

CURRICULUM VITAE

JOANNE L. MILLER

July 2008

Address: Department of Psychology
125 Nightingale Hall
Northeastern University
Boston, MA 02115

Phone: 617-373-3766
Fax: 617-373-8714
e-mail: j.miller@neu.edu

EDUCATION

University of Minnesota	B.S. 1969 (Speech Pathology)
University of Minnesota	M.A. 1970 (Speech Pathology)
University of Minnesota	Ph.D. 1974 (Speech Science)
Brown University	Postdoctoral Fellow 1974-1976 (Psychology)

PROFESSIONAL EXPERIENCE

Northeastern University	
Matthews Distinguished University Professor (Psychology)	1997 - present
College of Arts & Sciences Distinguished Professor (Psychology)	1994 - present
Professor of Psychology	1984 - present
Associate Professor of Psychology	1979 -1984
Assistant Professor of Psychology	1976 -1979
Visiting Scholar, Department of Cognitive and Linguistic Sciences, Brown University	1989-1990
Visiting Scientist, Department of Cognitive and Linguistic Sciences, Brown University	1986-1987
Visiting Scientist, MIT Center for Cognitive Science	1983-1984
NIH Postdoctoral Fellow (Research Associate), Department of Psychology, Brown University	1974-1976
Predoxal Trainee, University of Minnesota	1971-1974
Instructor of Speech Science and Pathology, University of Minnesota	1970-1971
Predoxal Fellow, University of Minnesota	1969-1970

HONORS AND AWARDS

Phi Beta Kappa
NDEA Predoctoral Fellowship (University of Minnesota, 1969-1970)
NIH Postdoctoral Fellowship (Brown University, 1974-1976)
NIH Research Career Development Award (1981-1986)
NIH Javits Neuroscience Investigator Award/Claude Pepper Award (1987-1994)
Northeastern University Excellence in Teaching Award (1988)
Phi Kappa Phi
Sigma Xi
Fellow, Acoustical Society of America
Fellow, American Association for the Advancement of Science
Fellow, Association for Psychological Science

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Acoustical Society of America (Fellow)
American Association for the Advancement of Science (Fellow)
American Association of University Professors
American Speech-Language-Hearing Association
Association for Psychological Science (Fellow)
Association for Women in Science
Psychonomic Society

PROFESSIONAL ACTIVITIES

NIH/NIDCD Advisory Council, 1993-1997
NIH/NIDCD Integrated Planning and Policy Committee, 1995-1996
NIH/NIDCD Communication Disorders Review Committee, 1987-1991
Fachbeirat (Scientific Council), Max Planck Institute for Psycholinguistics, 1994-2005
Associate Editor, *Journal of the Association for Research in Otolaryngology*, 2000-2003
Associate Editor, *Perception & Psychophysics*, 1993-1996
Associate Editor, *Journal of the Acoustical Society of America*, 1985-1988
Editorial Board, *Cognition*, 1984-1996
Editorial Board, *Modern Acoustics and Signal Processing Series*, Springer-Verlag (formerly AIP Press), 1992-present
AAAS Annual Meeting Scientific Program Committee, 2001-2004
AAAS John P. McGovern Award Selection Committee (Chair), 2001-2004
AAAS Psychology Section Electorate Nominating Committee, 1995-1998 (Chair 1997-98)
AAAS Psychology Section Member-at-Large, 2000-2004
Acoustical Society of America representative to AAAS Linguistics and Language Science Section, 1998-present
Acoustical Society of America Committee on Public Relations, 1993-2002
Acoustical Society of America Books Committee, 1988-1994

Acoustical Society of America Technical Committee on Speech Communication, 1984-1990
Associate, *Behavioral and Brain Sciences*, 1983-present
Chair and Organizer (with Patti J. Price), "Humans, Computers, and Speech." Symposium presented at the AAAS Meeting, Washington, D.C. February 2000
Co-Organizer (with Robert Epstein), "Critical Issues in Categorization." Conference sponsored by the Neurosciences Institute of the Neurosciences Research Program, February 1984.
Advisory Committee, Center on Hearing Loss in Children, Boys Town National Research Hospital, 1990-1994
Consultant, NIH Research Center Grant, Learning Disabilities Research Center at Children's Hospital, Boston, MA, 1996-2000
Advisory Committee, Haskins Laboratories, NIH Program Project Grant "The nature and acquisition of the speech code and reading," 1996-present
Board of Directors, Haskins Laboratories, 2001-present
Chair of the Board of Directors, 2006-present

Reviewer: *Cognition, Cognitive Psychology, Developmental Psychology, Infant Behavior and Development, The Journal of the Acoustical Society of America, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: Learning, Memory, and Cognition, Journal of Memory and Language, Journal of Phonetics, Journal of Speech and Hearing Disorders, Journal of Speech and Hearing Research, Language and Cognitive Processes, Language and Speech, Perception & Psychophysics, Phonetica, Psychological Science, Science, Speech Communication, The Quarterly Journal of Experimental Psychology*, MIT Press, Social Sciences and Humanities Research Council of Canada, National Science Foundation, National Institutes of Health.

EXTERNAL FUNDING

Principal Investigator, NIH NIDCD (formerly NINCDS) (R01), *Some determinants of speech perception* (originally titled *Tuning properties of feature detectors for speech*), April 1, 1978 - June 30, 2009.

In conjunction with this grant: NIH Javits Neuroscience Investigator Award/Claude Pepper Award, July 1, 1987 - June 30, 1994.

Investigator (L. Kamin PI, 1992 - 1997; S. Harkins PI, 1998 - 2007), NIMH (T32), *Training basic researchers, with emphasis on minorities*, September 15, 1992 – June 30, 2007.

NIH Research Career Development Award (K04), *Some determinants of speech perception*. July 1, 1981 - June 30, 1986.

Investigator (B. Scharf PI), NSF, *Speech perception in noise by the hearing impaired*, June 15, 1980 - November 30, 1982.

Investigator (H. Lane PI), NSF, *Multi-user equipment grant for studies in experimental psychology*, July 1, 1980 - June 30, 1981.

Postdoctoral Fellowship, NIH NINCDS (F22), *Infant speech perception: Linguistic processing*, September 1, 1974 - August 31, 1976.

PUBLICATIONS

Books

Eimas, P.D., and Miller, J.L. (Eds.). *Perspectives on the Study of Speech*, Hillsdale: Erlbaum Assoc., 1981.

Miller, J.L. Editor-in-chief of three-volume series:

Kent, R.D., Atal, B.S., and Miller, J.L. (Eds.). *Papers in Speech Communication: Speech Production*, New York: Acoustical Society of America, 1991.

Miller, J.L., Kent, R.D., and Atal, B.S. (Eds.). *Papers in Speech Communication: Speech Perception*, New York: Acoustical Society of America, 1991.

Atal, B.S., Miller, J.L., and Kent, R.D. (Eds.). *Papers in Speech Communication: Speech Processing*, New York: Acoustical Society of America, 1991.

Miller, J.L., and Eimas, P.D. (Eds.). *Handbook of Perception and Cognition: Speech, Language, and Communication*, Vol. 11. San Diego: Academic Press, 1995.

Articles and Chapters

Siegel, G.M., Lenske (Miller), J.L., and Broen, P. Suppression of normal speech disfluencies through response cost. *Journal of Applied Behavior Analysis*, 1969, 2, 265-276. [[pdf](#)]

Speaks, C., Gray, T., Miller, J.L., and Rubens, A.B. Central auditory deficits and temporal-lobe lesions. *Journal of Speech and Hearing Disorders*, 1975, 40, 192-205.

Miller, J.L. Properties of feature detectors for speech: Evidence from the effects of selective adaptation on dichotic listening. *Perception & Psychophysics*, 1975, 18, 389-397.

Miller, J.L., and Eimas, P.D. Studies on the selective tuning of feature detectors for speech. *Journal of Phonetics*, 1976, 4, 119-127.

- Miller, J.L., and Eimas, P.D. Studies on the perception of place and manner of articulation: A comparison of the labial-alveolar and nasal-stop distinctions. *Journal of the Acoustical Society of America*, 1977, 61, 835-845. [[pdf](#)]
- Miller, J.L. Nonindependence of feature processing in initial consonants. *Journal of Speech and Hearing Research*, 1977, 20, 519-528.
- Miller, J.L. Properties of feature detectors for VOT: The voiceless channel of analysis. *Journal of the Acoustical Society of America*, 1977, 62, 641-648. [[pdf](#)]
- Eimas, P.D., Tartter, V.C., Miller, J.L., and Keuthen, N.J. Asymmetric dependencies in processing phonetic features. *Perception & Psychophysics*, 1978, 23, 12-20.
- Eimas, P.D., and Miller, J.L. Effects of selective adaptation on the perception of speech and visual patterns: Evidence for feature detectors. In R. Walk and H. Pick (Eds.). *Perception and Experience*, Plenum Press, 1978.
- Miller, J.L. Interactions in processing segmental and suprasegmental features of speech. *Perception & Psychophysics*, 1978, 24, 175-180.
- White, K.D., Petry, H.M., Riggs, L.A., and Miller, J.L. Binocular interactions during establishment of McCollough effects. *Vision Research*, 1978, 18, 1201-1215.
- Miller, J.L., and Liberman, A.M. Some effects of later-occurring information on the perception of stop consonant and semivowel. *Perception & Psychophysics*, 1979, 25, 457-465.
- Miller, J.L., Eimas, P.D., and Zatorre, R.J. Studies of place and manner of articulation in syllable-final position. *Journal of the Acoustical Society of America*, 1979, 66, 1207-1210. [[pdf](#)]
- Miller, J.L., and Eimas, P.D. Organization in infant speech perception. *Canadian Journal of Psychology*, 1979, 33, 353-367.
- Miller, J.L. Contextual effects in the discrimination of stop consonant and semivowel. *Perception & Psychophysics*, 1980, 28, 93-95.
- Eimas, P.D., and Miller, J.L. Contextual effects in infant speech perception. *Science*, 1980, 209, 1140-1141. [[pdf](#)]
- Eimas, P.D., and Miller, J.L. Discrimination of information for manner of articulation by young infants. *Infant Behavior & Development*, 1980, 3, 367-375.
- Miller, J.L., and Grosjean, F. How the components of speaking rate influence perception of phonetic segments. *Journal of Experimental Psychology: Human Perception and Performance*, 1981, 7, 208-215.

Miller, J.L. Phonetic perception: Evidence for context-dependent and context-independent processing. *Journal of the Acoustical Society of America*, 1981, 69, 822-831. [[pdf](#)]

Eimas, P.D., Tartter, V.C., and Miller, J.L. Dependency relations during the processing of speech. In P.D. Eimas and J.L. Miller (Eds.). *Perspectives on the Study of Speech*. Erlbaum Associates, 1981.

Miller, J.L. Effects of speaking rate on segmental distinctions. In P.D. Eimas and J.L. Miller (Eds.). *Perspectives on the Study of Speech*. Erlbaum Associates, 1981.

Miller, J.L. Some effects of speaking rate on phonetic perception. *Phonetica*, 1981, 38, 159-180.

Eimas, P.D., and Miller, J.L. Organization in the perception of segmental and suprasegmental information by infants. *Infant Behavior & Development*, 1981, 4, 395-399.

Miller, J.L., and Eimas, P.D. Feature detectors and speech perception: A critical evaluation. *Lecture Notes in Biomathematics*, 1982, 44, 111-145.

Miller, J.L., and Eimas, P.D. Studies on the categorization of speech by infants. *Cognition*, 1983, 13, 135-165.

Miller, J.L., and Baer, T. Some effects of speaking rate on the production of /b/ and /w/. *Journal of the Acoustical Society of America*, 1983, 73, 1751-1755. [[pdf](#)]

Miller, J.L., Connine, C.M., Schermer, T.M., and Kluender, K.R. A possible auditory basis for internal structure of phonetic categories. *Journal of the Acoustical Society of America*, 1983, 73, 2124-2133. [[pdf](#)]

Miller, J.L., Aibel, I.L., and Green, K. On the nature of rate-dependent processing during phonetic perception. *Perception & Psychophysics*, 1984, 35, 5-15.

Bomba, P.C., Eimas, P.D., Siqueland, E.R., and Miller, J.L. Contextual effects in infant visual perception. *Perception*, 1984, 13, 369-376.

Miller, J.L., Green, K.P., and Schermer, T.M. A distinction between the effects of sentential speaking rate and semantic congruity on word identification. *Perception & Psychophysics*, 1984, 36, 329-337.

Miller, J.L., Grosjean, F., and Lomanto, C. Articulation rate and its variability in spontaneous speech: A reanalysis and some implications. *Phonetica*, 1984, 41, 215-225.

Green, K.P., and Miller, J.L. On the role of visual rate information in phonetic perception. *Perception & Psychophysics*, 1985, 38, 269-276.

Miller, J.L., Green, K.P., and Reeves, A. Speaking rate and segments: A look at the relation between speech production and speech perception for the voicing contrast. *Phonetica*, 1986, 43, 106-115.

Miller, J.L. Limits on later-occurring rate information for phonetic perception. *Language and Speech*, 1986, 29, 13-24.

Miller, J.L., Rate-dependent processing in speech perception. In A. Ellis (Ed.). *Progress in the Psychology of Language*, Vol. III. Erlbaum Associates, 1987.

Eimas, P.D., Miller, J.L., and Jusczyk, P. On infant speech perception and the acquisition of language. In S. Harnad (Ed.). *Categorical Perception*. Cambridge University Press, 1987.

Miller, J.L. Mandatory processing in speech perception: A case study. In J. Garfield (Ed.). *Modularity in Knowledge Representation and Natural-Language Understanding*. MIT Press/Bradford Books, 1987.

Miller, J.L., and Dexter, E.R. Effects of speaking rate and lexical status on phonetic perception. *Journal of Experimental Psychology: Human Perception and Performance*, 1988, 14, 369-378.

Miller, J.L., and Jusczyk, P.W. Seeking the neurobiological bases of speech perception. *Cognition*, 1989, 33, 111-137.

Reprinted as: Miller, J.L., and Jusczyk, P.W. Seeking the neurobiological bases of speech perception. In P.D. Eimas and A.M. Galaburda (Eds.). *Neurobiology of Cognition*. MIT Press/Bradford Books, 1990.

Miller, J.L., and Volaitis, L.E. Effect of speaking rate on the perceptual structure of a phonetic category. *Perception & Psychophysics*, 1989, 46, 505-512. [[pdf](#)]

Bürki-Cohen, J., Grosjean, F., and Miller, J.L. Base-language effects on word identification in bilingual speech: Evidence from categorical perception experiments. *Language and Speech*, 1989, 32, 355-371. [[pdf](#)]

Miller, J.L. Speech perception. In D.N. Osherson and H. Lasnik (Eds.). *An Invitation to Cognitive Science: Language*, Vol. 1. MIT Press, 1990.

Eimas, P.D., and Miller, J.L. Infant categories and categorization. In G.M. Edelman, W.E. Gall, and W.M. Cowan (Eds.). *Signal and Sense: Local and Global Order in Perceptual Maps*. Wiley-Liss, 1990.

Gottfried, T.L., Miller, J.L., and Payton, P.E. Effect of speaking rate on the perception of vowels. *Phonetica*, 1990, 47, 155-172. [[pdf](#)]

Miller, J.L. Comment: Bimodal speech perception and the motor theory. In I.G. Mattingly and M. Studdert-Kennedy (Eds.). *Modularity and the Motor Theory of Speech Perception*. Erlbaum Associates, 1991.

Eimas, P.D., and Miller, J.L. A constraint on the discrimination of speech by young infants. *Language and Speech*, 1991, 34, 251-263. [[pdf](#)]

Volaitis, L.E., and Miller, J.L. Phonetic prototypes: Influence of place of articulation and speaking rate on the internal structure of voicing categories. *Journal of the Acoustical Society of America*, 1992, 92, 723-735. [[pdf](#)]

Eimas, P.D., and Miller, J.L. Organization in the perception of speech by young infants. *Psychological Science*, 1992, 3, 340-345. [[pdf](#)]

Miller, J.L., and Wayland, S.C. Limits on the limitations of context-conditioned effects in the perception of [b] and [w]. *Perception & Psychophysics*, 1993, 54, 205-210. [[pdf](#)]

Miller, J.L., and Eimas, P.D. Observations on speech perception, its development, and the search for mechanism. In J.C. Goodman and H.C. Nusbaum (Eds.). *The Development of Speech Perception: The Transition from Speech Sounds to Spoken Words*. MIT Press, 1994.

Miller, J.L. On the internal structure of phonetic categories: A progress report. *Cognition*, 1994, 50, 271-285. [[pdf](#)]

Wayland, S.C., Miller, J.L., and Volaitis, L.E. The influence of sentential speaking rate on the internal structure of phonetic categories. *Journal of the Acoustical Society of America*, 1994, 95, 2694-2701. [[pdf](#)]

Grosjean, F., and Miller, J.L. Going in and out of languages: An example of bilingual flexibility. *Psychological Science*, 1994, 5, 201-206. [[pdf](#)]

Miller, J.L., and Eimas, P.D. Speech perception: From signal to word. *Annual Review of Psychology*, 1995, 46, 467-492. [[pdf](#)]

Hodgson, P., and Miller, J.L. Internal structure of phonetic categories: Evidence for within-category trading relations. *Journal of the Acoustical Society of America*, 1996, 100, 565-576. [[pdf](#)]

Miller, J.L., and Eimas, P.D. Internal structure of voicing categories in early infancy. *Perception & Psychophysics*, 1996, 58, 1157-1167. [[pdf](#)]

Miller, J.L. Speech perception. In M.J. Crocker (Ed.). *Encyclopedia of Acoustics*, Vol. 4. John Wiley & Sons, 1997.

Miller, J.L., O'Rourke, T.B., and Volaitis, L.E. Internal structure of phonetic categories: Effects of speaking rate. *Phonetica*, 1997, 54, 121-137. [[pdf](#)]

Miller, J.L., and Grosjean, F. Dialect effects in vowel perception: The role of temporal information in French. *Language and Speech*, 1997, 40, 277-288. [[pdf](#)]

Miller, J.L. Internal structure of phonetic categories. *Language and Cognitive Processes*, 1997, 12, 865-869. [[pdf](#)]

Miller, J.L. Speech perception. In R.A. Wilson and F. Keil (Eds.). *The MIT Encyclopedia of the Cognitive Sciences*, MIT Press, 1999.

Allen, J.S., and Miller, J.L. Effects of syllable-initial voicing and speaking rate on the temporal characteristics of monosyllabic words. *Journal of the Acoustical Society of America*, 1999, 106, 2031-2039. [[pdf](#)]

Bürki-Cohen, J., Miller, J.L., and Eimas, P.D. Perceiving nonnative speech. *Language and Speech*, 2001, 44, 149-169. [[pdf](#)]

Allen, J.S., and Miller, J.L. Contextual influences on the internal structure of phonetic categories: A distinction between lexical status and speaking rate. *Perception & Psychophysics*, 2001, 63, 798-810. [[pdf](#)]

Miller, J.L. Mapping from acoustic signal to phonetic category: Internal category structure, context effects and speeded categorization. *Language and Cognitive Processes*, 2001, 16, 683-690. [[pdf](#)]

Reprinted as: Miller, J.L. Mapping from acoustic signal to phonetic category: Internal category structure, context effects and speeded categorization. In J.M. McQueen and A. Cutler (Eds.). *Spoken Word Access Processes*. Psychology Press Ltd., 2001.

Allen, J.S., Miller, J.L., and DeSteno, D. Individual talker differences in voice-onset-time. *Journal of the Acoustical Society of America*, 2003, 113, 544-552. [[pdf](#)]

Brancazio, L., Miller, J.L., and Paré, M.A. Visual influences on the internal structure of phonetic categories. *Perception & Psychophysics*, 2003, 65, 591-601. [[pdf](#)]

Allen, J.S., and Miller, J.L. Listener sensitivity to individual talker differences in voice-onset-time. *Journal of the Acoustical Society of America*, 2004, 115, 3171- 3183. [[pdf](#)]

Brancazio, L., and Miller, J.L. Use of visual information in speech perception: Evidence for a visual rate effect both with and without a McGurk effect. *Perception & Psychophysics*, 2005, 67, 759-769. [[pdf](#)]

Schwab, S., Miller, J.L., Grosjean, F., and Mondini, M. Effect of speaking rate on the identification of word boundaries. *Phonetica*, in press. [[pdf](#)]