

BIOGRAPHICAL SKETCH

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NAME Charlotte M. Reed	POSITION TITLE Senior Research Scientist		
eRA COMMONS USER NAME CMREED			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Carlow College, Pittsburgh, PA	B.S.Ed.	1969	Speech Pathology
University of Pittsburgh, Pittsburgh, PA	Ph.D.	1973	Bioacoustics

A.Positions and Honors

Positions and Employment

-1973 Graduate Research Fellow, Bioacoustics Laboratory, University of Pittsburgh
-1975 Research Associate, Bioacoustics Laboratory, University of Pittsburgh
-1977 Postdoctoral Trainee, Research Laboratory of Electronics, MIT
-1989 Research Associate, Research Laboratory of Electronics, MIT
-2003 Principal Research Scientist, Research Laboratory of Electronics, MIT
2003-present Senior Research Scientist, Research Laboratory of Electronics, MIT

Other Experience and Professional Memberships

Member: Acoustical Society of America (ASA)

Member: American Speech-Language-Hearing Association (ASHA)

Member: American Auditory Society (AAS)

Honors

Fellow: Acoustical Society of America (ASA), 2010

B.Selected peer-reviewed publications

Reed, C.M., and Bilger, R.C. (1973). "A Comparative Study of S/No and E/No," J.Acoust.Soc. Am. 53, 1039-1044.

Reed, C.M. (1975). "Reaction Times for a Same-Different Discrimination of Vowel-Consonant Syllables," Perception and Psychophysics 18, 65-70.

Reed, C.M. (1975). "Identification and Discrimination of Vowel-Consonant Syllables in Hearing-Impaired Listeners," J.Speech Hearing Res. 18, 773-794.

Norton, S.J., Schultz, M.C., Reed, C.M., Braida, L.D., Durlach, N.I., Rabinowitz, W.M., and Chomsky, C. (1977). "Analytic Study of the Tadoma Method: Background and Preliminary Results," J. Speech Hearing Res. 20, 574-595.

Wang, M.D., Reed, C.M., and Bilger, R.C. (1978). "A Comparison of the Effects of Filtering and Sensorineural Hearing Loss on Patterns of Consonant Confusions," J. Speech Hearing Res. 21, 5-36.

Reed, C.M., Durlach, N.I., Braida, L.D., and Schultz, M.C. (1982). "Analytic Study of the Tadoma Method: Identification of Consonants and Vowels by an Experienced Tadoma User," J. Speech Hearing Res. 25, 108-116.

Reed, C.M., Durlach, N.I., and Braida, L.D. (1982). Research on Tactile Communication of Speech: A Review. ASHA Monographs Number 20.

Reed, C.M., Hicks, B.L., Braida, L.D., and Durlach, N.I. (1983). "Discrimination of Speech Processed by Low-Pass Filtering and Pitch-Invariant Frequency Lowering," J. Acoust. Soc. Am. 74, 409-419.

Reed, C.M., Rabinowitz, W.M., Durlach, N.I., Braida, L.D., Conway-Fithian, S., and Schultz, M.C. (1985). "Research on the Tadoma Method of Speech Communication," J. Acoust. Soc. Am. 77, 247-257.

Reed, C.M., Braida, L.D., Durlach, N.I., and Schultz, K.I. (1985). "Discrimination and Identification of Frequency-Lowered Speech in Listeners with High-Frequency Hearing Impairment," J. Acoust. Soc. Am. 78, 2139-2141.

Farrar, C.L., Reed, C.M., Ito, Y., Durlach, N.I., Delhorne, L.A., Zurek, P.M., and Braida, L.D. (1987). "Spectral-Shape Discrimination. I. Results from Normal-Hearing Listeners for Stationary Broadband Noises," J. Acoust. Soc. Am. 81, 1085-1092.

- Reed, C.M., Durlach, N.I., and Braid, L.D. (1989). "Analytic Study of the Tadoma Method: Effects of Hand Position on Segmental Speech Perception," J. Speech Hearing Res., 32, 921-929.
- Reed, C.M., Durlach, N.I., Delhorne, L.A., Rabinowitz, W.M., and Grant, K.W. (1989). "Research on Tactual Communication of Speech: Ideas, Issues, and Findings," Volta Review 91, 65-78. (Monograph entitled "Research on the Use of Sensory Aids for Hearing-Impaired People," N.S.McGarr, Editor).
- Reed, C.M., Delhorne, L.A., Durlach, N.I., and Fischer, S.D. (1990). "A Study of the Tactual and Visual Reception of Fingerspelling," J. Speech Hearing Res.33, 786-797.
- Reed, C.M., Durlach, N.I., and Delhorne, L.A. (1992). "Natural Methods of Tactual Communication," pp. 218-230 in *Tactile Aids for the Hearing Impaired*, I.R.Summers, Editor, London: Whurr Publishers.
- Reed, C.M., Power, M.H., Durlach, N.I., Braid, L.D., Foss, K.K., Reid, J.A., and Dubois, S.R. (1991). "Development and Testing of Articulation Low-Frequency Speech Codes, Journal of Rehabilitation Research and Development, 28, 67-82.
- Uchanski, R.M., Millier, K.M., Reed, C.M., and Braid, L.D. (1991). "Effects of Token Variability on Vowel Identification," in *The Processing of Speech: From the Auditory Periphery to Word Recognition*. Bert Schouten (Ed.), Berlin: Mouton de Gruyter.
- Reed, C.M., Rabinowitz, W.M., Durlach, N.I., Delhorne, L.A., Braid, L.D., Pemberton, J.C., Mulcahey, B.D., and Washington, D.L. (1992). "Analytic Study of the Tadoma Method: Improving Performance Through the Use of Supplementary Tactual Displays." J. Speech Hearing Research 35: 45-465.
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- Florentine, M., Reed, C.M., Rabinowitz, W.M., Braid, L.D., Durlach, N.I. and Buus, S. (1993). "Intensity Perception. XIV. Intensity Discrimination in Listeners with Sensorineural Hearing Loss." J. Acoust. Soc. Am. 94: 2575-2586.
- Reed, C.M., Delhorne, L.A., Durlach, N.I. and Fischer, S. (1995). "A Study of the Tactual Reception of Sign Language." J. Speech and Hearing Res. 38: 477-489.
- Reed, C.M. (1995). "Tadoma: An Overview of Research," in G. Plant and K.-E. Spens (Eds.), *Profound Deafness and Speech Communication*. London: Whurr Publishers, pp. 40-55.
- Besing, J.M., Reed, C.M., and Durlach, N.I. (1995). "A Comparison of Auditory and Tactual Presentation of a Single-Band Envelope Cue as a Supplement to Speechreading." Seminars in Hearing 16: 316-327.
- Reed, C.M. and Delhorne, L.A. (1995). "Current Results of a Field Study of Adult Users of Tactile Aids." Seminars in Hearing 16: 305-315.
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Principal Investigator/Program Director (Last, First, Middle):

Desloge, J. G., Reed, C. M., Braida, L. D., Perez, Z. D., and Delhorne, L. A. (2011). Temporal modulation transfer functions for listeners with real and simulated hearing loss," *J. Acoust. Soc. Am.*, 129, 3884-3896.

Desloge, J. G., Reed, C. M., Braida, L. D., Perez, Z. D., and Delhorne, L. A. (2012). Auditory filter characteristics for listeners with real and simulated hearing impairment. *Trends in Amplification*, 16, 19-39.

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