

## VITA

### Allen A. Montgomery

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#### *Research Professor*

Department of Communication Sciences  
and Disorders  
University of South Carolina  
Columbia, South Carolina 29208  
Office 803/777-3083  
Fax 803/777-3081

#### *Home address:*

6732 Cary Lane  
Columbia, SC 29206  
Birthdate: October 4, 1938  
Telephone: 803/782-7868  
Email: amontgomery@sc.edu

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#### **Education**

Ph. D. in Speech Science  
Purdue University, 1967

M. A. in Speech Pathology  
Western Michigan University, 1961

B. S. in Mathematics  
Miami University (Ohio), 1960

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#### **Employment**

University of South Carolina

1990 -- Present

*Research Professor for the Department of Communication  
Sciences & Disorders.*

Major duties include:

- Coordinating and promoting the doctoral program
- Conducting research
- Supervising research of master's and doctoral students
- Teaching Speech Science courses
- Teaching aural rehabilitation courses
- Conducting adult aural rehabilitation classes
- Serving on various departmental committees

#### **Doctoral Dissertations Supervised at University of South Carolina (11)**

Steppling, Mary Lou Guydish (May 1995)

Perception and Production of Rise-fall Intonation in American English

Blaesing, Karen Jean (Summer 1997)

Speech Motor priming: Influence of Articulatory Features

- O'Brien, Kathleen M. Howland (Fall 1998)  
Factors Influencing the Perception of Rhythm in Music
- Houston, Kevin Todd (Spring 1999)  
The Visual Similarity of Spoken Monosyllables
- Butler, Leigh Frances Thompson (Summer 2001)  
Some Factors Underlying the Asymmetry in Speech-Derived Confusion Matrices
- Adams, Charley (Summer, 2002)  
Blame the Message, Not the Messenger: Probing the Difficulty of Speechreading Sentences
- Stith, Joanna (Fall 2002) Evaluation of Locus Equations to Assess Coarticulation in Children
- Baker, Kimberly (Fall, 2004)  
Perception and Lateralization of Spoken Emotion by Children in the Autistic Spectrum
- Robinson, Charvette (2008) Contributions of Neighborhood Density, Frequency, and Phonotactic Probability to Word Recognition: A Regression Study
- Gresle, Suzanne Orr (2009) The effects of Consonant-Vowel Intensity Ratios on Speech Loudness in Monosyllables
- Crass, Kimberly (2011) The effect of orthographic cuing on the speechreadability of sentences.

1988-1990

*NIH Senior Fellow for the Department of Communicative Disorders and Computer Science*

Primary responsibilities included:

- Conducting research on the application of fuzzy set theory to speechreading
- Increasing my knowledge of mathematics
- Teaching courses in communicative disorders
- Supervising student research
- Cooperating in faculty research
- Serving on departmental committees.

1975-1987

*Research Audiologist/Speech Pathologist (GS-13) in the Research Section, Army Audiology and Speech Center, Washington, D.C.*

Duties included:

- Conducting clinical research in aural rehabilitation and speech pathology through clinical investigation grants
- Organizing and managing the laboratory's data processing facilities

- Serving as statistical and research design consultant to the staff of the Army Audiology and Speech Center
- Developing innovative clinical techniques
- Participating in ENT resident training.

1987-1990

*Adjunct Professor*, Columbia University, New York

1974-1975

*Senior Lecturer*, Lincoln Institute, School of Communication Disorders Melbourne, Australia

Experience included:

- Teaching applied linguistics
- Conducting research in aural rehabilitation
- Supervising faculty and student research.

1967-1974

*Assistant Professor*, Department of Audiology and Speech Sciences, Purdue University, Lafayette, Indiana

Duties included:

- Teaching Speech Science and Speech Pathology courses
- Supervising and conducting research
- Directing the stuttering program.

1966-1967

*Instructor*, Department of Audiology and Speech Sciences, Purdue University

1963-1966

*National Institute of Dental Research Trainee*, Purdue University, 1963-66.

1962-1963

*Instructor*, Department of English and Speech, Iowa State University, Ames, Iowa

Duties included:

- Teaching Speech Pathology courses
- Providing speech therapy services

1961-1962

*Instructor*, Speech Pathology, Minot State College, Minot, North Dakota

Duties included:

- Teaching Speech Pathology
- Supervising practicum
- Participating as member of cleft palate team

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**Certification**

Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP), 1965-present

South Carolina state licensure in Speech-Language Pathology, 1989-present

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**Teaching Experience**

Courses taught include:

- Introduction to Speech-Pathology
- Anatomy and Physiology of Speech
- Aphasia
- Phonetics
- Linguistics for Speech Pathologists
- Stuttering Methods
- Practicum in Stuttering
- Seminar in Stuttering
- Organic Speech Disorders
- Speech Science
- Laboratory Methods in Speech and Hearing
- Computer Application in Speech and Hearing
- Advanced Speech Science
- Speech Production
- Cochlear Physiology
- CHILDES, Locke

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**Awards, Honors, and Special Training**

Fellow, American Speech-Language and Hearing Association, 1989

Honorary member of Sigma Xi

Member, Delta Omega (Public Health honorary society)

Recipient of the Editors Award from the Journal of Speech and Hearing Research for publication of the article of highest merit, 1990. Article published with Walden, Hawkins, and Prosek.

Awarded ASHA ACE status for continuing ed. August, 2011

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**Research Supervision**

A total of 30+ masters theses and 14 doctoral dissertations has been supervised.

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## Professional Activities

Editorial Consultant, Journal of the Acoustical Society of America, 1983-1985, 1986-1992.

Editorial Consultant, Journal of Speech and Hearing Research, 1975-1982, 1985-1990.

Editorial Consultant, Journal of Speech and Hearing Disorders, 1983-1989.

Editorial Consultant, Ear and Hearing, 1991, 1993.

Editorial Consultant, Language and Speech, 1990-1991.

Member, Technical Committee on Speech Communication, Acoustical Society of America (3 yr. term, 1983-86).

Member, Steering Committee, American Speech-Language Hearing Association Foundation Conference on the Personal Computer as a Professional Tool, 1983.

Member, Council on Professional Standards, American Speech-Language Hearing Association, 1985-88.

Member, Advisory Committee, Leadership Training in Computer Technology project, American Speech-Language Hearing Association, 1984.

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## Grant Activity

### APPOINTMENT TO FEDERAL REVIEW PANEL:

**In August, 1978. I received a four year appointment to the Communicative Disorders Review Committee of The National Institute of Neurological and Communicative Disorders and Stroke as their Army liaison.** In this capacity I provided critical evaluations of the scientific and technical merit of institutional, training, and teacher development grant applications, and participated & chaired site visits. I reviewed grants totaling over **\$50,000,000** during my term on the Committee.

Montgomery, A.A. Principal Investigator.  
“Specialized Training for Speech-Language Pathologists in Habilitation of Children with Cochlear Implants“. Training grant, U.S. Dept. of Education, 1/1/98 – 12/31/01 (\$389,000).

Montgomery, A.A. Principal Investigator.  
“Specialized Training for Speech-Language Pathologists in Habilitation of Children with Cochlear Implants“. Training grant, U.S. Dept. of Education, 6/1/98 – 5/31/01 (\$422,727).

Montgomery, A.A. Principal Investigator.  
"Application of fuzzy set theory to lipreading," NIH Senior Fellowship, funded thru NINCDS (\$66,000), awarded January 1988.

Montgomery, A.A., Principal Investigator.  
"Evaluation of methods for scoring a test of children's grammatical performance," funded by the National Institute of Education (\$10,000), awarded 1973.

Montgomery, A.A. Principal Investigator.  
"Acoustic characteristics of normal and hoarse voices," Purdue University Cancer research Grant (\$3,400), 1972-1973.

Montgomery, A.A. Purdue Research Foundation XR Grant (\$7,200), "Dimensions underlying vowel lipreading," 1972-1974.

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## Publications

Dirk-Bart den Ouden, Allen Montgomery & Charley Adams (2014) Simulating the neural correlates of stuttering, Neurocase: The Neural Basis of Cognition, 20:4, 434-445,

Montgomery, A. A., Reed, P. E., Crass, K. A., Hubbard, H. I. & Stith, J. (2014). The effect of measurement error and vowel selection on the locus equation measure of coarticulation Journal of the Acoustical Society of America, 136, 2747-2750.

Orr, S. B., Montgomery, A. A., Healy, E. W. & Dubno, J. R. (2010). Effects of consonant-vowel intensity ratio on loudness of monosyllabic words. Journal of the Acoustical Society of America, 128, 3105-3113.

- Baker, K. F., Montgomery, A.A. & Abramson, R. (2010, online 4 August, 2009). Perception and Lateralization of Spoken Emotion by Children and Adolescents with High-Functioning Forms of Autism. Journal of Autism and Developmental Disorders, Jan;40(1):123-9.
- Healy, E.W. & Montgomery, A.A.(2007). The consistency of sentence intelligibility across three types of signal distortion. Journal of Speech, Language, and Hearing Research, 50, 270-282.
- Rogers, C.F., Healy, E.W., & Montgomery, A.A. (2006). Sensitivity to isolated and concurrent intensity and fundamental frequency increments by cochlear implant users under natural listening conditions. Journal of the Acoustical Society of America, 119, 2276-2287.
- Healy, E.W. & Montgomery, A.A. (2006) Consistency of CID sentence intelligibility across difficult listening conditions. Journal of Speech and Hearing Research, 49, 823-834.
- Fridriksson, J., Nettles, C., Davis, M., Morrow, L., & Montgomery, A. (2006). Functional communication and executive function in aphasia: Preliminary data. Journal of Clinical Linguistics and Phonetics, 20, 401-410.
- O'Day, C., Frank, E.M., Montgomery, A., Nichols, M., & McDade, H. (2006). Repeated tongue and hand strength measurements in normal adults and individuals with Parkinson's disease. International Journal of Orofacial Myology, 31, 15-25.
- Fleming Barnes, E., Frank, E.M., Montgomery, A., and Nichols, M. (2005 Mar). Factors predicting rehabilitative service provision in adults with traumatic brain injury. Journal of Medical Speech-Language Pathology 13, (1): 69-83.
- Sandifer, H., Frank, E., Montgomery, A., Nichols, M., and William, C. (2005 Mar). Arizona Battery for Communication Disorders of Dementia Test performance: can this test be used with Caucasian and African-American adolescents with traumatic brain injury? Journal of Medical Speech-Language Pathology 13, (1): 1-6.
- Stepling, M.L., and Montgomery, A.A. Perception and

production of rise-fall intonation in American English. Perception and Psychophysics 64, 451-461, 2002.

Blaesing, K.J, and Montgomery, A.A. Speech motor priming: influence of articulatory features. Texas Journal of Audiology and Speech Pathology, XXV, 11-19, 2001.

Vallino-Napoli, L.D., and Montgomery, A.A. Examination of the standard deviation of mean nasalance scores in subjects with cleft palate: implications for clinical use. The Cleft Palate-Craniofacial Journal, Nov. 1997, vol. 34 (6).

Houston, K.T., and Montgomery, A.A. Auditory-visual integration: A practical approach. Seminars in Hearing, 18 (2), 1997.

Frank, E. M. and Montgomery, A. A. The effectiveness of computer-assisted instruction in neuroscience for speech-language pathology students. Journal of Medical Speech-Language Pathology, 4, 27-32, 1996.

Montgomery, A.A. WATCH: A practical approach to brief auditory rehabilitation. The Hearing Journal, 47 (10), 1994.

Montgomery, A. A. Treatment efficacy in adult audiological rehabilitation. JARA Monograph Supplement, 27, 317-336, 1994.

Walden, B. E., Busacco, D. A. and Montgomery, A. A. Benefit from visual cues in auditory-visual speech recognition by middle-aged and elderly persons. Journal of Speech and Hearing Research, 36, 431-436, 1993.

McCarthy, P.A., Montgomery, A.A. and Mueller, H.G. Decision making in rehabilitative audiology. Journal of the American Academy of Audiology, 1, 23-30, 1990.

Prosek, R.A., Montgomery, A.A., and Walden, B.E. Science and stuttering: Reply to DiSimoni. Journal of Speech and Hearing Research, 33, 406-407, 1990.

Walden, B.E., Montgomery, A.A., Prosek, R.A. and Hawkins, D.B. Visual biasing of normal and impaired auditory speech perception.

Journal of Speech and Hearing Research, 33, 163-173, 1990. [Winner of the ASHA Editor's award for 1990]

Finn, K.E. and Montgomery, A.A. Automatic optically-based recognition of speech. Pattern Recognition Letters, 8, 159-164, 1988.

Montgomery, A.A. and Edge, R.A. Evaluation of two speech enhancement techniques to improve intelligibility for hearing-impaired adults. Journal of Speech and Hearing Research, 31, 386-393, 1988.

Prosek, R.A., Montgomery, A.A. and Walden, B.E. Constancy of relative timing for stutterers and nonstutterers. Journal of Speech and Hearing Research, 31, 654-658, 1988.

Hawkins, D.B., Montgomery, A.A., Prosek, R.A. and Walden, B.E. Examination of two issues concerning functional gain measurements. Journal of Speech and Hearing Disorders, 52, 56-63, 1987.

Hawkins, D.B., Prosek, R.A., Walden, B.E. and Montgomery, A.A. Binaural loudness summation in the hearing impaired. Journal of Speech and Hearing Research, 30, 37-43, 1987.

Hawkins, D.B., Walden, B.E., Montgomery, A.A., and Prosek, R.A. Description and validation of an LDL procedure designed to select SSPL90. Ear and Hearing, 8, 162-169, 1987.

Montgomery, A.A., Prosek, R.A., Walden, B.E. and Cord, M.T. The effects of increasing consonant/vowel intensity ratio on speech loudness. Journal of Rehabilitation Research and Development, 24, 221-228, 1987.

Montgomery, A.A., Walden, B.E. and Prosek, R.A. Effects of consonantal context on vowel lipreading. Journal of Speech and Hearing Research, 30, 50-59, 1987.

Prosek, R.A., Montgomery, A.A., Walden, B.E., and Hawkins, D.B. Formant frequencies of stuttered and fluent vowels. Journal of Speech and Hearing Research, 30, 301-305, 1987.

Prosek, R.A., Montgomery, A.A., Walden, B.E. and Hawkins, D.B. An evaluation of residue features as correlates of voice disorders. Journal of Communication Disorders, 20, 105-117, 1987.

Walden, B.E., Montgomery, A.A., and Prosek, R.A. Perception of synthetic visual consonant-vowel articulations. Journal of Speech and Hearing Research, 30, 418-424, 1987.

Montgomery, A.A., Walden, B.E. and Prosek, R.A. Demonstration of a computer-based system for generating clinical materials. Journal for Computer Users in Speech and Hearing, 2, 25-34, 1986.

Stephens, M.E. and Montgomery, A.A. A critique of recent relevant standardized tests. Topics in Language Disorders, 21-45, June 1986.

Surr, R.K., Montgomery, A.A., and Mueller, H.G. Effect of monaural hearing aid use on dichotic test results for individuals with high-frequency hearing impairment. Journal of Speech and Hearing Disorders, 51, 161-169, 1986.

Walden, B.E., Montgomery, A.A., and Prosek, R.A. Phoneme boundaries in normal and hearing-impaired ears. Journal of the Acoustical Society of America, 79, 1101-1112, 1986.

Surr, R.K., Montgomery, A.A., and Mueller, H.G. Effect of amplification on tinnitus among new hearing aid users. Ear and Hearing, 6, 71-75, 1985.

Montgomery, A.A. and Sylvester, S.F. Streamlining the aural rehabilitation process. Hearing Instruments, 35, 46-50, November 1984.

Montgomery, A.A., Walden, B.E., Schwartz, D.M., and Prosek, R.A. Training auditory-visual speech reception in adults with moderate sensorineural hearing loss. Ear and Hearing, 5, 30-36, 1984.

Soo Hoo, G., and Montgomery, A.A. Stimulus tape generator: A package to present analog

recordings according to user specifications. Behavioral Research, Methods, Instruments, and Computers, 16, 337, 1984.

Montgomery, A.A. and Jackson, P.L. Physical characteristics of the lips underlying vowel lipreading performance. Journal of the Acoustical Society of America, 73, 2134-2144, 1983.

Scherr, C.K., Schwartz, D.M., and Montgomery, A.A. Follow-up survey of new hearing aid users. Journal of the Academy of Rehabilitative Audiology, 16, 202-209, 1983.

Montgomery, A.A., Schwartz, D.M., and Punch, J.L. Tournament strategies in hearing aid selection. Journal of Speech and Hearing Disorders, 47, 363-372, 1982. [Note: This paper was nominated for the Editor's Award for best research paper, 1982.]

Montgomery, A.A. and Soo Hoo, G. ANIMAT: A set of programs to generate, edit and display sequences of vector-based images. Behavior Research Methods and Instrumentation, 14, 39-40, 1982.

Walden, B.E., Erdman, S.A., Montgomery, A.A., Schwartz, D.M., and Prosek, R.A. Some effects of training on speech recognition by hearing-impaired adults. Journal of Speech and Hearing Research, 24, 207-216, 1981.

Walden, B.E., Schwartz, D.M., Montgomery, A.A., and Prosek, R.A. A comparison of the effects of hearing impairment and acoustic filtering on consonant recognition. Journal of Speech and Hearing Research, 24, 32-43, 1981.

Punch, J.L., Montgomery, A.A., Schwartz, D.M., Walden, B.E., and Prosek, R.A. Multidimensional scaling of quality judgments of speech signals processed by hearing aids. Journal of the Acoustical Society of America, 68, 458-466, 1980.

Walden, B.E., Montgomery, A.A., Prosek, R.A., and Schwartz, D.M. Consonant similarity judgments by normal and hearing-impaired listeners. Journal of Speech and Hearing Research, 23, 162-184, 1980.

- Prosek, R.A., Montgomery, A.A., Walden, B.E., and Schwartz, D.M. Reaction-time measures of stutterers and nonstutterers. Journal of Fluency Disorders, 4, 269-278, 1979.
- Prosek, R.A., Walden, B.E., Montgomery, A.A., and Schwartz, D.M. Some correlates of stuttering severity judgments. Journal of Fluency Disorders, 4, 215-222, 1979.
- Schwartz, D.M., Surr, R.K., Montgomery, A.A., Prosek, R.A., and Walden, B.E. Performance of high frequency impaired listeners with conventional and extended high frequency amplification. Audiology, 18, 157-174, 1979.
- Surr, R.K., Schuchman, G.I., and Montgomery, A.A. Factors influencing use of hearing aids. Archives of Otolaryngology, 104, 732-736, 1978. Summary reprinted in O.R.L. Digest, 1-2, February, 1980. Article reprinted in Hearing Instruments, October, 1979.
- Montgomery, M.M., Montgomery, A.A., and Stephens, M.I. Sentence repetition in preschoolers: Effects of length, complexity and word familiarity. Journal of Psycholinguistic Research, 7, 435-452, 1978.
- Prosek, R.A., Montgomery, A.A., Walden, B.E., and Schwartz, D.M. EMG biofeedback in the treatment of hyperfunctional voice disorders. Journal of Speech and Hearing Disorders, 43, 282-294, 1978.
- Stein, D., Cooper, C., Lynn, G., Madell, J., Miller, W., Montgomery, A.A., Resnick, S., and Stream, R. Trends in aural rehabilitation research. Journal of the Academy of Rehabilitative Audiology, 11, 63-69, 1978.
- Walden, B.E., Montgomery, A.A., Gibeily, G.J., Prosek, R.A., and Schwartz, D.M. Correlates of psychological dimensions in talker similarity. Journal of Speech and Hearing Research, 21, 265-275, 1978.
- Walden, B.E., Prosek, R.A., Montgomery, A.A., Scherr, C.K. and Jones, C.J. Effects of training on the visual recognition of consonants. Journal of Speech and Hearing

Research, 20, 130-145, 1977.

Binnie, C.A., Jackson, P., and Montgomery, A.A.  
Visual intelligibility of consonants: A lipreading  
screening test with implications for aural  
rehabilitation. Journal of Speech and Hearing  
Disorders, 41, 530-539, 1976.

Jackson, P., Montgomery, A.A., and Binnie, C.A.  
Perceptual dimensions underlying vowel  
lipreading performance. Journal of Speech  
and Hearing Research, 19, 796-812, 1976.

Montgomery, A.A. and Cooke, P. Perceptual and  
acoustic analysis of repetitions in stuttered  
speech. Journal of Communication Disorders,  
9, 317-330, 1976.

Daniloff, R., Montgomery, A.A., Hampton, J., and  
Percifield, P. Children's articulatory and  
auditory awareness of differences between vowel  
sounds. Journal of Communication Disorders, 8,  
335-341, 1975.

Walden, B.E., and Montgomery, A.A.  
Dimensions of consonant perception in normal  
and hearing-impaired listeners. Journal of  
Speech and Hearing Research, 18, 444-455,  
1975.

Binnie, C.A., Jackson, P.L. and Montgomery, A.A.  
Auditory and visual contributions to the  
perception of selected English consonants for  
normal-hearing and hearing-impaired listeners.  
Scandinavian Audiology, Suppl. 4, 182-209,  
1974.

Binnie, C.A. Montgomery, A.A., and Jackson, P.L.  
Auditory and visual contributions to the  
perception of consonants. Journal of Speech  
and Hearing Research, 17, 619-630, 1974.  
[Note: This paper was nominated for the  
Editor's Award for the best research paper in  
speech and hearing, 1974.]

Banikiotes, F., Montgomery, A.A., and Banikiotes,  
P. Male and female auditory reinforcement of  
infant vocalizations. Developmental  
Psychology, 6, 1972.

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## Book Chapters

- Montgomery, A.A., and Houston, K.T. The hearing impaired adult: Management of communication deficits and tinnitus. In J.G. Alpiner and P.A. McCarthy (Eds.) Rehabilitative Audiology: Children and Adults, Baltimore: Williams & Wilkins, Ch. 12, 1999.
- Montgomery, A. A. Management of the Hearing-Impaired Adult. In J. G. Alpiner and P. A. McCarthy (Eds.) Rehabilitative Audiology: Children and Adults. Baltimore: Williams & Wilkins, 311-330, 1993.
- Montgomery, A. A. Aural Rehabilitation. In G. A. Studebaker, F. H. Bess and L. B. Beck (Eds.) The Vanderbilt Hearing Aid Report II. Parkton, MD: York Press, 223-231, 1991.
- Montgomery, A.A. and Demorest, M. Issues and Developments in the Evaluation of Speechreading. Chapter 13 in Sims, D. and Defilippo, C. (Eds.). New Dimensions in Speechreading, Volta Review Monograph, 193-214, 1988.

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## Papers Published As Conference Proceedings

- Hawkins, D., Montgomery, A.A., Mueller, H., and Sedge R. Assessment of speech intelligibility by hearing-impaired listeners. In B. Berglund (Ed.), Noise as a Public Health Problem, Volume 2: Hearing, Communication, Sleep and Nonauditory Physiological Effects, 241-246, 1988, Swedish Council for Building Research, Stockholm, Sweden.
- Montgomery, A.A. and Finn, K.E. The use of visible lip information in automatic speech recognition. In Young, I.T. et al (eds) Signal Processing III: Theories and Applications. Amsterdam: Elsevier Science Publishers, 577-580, 1986.
- Montgomery, A.A. A review of speech signal enhancement for the hearing-impaired. In Pickett, J.M. (Ed) Proceedings of Symposium on Hearing Technology: Its Present and Future. Gallaudet College, Washington, D.C., 1984.

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**Book Reviews and Reports**

- Montgomery, A.A. Review of Hearing by Eye: The Psychology of Lipreading. Published in American Scientist, 76, pg. 523, 1988.
- Montgomery, A.A. Review of Targeting Intelligible Speech: A Phonological Approach to Remediation. Published in Military Medicine, 149, January 1984.
- Montgomery, A.A. Review of Treatment of Stuttering in Early Childhood: Methods and Issues. Published in Military Medicine, 148, December 1983.
- Montgomery, A.A. A book review of Multidimensional Scaling: Theory and Application in the Behavioral Sciences, Volumes I and II. Review appeared in ASHA, 16, 402. 1974.
- Montgomery, A.A. A book review of Digital Computing: Fortran IV and its Application in the Behavioral Sciences. Review published in ASHA, 14, 300, 1972.
- Montgomery, A.A. A book review of Fortran Programming for the Behavioral Sciences. Review published in ASHA, 14, 300, 1972.
- Paras, N., and Montgomery, A.A. Report on Public School Speech and Hearing Therapy in the State of Indiana: 1971-1972. Department of Public Instruction Division of Special Education, State of Indiana, 1972.

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**Papers Presented at  
Scientific Meetings**

McDade, H. and Montgomery, A. and Birnie, H.(2015).  
The Contribution of Units of Meaning Within  
Words During Lexical Decision Tasks. ASHA  
paper/poster, Denver, 2015

Allen Montgomery, Hiram McDade, Angela Hancock, &  
Anna Laura Parten. (2014). The effect of lexical  
characteristics of words on speech production.  
Presented at American Speech-Language-Hearing  
Association Convention,

Hiram McDade, Kimberlee Crass, Dirk den Ouden, Allen  
Montgomery, & Angela Hancock. (2013). The Effect of  
Sonority Sequencing in Syllable Onsets. Presented  
at American Speech-Language-Hearing Association  
Convention

Kimberly A. Crass, K. Todd Houston, and Allen  
Montgomery (2013). A comparison of visual-  
equivalency class membership with a fuzzy  
membership criterion in lipreading. Presented at the  
HRF Conference, St. Pete Beach, May, 2013

Kersting, J., Finneran, D., & Montgomery, A. (2012). A  
detailed analysis of To-omissions in typically  
developing children. . Poster presented at the  
annual Symposium on Research in Child Language  
Disorders Conference, Madison, WI

Crass, K.A., Montgomery, A. & Adams, C. (2011). *A  
comparison of good and poor speechreaders'  
performance on the CID sentences*. Paper presented  
at the Sixth International Adult Aural Rehabilitation  
Conference, May, St. Petersburg Beach, FL

Kersting, J., Finneran, D., & Montgomery, A. (2010).  
Using a large-scale research database to study verb  
development in preschool children. Poster  
presented at the annual Symposium on Research in  
Child Language Disorders Conference, Madison,  
WI

Crass, K., Montgomery, A & Adams, C. (2010) Influence of early vs. late cuing on the speechreading of sentences. Presented at Association of Rehabilitative Audiologists Institute, September, San Francisco

Crass, K.A., Montgomery, A. & Hoole, W. (2010,). *Contralateral pure tone threshold improvement following unilateral cochlear implantation*. Poster presented at the Academy of Audiology-North Carolina Fall Conference, September, Greensboro, NC.

Crass, K.A. & Montgomery A. (2010, September). *The effects of early vs late cueing on the speechreadability of sentences*. Poster presented at the Academy of Rehabilitative Audiology 2010 ARA Institute, San Francisco, CA.

Armitage, A., Sherwood, K., Crass, K.A., & Montgomery, A. (2010, February). *Speaker identification in adult cochlear implant users*. Paper presented at the annual convention of the South Carolina Speech and Hearing Association, Columbia, SC

Crass, K., Montgomery, A.A. & Hoole, W. Influence of unilateral cochlear implantation on contralateral hearing. Presented at American Speech-Language-Hearing Association Convention, Philadelphia, 2010

Kersting, J., Finneran, D. & Montgomery, A.A. Development of verb inflections in typically-developing preschool children Presented at American Speech-Language-Hearing Association Convention, Philadelphia, 2010

Contini, C. Montgomery, A.A., McDade, H. & Adams, C. Lexical and sub-lexical factors in disfluent speech of adult stutterers. Presented at American Speech-Language-Hearing Association Convention, Philadelphia, 2010

Hasten, A., Montgomery, A., McDade, H., and Adams, C. Acoustic characteristics of the adaptation of stuttering. Presented at American Speech-

Language-Hearing Association Convention, New Orleans, 2009

Bonilha, H. ???Presented at American Speech-Language-Hearing Association Convention, New Orleans, 2009

Jordan, M., Allen Montgomery, Hiram McDade. Lexical and sub-lexical factors influencing retrieval of proper names. Presented at American Speech-Language-Hearing Association Convention, Chicago, 2008

Robinson., C. Allen Montgomery, Hiram McDade. Relative contributions of Lexical and sub-lexical factors in word recognition. Presented at American Speech-Language-Hearing Association Convention, Chicago, 2008

McCants, N. Hiram McDade, Allen Montgomery. Effects of vowel length on lexical decision tasks. Presented at American Speech-Language-Hearing Association Convention, Boston, 2007

Brown, L., Montgomery, A.A., & Healy, E.W. (2007, February). Effects of contralateral noise on sensitivity to frequency and amplitude increments. Paper presented at the annual convention of the South Carolina Speech and Hearing Association, Hilton Head, SC

Robinson, C; Conyers, T; McDade, H; and Montgomery, A. Neighborhood density and spoken word recognition: Effects of phoneme position. Presented at American Speech-Language-Hearing Association Convention, Miami, Nov. 2006.

Baker, K.; Montgomery, A.; and Abrahamson, R. Lateralization of prosody by children with emotional and behavioral disorders. Presented at American Speech-Language-Hearing Association Convention, Miami, Nov. 2006.

Abramson, RK; Baker, KF; Montgomery, AA; Frank, E; Hall, AV; Ravan, SA; and Wright, HH (2005). Perception of Spoken Emotion in Children with

Asperger's and Autism, Academy of Child and Adolescent Psychiatry, Toronto, Canada

Abramson, R.; Baker, K.; Montgomery, A.; Frank, E.; Hall, A.; Ravan, S; and Wright, H. Perception of Spoken Emotion in Children with Asperger's and Autism Poster presented at AACA convention, October, 2006

Healy, E.W., Rogers, C.F., and Montgomery, A.A. Sensitivity to combined frequency and amplitude speech cues by cochlea implant users. Presented at 149<sup>th</sup> meeting of the Acoustical Society of America, Vancouver, BC, May 2005.

Healy, E.W., Rogers, C.F., and Montgomery, A.A. Sensitivity to acoustic speech cues in acoustic and electric hearing. Presented at the mid-winter meeting of the Association for Research in Otolaryngology, New Orleans, LA, February 2005.

Johnson, R., Montgomery, A.A., Spell, L., and Baker, K. Laterality of Perception of Spoken Emotion by Adult Women. Presented at South Carolina Speech-Language-Hearing Association, Charleston, SC, February 2005.

Baker, K., and Montgomery, A.A. Laterality of emotion in children with autism spectrum disorders. Presented at American Speech-Language-Hearing Association Convention, Philadelphia, PA, November 2004.

Steppling, M.L., and Montgomery, A.A. Perception and production of rise-fall intonation in American English. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, November 2001.

Williamson, S., McDade, H.L., and Montgomery, A.A. Assessment of oral-motor skills in children. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, November 2001.

Adams, C., and Montgomery, A.A. Artificial dysfluency:

Using synthesized stuttering as an evaluation tool. Presented at South Carolina Speech-Language Hearing Association Conference, Myrtle Beach, SC, February 1999.

Houston, K.T., and Montgomery, A.A. A model of visual similarity of spoken monosyllables. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, November 1998.

Houston, K.T., and Montgomery, A.A. Developing competency in habilitation of children with cochlear implants. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, November 1998.

Blaesing, K.J., and Montgomery, A.A. Speech motor priming: Influence of articulatory features. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, November 1998.

Zimmerman, D.A., McDade, H.L., and Montgomery, A.A. Relationship between preschool speech problems and later school performance. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, November 1998.

Huntley, R., Montgomery, A.A., Herron, T., Clark, H., Kugel, K., and Iden, L. Procedural influences on three measures of articulatory control. Presented at American Speech-Language-Hearing Association Convention, October 1995.

Clark, H., Huntley, R., and Montgomery, A.A. The reliability of relative timing measures. Presented at American Speech-Language-Hearing Association Convention, October 1995.

Kugel, K., Huntley, R., and Montgomery, A.A. Procedural influences on the measurement of locus equations. Presented at American Speech-Language-Hearing Association Convention, October 1995.

Wayner, D.S., Stromberg, E.M., Abrahamson, J.,

- Montgomery, A.A., and Jennings, M.B. How to establish an aural rehabilitation program from the ground up. Invited presentation and panel discussion, Presented at American Speech-Language-Hearing Association Convention, October 1995.
- Huntley, R., Montgomery, A.A., Herron, T., Clark, H., Kugel, K., and Iden, L. Procedural influences on three measures of articulatory control. Presented at the International Phonetic Conference in Stockholm, Sweden, August 1995.
- Herron, T.K., Huntley, R.A., Montgomery, A.A., and Frank, E.M. Procedural influences on the measurement of F2 slope. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, October 1994.
- Montgomery, A.A., Cook, E., Melvin, C., and Kingbury, M. Factors influencing the speechreading of sentences. ARA Summer Institute, Snowbird, Utah, June 1994.
- Ickes, M.A., Cooper, W.A., Montgomery, A.A., Hawkins, D.B., and Coleman, J.R. Effects of contralateral noise bands on click-evoked otoacoustic emissions. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, October 1992.
- Naidoo, S.V., and Montgomery, A.A. Effects of cognitive/visual tasks on click-evoked otoacoustic emissions. Presented at American Speech-Language-Hearing Association Convention, San Antonio, TX, October 1992.
- Balfour, P.B., Hawkins, D.B., Montgomery, A.A., and Cooper, W.A. Comparison of monaural and binaural hearing aid process stimuli. Presented at American Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.
- Ickes, M.A., Cooper, W.A., Montgomery, A.A., Hawkins, D.B., and Coleman, J.R. Evoked

otoacoustic emissions altered by contralateral stimulation. Presented at American Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.

Leadbitter, E.M., Hawkins, D.B., Montgomery, A.A., and Cooper, W.A. Effects of environmental factors on hearing aid sound quality judgments. Presented at American-Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.

Houston, K.T., and Montgomery, A.A. Consistency of semantic content of adolescent sign language. Presented at American-Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.

McCurry, P.O., Cooper, W.A., and Montgomery, A.A. Evaluation of reliability of otoacoustic emission testing. Presented at American Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.

Nelson, K.E., Bishop, J.H., and Montgomery, A.A. Language performance of stuttering, articulation-disordered and normal children. Presented at American Speech-Language-Hearing Association Convention, Atlanta, GA, October 1991.

Montgomery, A.A. Aural rehabilitation: A leap forward. ARA Summer Institute, Boulder, Colorado, June 1991.

Montgomery, A.A. Oto-acoustic emissions: Applications to hearing screening and diagnostic audiology. Presented at South Carolina Speech-Language-Hearing Association Conference, March 1991.

Montgomery, A.A. Oto-acoustic emissions: Physiology and clinical applications (Parts I & II). Audiological Resource Association, Atlanta, GA, February 1991.

- Montgomery, A.A. New developments and thinking about tinnitus. SCAA, Columbia, South Carolina, January 25, 1991.
- Knight, R.E., White, J.F., Montgomery, A.A., and Hobbs, D. A study of the effects of topical anesthesia on vocal fundamental frequency and frequency perturbation. Presented at 19th Annual Symposium: Care of the Professional Voice, Philadelphia, Pennsylvania, June 1990.
- White, J.F., Knight, R.E., and Montgomery, A.A. Acoustic analysis of voice in uvulopalatopharyngoplasty. Presented at 19th Annual Symposium: Care of the Professional Voice, Philadelphia, Pennsylvania, June 1990.
- Montgomery, A.A. and Cooper, W.A. Microstructure of the auditory threshold: Reliability, morphology and relationship to evoked oto-acoustic emissions. Presented at The 119th Meeting of the Acoustical Society of America, State College, Pennsylvania, May 1990.
- Montgomery, A.A. Oto-acoustic emissions: Auditory Phenomenon and clinical tool. SCAA, Columbia, SC, March 1990.
- Stephens, I. Dallman, W. and Montgomery, A.A. Presented at American Speech-Language-Hearing Association Convention, Boston, MA, November 1988.
- Montgomery, A.A. Instrumentation. Presented at Care of the Injured Voice: Symposium for Speech-Language and Voice Pathologists, Voice Teachers, and Physicians, Columbia, SC, October 1988.
- Busacco, D. Walden, B., Montgomery, A.A. and Prosek, R. The effects of age on auditory-visual speech recognition ability. American Speech-Language-Hearing Association Conference on Communication Sciences and Disorders and Aging. Washington, D.C., September 1988.
- Walden, B.E., Cord, M.T., Demorest, M.E. and Montgomery, A.A. Consonant recognition through hearing aids and via speechreading. Presented at AMEDD Short Course, Baltimore,

MD, 1987.

Walden, B.E., Cord, M.T., M.E. Demorest, and A.A. Montgomery. Effects of amplification and visual cues on consonant recognition. Presented at Military Audiology and Speech Pathology Society Meeting, 1987.

Walden, B.E., Cord M.T., Demorest, M.E., and Montgomery, A.A. Effects of amplification and visual cues on consonant recognition. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, November 1987.

Busacco, D.A., Walden, B.E., Montgomery, A.A., and Prosek, R.A. The effects of age on auditory-visual speech recognition by the hearing impaired. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, November 1987.

Prosek, R.A., Montgomery, A.A., Walden, B.E., and Cord, M.T. Constancy of relative timing for stutters and nonstutters. Presented at American Speech-Language-Hearing Association Convention, New Orleans, LA, November 1987.

Braida, L., Bustamante, D., Montgomery, A.A., Revoile, S.G., and Uchanski, R. Hearing-aid processed speech. Presented at American-Speech-Language-Hearing Association Convention, New Orleans, LA, November 1987.

Montgomery, A.A. and Finn, K.E. The use of visible lip information in automatic speech recognition. Presented at EUSIPCO-86, The Hague, Netherlands, September 1986.

Hawkins, D.B., Walden, B.E., Montgomery, A.A. and Prosek, R.A. A new procedure for determining LDL's in selecting SSPL90. Presented at American Speech-Language-Hearing Association Convention, Washington, D.C., November 1985.

Hawkins, D.B., Prosek, R.A., Montgomery, A.A., Walden, B.E. Binaural suprathreshold loudness summation in hearing-impaired listeners. Presented at American Speech-Language-Hearing Association Convention, Washington, D.C., November 1985.

Hawkins, D.B., Montgomery, A.A., Prosek, R.A., and Walden, B.E. Examination of two issues concerning functional gain measurements. Presented at American Speech-Language-Hearing Association Convention, Washington, D.C., November 1985.

Montgomery, A.A., Traynor, R.M., Smaldino, J.J., Kopra, L.L., Dunlop, R.J., Kopra, M., Abrahamson, J., Garstecki, D.C. and Raz, I. High technology in aural rehabilitation. Presented at American Speech-Language-Hearing Association Convention, Washington, D.C., November 1985.

Prosek, R.A., Montgomery, A.A., Walden, B.E. and Hawkins, D.B. Formant frequencies of stuttered and fluent vowels. Presented at American Speech-Language-Hearing Association Convention, Washington, D.C., November 1985.

Montgomery, A.A. Evaluation of a vowel shadowing task. Presented at the 110th meeting of the Acoustical Society of America, Nashville, TN, November 1985.

Montgomery, A.A. (with Levitt, H. and Pickett, J.M.) Digital signal processing to improve speech recognition. Miniseminar, American Speech-Language-Hearing Association Convention, 1984. Abstract in ASHA, 26, 60, 1984.

Prosek, R.A., Montgomery, A.A., Walden, B.E., and Hawkins, D.B. Some relations between voice quality judgments and derived acoustic measurements. Paper presented at 107th Meeting of the Acoustical Society of America, 1984. Abstract in Journal of the Acoustical Society of America, 75, Suppl. 1, S8, 1984.

Walden, B.E. and Montgomery, A.A. Effects of visual cues on auditory phoneme boundaries. Presented at American-Speech-Language-Hearing Association Convention, 1984. Abstract in ASHA, 26, 74, 1984.

Montgomery, A.A. The search for invariant visible cues in lipreading. Presented at the 105th Meeting of the Acoustical Society of America, 1983. Abstract in Journal of the Acoustical Society of America, 73, Suppl. 1, S15, 1983.

Surr, R.K., Montgomery, A.A., and Mueller, H.G. Variability of dichotic scores in listeners

with sensorineural hearing loss. Paper presented at American Speech-Language-Hearing Association Convention, 1983. Abstract in ASHA, 25, 165, 1983.

Walden, B.E., and Montgomery, A.A. Identification and discrimination of visually presented synthetic consonant-vowel stimuli. Presented at 106th Meeting of the Acoustical Society of America, 1983. Abstract in Journal of the Acoustical Society of America, 74, S1, 1983.

Montgomery, A.A. Evaluation of a model for generating and displaying synthetic animated lip shapes. Presented at the 104th Meeting of the Acoustical Society of America, 1983. Abstract in Journal of the Acoustical Society of America, 72, Suppl. 1, S80, 1982.

Prosek, R.A., Runyan, C.M., Montgomery, A.A., and Walden, B.E. The effects of rate changes on the identification of treated stutterers. Presented at American Speech-Language-Hearing Association Convention, 1982. Abstract in ASHA, 24, 734, 1982.

Montgomery, A.A. Effects of consonantal context on vowel lipreading. Presented at the 101st Meeting of the Acoustical Society of America, 1981. Abstract in Journal of the Acoustical Society of America, 69, Suppl. 1, S122, 1981.

Montgomery, A.A. Development of a model for generating synthetic animated lipshapes. Presented at 100th Meeting of the Acoustical Society of America, 1980. Abstract in Journal of the Acoustical Society of America, Suppl. 1, 68, S58, 1980.

Anderson, S.E., and Montgomery, A.A. The use of assertiveness training in adult aural rehabilitation. Paper presented at American Speech-Language-Hearing Association Convention, 1979. Abstract in ASHA, 21, 768, 1979.

Montgomery, A.A. Coarticulation and lipreading: Comparison of synthetic and real stimuli. Paper presented at American Speech-Language-Hearing Association Convention, 1979. Abstract in ASHA, 21, 738, 1979.

- Surr, R.K., Montgomery, A.A., and Schuchman, G.I. Relationship between hearing aid issuing patterns and reported usage. Reported at Tri-State Speech and Hearing Association Workshop, Williamsburg, Virginia, 1979.
- Montgomery, A.A. Generation and evaluation of synthetic facial images for lipreading. Presented at American Speech-Language-Hearing Association Convention, 1978. Abstract in ASHA, 20, 778, 1978.
- Punch, J.L., Montgomery, A.A., and Howard, M.T. Relationship between hearing aid electroacoustic characteristics and speech quality judgments. Paper presented at American Speech-Language-Hearing Association Convention, 1978. Abstract in ASHA, 20, 766, 1978.
- Montgomery, A.A. Research on auditory-visual integration for adult hearing aid users. Presented at Academy of Rehabilitative Audiology, Summer Meeting, 1977.
- Montgomery, A.A. Assessment of a new auditory-visual integration technique. Presented at American Speech-Language-Hearing Association Convention, 1977.
- Schwartz, D.M., Surr, R.K., Montgomery, A.A., Walden, B.E., and Prosek, R.A. Evaluating the effectiveness of high-pass amplification in listeners with hearing loss above 1000 Hz. Presented at Symposium on Current Trends in Audiology and Hearing Prosthetics Research, University of Wyoming, 1977.
- Schwartz, D.M., Surr, R.K., Montgomery, A.A., Prosek, R.A., and Walden, B.E. Performance of high frequency impaired listeners with conventional and extended high frequency amplification. Symposium on Auditory and Hearing Prosthetic Research, Laramie, Wyoming, 1977.
- Sims, D., and Montgomery, A.A. Multidimensional analysis of auditory and visual perception among the profoundly hearing impaired. Presented at 94th Meeting of the Acoustical Society of America, 1977.

- Walden, B.E., and Montgomery, A.A. Consonant similarity judgments by normal and hearing-impaired subjects. Presented at American Speech-Language-Hearing Association Convention, 1977.
- Prosek, R.A., Montgomery, A.A., and Walden, B.E. Preliminary studies in biofeedback for hypertensive voice disorders. Presented at American Speech-Language-Hearing Association Convention, 1976.
- Montgomery, A.A. Specialized techniques in aural rehabilitation. Miniseminar presented at American Speech-Language-Hearing Association Convention, 1976.
- Montgomery, A.A. Application of clustering and scaling techniques to speech and hearing problems. Presented at Advanced Seminar on Classification and Clustering, sponsored by Mathematics Research Center, Madison, Wisconsin, 1976.
- Montgomery, A.A. An approach to aural rehabilitation for the hearing-impaired adult. Presented at 18th Annual Convention of the Ontario Speech and Hearing Association, Toronto, 1976.
- Montgomery, A.A. A model for the effects of coarticulation on vowel and consonant visibility. Presented at American Speech-Language-Hearing Association Convention, 1975.
- Montgomery, A.A. Strategies for the investigation and quantification of lipreading. Miniseminar presented at American Speech-Language-Hearing Association Convention, 1975.
- Jackson, P., Montgomery, A.A., and Binnie, C. Perceptual parameters underlying lipreading performance. Presented at American Speech-Language-Hearing Association Convention, 1974.
- Percifield, P., Hampton, J., and Montgomery, A.A. Children's articulatory and auditory awareness of differences between vowel sounds. Presented at American Speech-Language-Hearing Association Convention, 1974.

- Horii, Y., Ringel, R., and Montgomery, A.A. Application of computers in acoustic analysis of disordered speech. Presented at American Speech-Language-Hearing Association Convention, 1973.
- Montgomery, A.A., and Noll, D. An articulatory analog of the vocal tract. Presented at American Cleft Palate Association Convention, 1973.
- Walden, B.E., and Montgomery, A.A. Dimensions of consonant perception in hearing-impaired listeners. Presented at American Speech-Language-Hearing Association Convention, 1973.
- Bodle, P., Binnie, C., and Montgomery, A.A. Auditory and visual contributions to the perception of selected English consonants. Presented at American Speech-Language-Hearing Association Convention, 1972.
- Del Polito, G., and Montgomery, A.A. An evaluation of three measures of articulation proficiency and intelligibility in retarded children. Presented at American Speech-Language-Hearing Association Convention, 1972.
- Montgomery, A.A. Computers, L.D. and public school record keeping. Presented at 1972 International Conference of the Association for Children with Learning Disabilities, 1972.
- Snow, T., and Montgomery, A.A. Observations on a multiple harmonic  $f_0$  tracking program. Presented at 84th Meeting of the Acoustical Society of America, 1972.
- Greenberg, B., and Montgomery, A.A. Sentence retention and syntactic complexity in children. Presented at American Speech-Language-Hearing Association Convention, 1971.
- Montgomery, A.A. Speech processing and synthesis by computer. Presented at National Conference on Computers in Human Communication, 1971. Abstract in Acta Symbolica, 2, 26, 1971.
- Banikiotes, F., Banikiotes, P., and Montgomery, A.A. Male and female auditory reinforcement of

infant vocalization. Presented at American Psychological Association Convention, 1970.

Prosek, R.A., and Montgomery, A.A. Some physical correlates of vocal effort and loudness. Presented at American Speech-Language-Hearing Association Convention, 1969.

Montgomery, A.A. Computer Analysis of Speech. Presented at American Speech-Language-Hearing Association Convention, 1968.

Montgomery, A.A., and Burk, K. Determination of vocal limits: Methodology and application. Presented at American Speech-Language-Hearing Association Convention, 1967.

Ringel, R., House, A., and Montgomery, A.A. Scaling articulatory behavior: Intraoral air pressure. Presented at Acoustical Society of America Convention, 1967.

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### **Invited Presentations**

Montgomery, A.A. "Adult aural rehabilitation." Texas Christian University, Fort Worth, TX, 1996.

Montgomery, A.A. "Factors influencing lip reading." Twenty-Fifth Anniversary Conference and Reunion, Vancouver, British Columbia, May, 1994.

Montgomery, A.A. "Coping in difficult listening situations." Augusta Group of Self Help for Hard of Hearing People, Aiken, SC, February 1993.

Montgomery, A.A., Erber, N.P., & Osborn, R.R. "Computer-generated speech stimuli for visual communication research." LaTrobe University Research Colloquium Series, Melbourne, Australia, April 1992.

Montgomery, A.A. "The role of "neighborhood"

structure in lexical access of spoken language.”  
LaTrobe University Research Colloquium  
Series, Melbourne, Australia, May 1992.

Montgomery, A. A. “Cochlear Update.” Research and  
Continuing Education Workshop, Melbourne,  
Australia, June 1992.

Montgomery, A.A. "Tinnitus: Site of lesion testing?"  
Presented at Seminar in Audiology, University  
of South Carolina, Columbia, South Carolina,  
November 1990.

Montgomery, A.A. "Medical management of tinnitus."  
Presented at conference on Management of  
the Hearing Impaired, Dover General Hospital,  
Dover, New Jersey, October 1990.

Montgomery, A.A. "Site of lesion testing and  
rehabilitation for tinnitus." Presented at  
conference on Management of the Hearing  
Impaired, Dover General Hospital, Dover, New  
Jersey, October 1990.

Montgomery, A.A. "Otoacoustic emissions."  
Presented at conference on Management of  
the Hearing Impaired, Dover General Hospital,  
Dover, New Jersey, October 1990.

Montgomery, A.A. "Modern approaches to aural  
rehabilitation for the adult: Individual therapy."  
Presented at conference on Management of  
the Hearing Impaired, Dover General Hospital,  
Dover, New Jersey, October 1990.

Montgomery, A.A. "Modern approaches to aural  
rehabilitation for the adult: Group therapy."  
Presented at conference on Management of  
the Hearing Impaired, Dover General Hospital,  
Dover, New Jersey, October 1990.

Montgomery, A.A. "Aural rehabilitation: Review and  
Preview." Presented at Vanderbilt/VA  
Conference on Amplification, Nashville,  
Tennessee, September 1990.

Montgomery, A.A. "Tinnitus site of lesion testing."  
Presented at Walter Reed Army Medical  
Center, Washington, DC, September 1990.

Montgomery, A.A. "Approaches to the treatment of  
tinnitus." Presented at Walter Reed Army

Medical Center, Washington, DC, September 1990.

Montgomery, A.A. "Towards a cite-of-lesion test battery for tinnitus." Presented at Walter Reed Army Medical Center, Washington, DC, September 1990.

Montgomery, A.A. "Clinical research on tinnitus." Presented at Audiology staff meeting, Dorn VA Hospital, Columbia, South Carolina, June 1990.

Montgomery, A.A. "Management of the hearing-impaired adult: An interactive process." Presented at the annual convention of the New Jersey Speech and Hearing Association, Meadowlands, New Jersey, May 1990.

Montgomery, A.A. "Audiology in the year 2001: A high-tech look at the profession." Presented at the annual convention of the New Jersey Speech and Hearing Association, Meadowlands, New Jersey, May 1990.

Montgomery, A.A. "Assertive communication strategies." Presented at meeting of SHHH-PALCO, Columbia, South Carolina, April 1990.

Montgomery, A.A. "Oto-acoustic emissions: Auditory phenomenon and clinical tool." Presented at first annual convention, South Carolina Academy of Audiology, Columbia, South Carolina, March, 1990.

Montgomery, A.A. "Quantitative approaches to aural rehabilitation." Presented at Research Colloquium, University of Georgia, 1990.

Montgomery, A.A. "Applications of fuzzy set theory to speechreading." Presented at JICAI, Detroit, Michigan, August 1989.

McCarthy, P., Montgomery, A.A., and Mueller, H.G. "Decision making in rehabilitative audiology." Presented at annual convention of American Academy of Audiology, Kiawah Island, South Carolina, April 1989.

Montgomery, A.A. "Instrumentation." Presented at conference on Care of the Injured Voice, Columbia, South Carolina, October 1988.

Montgomery, A.A. "Digital Hearing Aids." Presented at Military Audiology Conference, Denver, Colorado, May 1988.

Montgomery, A.A. "Digital signal processing in hearing rehabilitation." Presented to computer science class at University of Maryland, April 28, 1987.

Montgomery, A.A. with Brian Walden and Marilyn Demorest. "Teleconference on speech recognition in hearing aid assessment," conducted on April 24, 1987 for Department of Communicative Disorders, University of Arkansas, Little Rock, Arkansas.

Montgomery, A.A. and Prosek, R.A. "Clinical uses of the Speech Master." Presented to Montgomery County Auditory Therapists, February 26, 1987.

Montgomery, A.A. "Development of an audio-visual articulation index." Department of Communicative Disorders Seminar, University of South Carolina, February 13, 1987.

Montgomery, A.A. "New directions in hearing aids and adult aural rehabilitation." Half day workshop, School of Audiology and Speech Science, University of British Columbia, Vancouver, British Columbia, November 7, 1986.

Montgomery, A.A. "The hearing-impaired adult: Greater opportunities through advances in rehabilitation." School of Audiology and Speech Sciences, University of British Columbia, November 7, 1986.

Montgomery, A.A. "Research and techniques in aural rehabilitation." Graduate colloquium, University of Tennessee, April 28, 1986.

Montgomery, A.A. "Rehabilitation of the hearing-impaired adult." One-day workshop presented at Miami University, Oxford, Ohio, March 28, 1986.

Montgomery, A.A. "Development of new tests of speech production and perception." Department of Communicative Disorders

Seminar, University of South Carolina,  
Columbia, South Carolina, Feb 7, 1986.

Montgomery, A.A. "Computer methods in the study of lipreading." Presented at 35th Annual Georgetown University Round Table on Languages and Linguistics, 1984.

Montgomery, A.A. "Current approaches to understanding lipreading." Colloquium Series, Department of Hearing and Speech Sciences, University of Maryland, 1984.

Montgomery, A.A. "An analysis of lipreading research." Presented at Haskins Laboratories Research Colloquium, 1983.

Montgomery, A.A. Panel member, What is Auditory Habilitation? District of Columbia Speech and Hearing Association Convention, 1983.

Montgomery, A.A. "Lipreading research." Presented at Graduate Colloquium, City University of New York, 1982.

Montgomery, A.A. "Clinical research at Walter Reed." Presented at Graduate Colloquium, Department of Speech Pathology and Audiology, University of South Carolina, 1982.

Montgomery, A.A. "Current research in lipreading." Presented at Cognitive Psychology Colloquium, University of Maryland, 1980.

Montgomery, A.A. "Technical possibilities in signal processing for the hearing impaired." NINCDS Acoustic Signal Processing Workshop; opening address to participants, 1980.

Montgomery, A.A. "Rehabilitating the hard-of-hearing adult." Presented at Annual Meeting of North Carolina Speech, Hearing and Language Association, Wilmington, North Carolina, March, 1979.

Montgomery, A.A. "Applied research in Audiology and Speech Pathology." Presented at Department of Speech and Hearing Sciences Research Seminar, University of Maryland, 1978.

Montgomery, A.A. "Techniques for training auditory-

visual integration." Presented at National Technical Institute for the Deaf, Research Seminar, 1977.

Montgomery, A.A. "Applications of multi-dimensional scaling in speech perception research." Presented at Bowling Green State University Graduate Research Colloquium, 1977.

Montgomery, A.A. "Use of biofeedback in therapy for fluency disorders." Presented at Bowling Green State University, Division of Speech Pathology and Audiology Research Seminar, 1977.

Montgomery, A.A. "Introduction to microprocessors." Presented at CHABA Sect. 6 Meeting, Washington, D.C., 1977.

Montgomery, A.A. "Aural rehabilitation." Presented to Seventh Annual Military Hearing Conservation Workshop, United States Army Environmental Hygiene Agency, Aberdeen Proving Ground, 1976.

Montgomery, A.A. "Aural rehabilitation." Presented to Eighth Annual Military Hearing Conservation Workshop, United States Army Environmental Hygiene Agency, Aberdeen Proving Ground, 1976.

Montgomery, A.A. "Deaf education and rehabilitation." Presented to Otolaryngology Basic Science Course, Armed Forces Institute of Pathology, 1976.

Montgomery, A.A. "Biofeedback in the treatment of hypertensive voice disorders." Presented to staff and students of the Speech Pathology Department of the University of Vermont, 1976.

Walden, B.E., and Montgomery, A.A. "A new aural rehabilitation program for the hearing-impaired adult." Presented to the Washington Area Hearing and Speech Research Group, 1976.

Montgomery, A.A. "Prescriptive treatment of the lipreading client." Presented to the Victorian Audiological Society (Australia), 1975.

Montgomery, A.A. "A manual language for the language-handicapped child." Presented to

the Australian Association for Speech and Hearing (Victorian Branch), 1975.

Montgomery, A.A. "A programmed approach to teaching lipreading." Presented to Australian Association for Better Hearing (Victorian Chapter), 1975.

Montgomery, A.A. "A machine-scorable syntax screening test: Its use in public school system programs." Presented to Waukegan County Speech Therapy Association, 1973.

Montgomery, A.A. "Use of multidimensional scaling in speech and hearing research." Presented to staff of the Institute of Logopedics and University of Wichita, 1973.

Montgomery, A.A. "Developments in stuttering therapy." Presented to Waukegan County Speech Therapy Association, 1972.

Montgomery, A.A. "Stuttering therapy for the institutionalized retarded patient." Presented to Fort Wayne State School Clinical Personnel, 1971.

Montgomery, A.A. "Stuttering therapy." Presented to Jeffersonville area meeting for public school clinicians, 1970.

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## **Professional Consultations**

**Invited participant and consultant - National Institute of Neurological and Communicative Disorders and Stroke; Workshop on Otitis Media and Educational Development, 1978.**

**Consultant, National Institute of Neurological and Communicative Disorders and Stroke, April, 1977.** Duties involved a detailed examination of the Boston VA Hospital Aphasia Research Grant Proposal (\$1,500,000), staff, and facilities.

**Invited participant and consultant - Research Conference on Deafness, Gallaudet College, 1977.**

**Consultant to Victorian School for Deaf Children, Melbourne, Australia, 1974-75.** Activities centered on assisting speech staff in developing graded, videotaped materials for teaching lipreading and syntax.

**Consultant to National Information Retrieval Service in**

**Speech and hearing at Johns Hopkins University, 1973.**  
Activities centered on the retrieval and indexing of references in the area of stuttering.

**Consultant to Army Audiology and Speech Center, Walter Reed Army Medical Center, 1972-74.** Activities included advising staff on statistical methods and research design, developing and adapting computer programs, and reviewing manuscripts and research proposals.

**Consultant to the Indiana Department of Public Instruction, Division of Special Education, 1971-73.**  
Development of the current forms, methods, and software for automating the state's survey of the incidence of speech and hearing disorders and the clinical services rendered each year were primary activities.

**Consultant to White County Public Schools, Indiana, 1968-69.** Performed a comprehensive evaluation of the County's mobile speech and hearing services program.

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**WRAMC Clinical  
Investigation Protocols:  
Principal Investigator**

WU-2517: "Evaluation of a Specialized Technique for Training Audiovisual Integration in Hard-of-Hearing Patients."

WU-2524: "The Effects of Assertiveness Training on Hearing-Impaired Soldiers."

WU-2525: "Generation and Evaluation of Synthetic Facial Images for Studying and Training Lipreading."

WU-2535: "Development of a Method for Generating Individualized Aural Rehabilitation Materials and Evaluation Data for Hard-of-Hearing Patients (A Materials Generating Algorithm)."

WU-2536: "Effects of Consonantal Context on Vowel Lipreading."

WU-2556: "Investigation of Digital Speech Processing Techniques for Enhancing Intelligibility of Speech for Hearing Impaired Adults."

WU-2561: "Development of a Procedure for

## Assessing the Perceptual-Motor Control of Speech."

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### **Computer Applications**

(The following algorithms and software have been written by me for use by the Research Section and the Army Audiology and Speech Center.)

1. MATRIX - A set of routines to manipulate and analyze data matrices of the type generated in perceptual research, including similarity and confusion matrices.
2. ALLCOR - A program to generate various sorts of partial correlation coefficients from correlation matrices.
3. ANIMAT - I/O routine to provide rapid sequential accessing of graphic images (i.e., animation) on Research Section's intelligent graphic system.
4. TOURN - A program to simulate the tournament method of hearing aid selection.

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### **Membership in Professional Societies**

- American Speech-Language-Hearing Association
- Acoustical Society of America
- Society of Sigma Xi
- American Psychological Association
- Academy of Rehabilitative Audiology
- South Carolina Speech and Hearing Association

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### **Excerpts from ASHA Fellowship Document (1989)**

#### 1. CLINICAL SERVICE

Dr. Montgomery, as a "recovered stutterer" has maintained an active interest in speech pathology and aural rehabilitation throughout his career, and is currently providing direct clinical services in adult aural rehabilitation. Prior to that he started the North Dakota Lost Cord Club (1961), served as the speech pathologist on the Minot Cleft Palate Team, initiated the speech

pathology services program at Iowa State University (1962) and resurrected the stuttering program at Purdue University (1967) - [see Academic Teaching for details].

## 2. ACADEMIC TEACHING

Dr. Montgomery has consistently been recognized as a superior teacher. In 1961, on his first professional assignment, he was voted "Outstanding Teacher of Speech" in North Dakota. At Purdue, where he taught speech pathology and speech science for six years, he was consistently rated in the "high fives" on a six-point rating scale. His contributions there included:

1) developing one of the first, if not THE first course for master's students in introduction to computers and computer applications for speech and hearing majors (AUS 538), first offered in 1968, and 2) completely revising and modernizing the required master's level speech science sequence (AUS 540,545).

He also revitalized and developed the master's level stuttering curriculum at Purdue (prior to Marty Adams arrival there) so that practicum, participation in the large stutterer's group meeting, and the content of AUS 518 (Stuttering Methods) were all coordinated and reflected a coherent approach to treatment stemming from the course work.

A teacher can also be judged by his students. In that regard Dr. Montgomery can be considered very successful: His six doctoral students from that period have gone on to become tenured faculty members (2), head of department, Dean of a College of Allied Health, ASHA coordinator for Audiology (now a Washington lobbyist), and a director of a large clinical research facility. His two most recent doctoral students in computer science and linguistics (Edge and Finn) are currently director of a large computer center in San Antonio and project director in Artificial Intelligence at Stamford Research Institute, respectively.

Recently Dr. Montgomery has moved back to an academic setting at the University of South Carolina. Here he has developed and offered for the first time the Advanced Speech Science course for the Ph.D. students in the new doctoral program. He again received high ratings (3.8 on a 4-point scale).

He has also been invited to present workshops and lectures all over the United States and in Canada and Australia. His list of invited presentations includes over 50 entries [See vita for listing].

## 3. RESEARCH AND PUBLICATIONS

Dr. Montgomery's primary work in the last 12 years has been conducting basic and applied research in speech pathology and audiology, and particularly in speechreading and aural rehabilitation. He is recognized as a national authority in speechreading and was recently awarded an NIH Senior Fellowship to apply fuzzy set theory to speechreading. He has over 40 publications in refereed journals and over 50 presentations to professional meetings, primarily ASHA and the Acoustical Society. (See vita for listing).

Some themes and contributions in his research that may not be immediately apparent are as follows:

1. Careful use of multidimensional scaling and hierarchical clustering in auditory and visual speech perception by the hearing-impaired. (Montgomery and

Demorest, 1988; Walden and Montgomery, 1975; Walden et al, 1981, Punch, Montgomery et al, 1980)

2. An ongoing program of research in speechreading (Montgomery and Finn, 1986; Montgomery Walden and Prosek, 1986; Finn and Montgomery, 1988; Montgomery et al, 1987; Montgomery et al, 1984; Montgomery and Jackson, 1983; Walden et al, 1977, 1981; Binnie, Montgomery and Jackson, 1974; and Jackson, Montgomery and Binnie, 1976).
3. The development of the first practical system to generate synthetic animated lip images for studying speechreading. (Montgomery and Soo Hoo, 1982). This computer system supplies graphic images of a pair of lips speaking and has been used in research such as the visual analog of the Haskin's Laboratories consonant-boundary studies (Walden, Montgomery and Prosek, 1987)

#### 4. SERVICE TO ASHA

Dr. Montgomery has served ASHA in many ways over the past fourteen years.

1. He recently completed a three-year term on the Council on Professional Standards, where he chaired the subcommittee on revision of the CCC's.
2. He has served more or less continuously as a reviewer for JSHR or JSHD in the area of speechreading and statistics for several years. He is currently reviewing for JSHD. (At one point he was reviewing for JSHR, JSHD, JASA and Ear & Hearing!)
3. He was on the Program Committee for the 1987 ASHA convention (aural rehabilitation).
4. He served on the first Steering Committee for the ASHA Foundation Conference on the Personal Computer as a Professional Tool (1983).
5. He was a member of the Advisory Committee for Leadership in Computer Technology (1984).
6. He served on the DSH Abstracts ad hoc advisory committee (1983-84).
7. He served on the advisory committee to select the computer for the new ASHA headquarters.

#### 5. SERVICE TO STATE AND OTHER PROFESSIONAL ORGANIZATIONS

1. Dr. Montgomery served on the Communicative Disorders Review Committee of NINCDS (1978-82). At times he was one of only two ASHA members on this large committee, in effect "holding the line" against otolaryngologists, neurologists and physiologists. Grants totaling over \$40,000,000 were reviewed during this period.

2. Member, Technical Committee on Speech Communication, Acoustical Society of America (1983-86).
3. Member of several ad hoc review committees for NINCDS and NSF. Most recently on an SBIR (small business) panel for NINCDS (March 1989).
4. Served as consultant to several organizations. These were primarily unpaid or expenses-only, and thus constitute service rather than employment:
  - a. Victorian School for Deaf Children,  
Melbourne, Australia,
  - b. National Information Retrieval Service in  
Speech and Hearing at Johns Hopkins,
  - c. Indiana Department of Public Instruction,  
Division of Special Education,
  - d. White County Public Schools, Indiana
  - e. Johns Hopkins Sensory Communication Laboratory