (1996). Re-examining age-related differences in the perception of 'say-stay'. *J. Acoust. Soc. Am.* **100**, S2726.
- Crowther, C.S. & Nittrouer, S. (1997). Integration of acoustic information in the perception of [s] + stop clusters by children and adults. *J. Acoust. Soc. Am.* **102**, S3092.
- Miller, M.E. & Nittrouer, S. (1997). Acoustic differences between syllable-initial [f] and [θ]. *J. Acoust. Soc. Am.* **102**, S3093.
- Nittrouer, S., Miller, M.E. & Crowther, C.S. (1998). Children's perceptual weighting strategies for speech are not as flexible as adults. *J. Acoust. Soc. Am.* **104**, S1835.
- Nittrouer, S. & Miller, M.E. (1999). Developmental changes in perceptual weighting strategies for speech are contrast specific. *J. Acoust. Soc. Am.* **106**, S2246.
- McGowan, R.S., Nittrouer, S. & Manning, C. (2000). Development of prevocalic, intervocalic, and postvocalic /ɹ/ in young American children. *J. Acoust. Soc. Am.* **108**, S2480.
- Nittrouer, S., Taylor, S., Larive, L., Manning, C., & Mertes, T. (2001) Dynamic information signals voicing of syllable-final stops. *J. Acoust. Soc. Am.* **109**, S2312.
- Nittrouer, S. (2002). Specifying voicing differences in children's productions of syllable-final stops: Knowledge vs. skill. *J. Acoust. Soc. Am.* **111**, S2482.
- Nittrouer, S., Wilhelmsen, M., Shapley, K., & Bodily, K. (2003). Two reasons not to bring your children to cocktail parties. *J. Acoust. Soc. Am.* **113**, S2254.

- Nittrouer, S.** (2004). Developmental changes in the perception of syllable-final stop voicing are not explained by age-related differences in auditory sensitivity. *J. Acoust. Soc. Am.* **115**, S2396.
- Lowenstein, J.H. & **Nittrouer, S.** (2004). The acquisition of voice onset time by English-learning infants. *J. Acoust. Soc. Am.* **115**, S2465.
- Nittrouer, S.** (2005). Perception of steady-state vowels and vowelless syllables by adults and children. *J. Acoust. Soc. Am.* **117**, S2402.
- McGowan, R. S., **Nittrouer, S.**, & Chenausky, K. (2005). Preliminary comparison of infants' speech with and without hearing loss. *J. Acoust. Soc. Am.* **117**, S2377.
- Nittrouer, S.**, & Packer, R. (2006). Comprehension of envelope-only sentences by English-speaking adults and children and Mandarin-speaking adults. *J. Acoust. Soc. Am.* **117**, S3392.
- Lowenstein, J.H., & **Nittrouer, S.** (2006). Fricative development in English-learning children. *J. Acoust. Soc. Am.* **117**, S3421.
- Nittrouer, S.**, & Lowenstein, J.H. (2007). The contributions of global spectral and amplitude structure to speech perception by English-speaking adults and children and Mandarin-speaking adults. *J. Acoust. Soc. Am.* **122**, S3032.
- Lowenstein, J.H., & **Nittrouer, S.** (2007). Why do children attend to global structure in speech signals? *J. Acoust. Soc. Am.* **122**, S3032.
- Lowenstein, J.H., & **Nittrouer, S.** (2008). Getting phonetic structure from an aphonetic signal. *J. Acoust. Soc. Am.* **124**, S2458.
- McGowan, R. S. & **Nittrouer, S.**, (2008). Children's articulatory constraints inferred from acoustic output: How some speech-sound errors arise. *J. Acoust. Soc. Am.* **124**, S2555.
- Tarr, E.W. & **Nittrouer, S.** (2009). Children need coherence masking protection. *J. Acoust. Soc. Am.* **126**, S2300.

### **Other posters and presentations**

- Nittrouer, S.** (2000). Learning to apprehend phonetic structure from the speech signal: The hows and whys. Keynote address presented at the VIIth Meeting of the International Clinical Phonetics and Linguistics Association, Edinburgh, Scotland. August. (INVITED)
- Nittrouer, S.** (2000). How language problems arise from early otitis media with effusion. Presented at the New York State Speech-Language-Hearing Association Meeting, Saratoga Springs, NY. April. (INVITED)
- Nittrouer, S.** (2000). The scientific basis of Fast ForWord: Granite or shifting sands. Presented at the New York State Speech-Language-Hearing Association Meeting, Saratoga Springs, NY. April. (INVITED)
- Nittrouer, S.** & Burton, L. T. (2001). Success in the mainstream does not require speech perception using traditional cues, but does require access to phonological structure.

Presented at the Central Institute of the Deaf Conference, New Frontiers in the Amelioration of Hearing Loss, St. Louis, MO. March.

**Nittrouer, S.** (2002). Early OME: Implications for speech perception and phonological processing. Presented at the Otitis Media and Language Learning Sequelae: Current Research and Controversies Conference, Arlington, VA. May. (INVITED)

**Nittrouer, S.** (2004). Early development of children with hearing loss. Presented at the national meeting of Early Hearing Detection and Intervention, Washington, D.C. February.

**Nittrouer, S.** (2004). Crossing the research/clinical divide. Presented at the AGBell Summit on Deafness. Washington, D.C. February. (INVITED)

**Nittrouer, S.** (2004). From Ears to Cortex and Back Again: The Co-dependent Relationship Between Speech Perception and Language. Presented at the Hearing Research Foundation Conference. Providence, RI. May. (INVITED)

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