

----- Douglas E. Cross, Ph.D. -----
Associate Professor, Speech Science/Speech-Language Pathology
Curriculum Vita

PROFESSIONAL BACKGROUND

Professional Address

Department of Speech-Language Pathology and Audiology

Ithaca College

Ithaca, New York 14850

(607) 274-3073

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web site: www.ithaca.edu/cross

Residence

215 Buttermilk Lane

Ithaca, New York 14850

(607) 273-7778

Education

- Ph.D. Speech Science, University of Tennessee, 1978
- M.S. Speech Pathology, University of Alabama, 1974,
- B.S. Secondary Education/English, University of Alabama, 1972,

Employment

- Ithaca College Associate Professor: (1984-present, tenured 1987)
- University of Iowa: Assistant Professor (1980-1984)
- University of North Carolina-Greensboro: Assistant Professor (1978-1980)
- Clinical/Research Associate: Residential Stuttering Treatment Program, University of New South Wales, Australia (1978).

Professional Affiliations

- American Speech, Language, and Hearing Association
- Special Interest Division #4 of ASHA (Fluency Disorders)
- International Fluency Association
- National Stuttering Project

Present Responsibilities by Credit Hour Distribution: Ithaca College

- Teaching: 12 credit hours per semester
 - 6 credits classroom teaching (Anatomy and Physiology of Speech (UG), Basic Speech Science (UG), Speech Science (GR), Fluency Development and Disorders (GR), Advanced Fluency (GR)
 - 6 credits clinical supervision (equals 10 clients). Direct Stuttering Treatment Program
- Scholarship: 0 credit hours
- Service: 0 credit hours

SUMMARY OF PROFESSIONAL ACTIVITIES AND PROJECTS

Current Projects:

- Developing three-part DVD series for teaching Anatomy and Physiology of Speech.
- Investigating and implementing the concept of speech “fluidity” as a valid and reliable alternative to the concept of segmental “fluency” counts
- Developing and assessing the reliability and validity of psychometric scaling protocols for evaluating and shaping dynamic characteristics of speech behaviors
- Developing interactive multimedia animation programs for training fluid movement and communication “pace” for fluency clinicians and clients
- Developing a digital audio/video library and DVD series of both historical and current examples of fluency evaluation and treatment methodologies.
- Developing a comprehensive digital audio/video library of speech fluency and disfluency samples
- Research Projects Planned or in Progress
 - Correlation among preferred tapping rates, nonspeech- and speech-related movement pace in normal speakers and persons who stutter
 - Acoustic analysis of speech and perception of speech naturalness under conditions of modified communication pace using computer-based visual imagery

Recent Projects Completed in 2006-2007

- Three-part DVD series on Anatomy and Physiology of Speech (2007)
- Interactive digital animations for training and shaping communication “pace” (2006-07)

Background Activities

- **Research** investigations resulting in refereed publications/presentations and/or grants in the following areas:
 - Fluency: Laryngeal physiology, movement coordination, reaction time, biofeedback, fluency conditioning, visual/auditory imagery, communication pace, measurement and shaping fluid speech movement, interactive multimedia materials and animations for shaping fluid speech
 - Speech Perception/Neurolinguistic Processing: Long-latency auditory evoked potentials to linguistic and nonlinguistic variations in intonation and stress patterns in normal children and adults
 - Marine Mammal Communication: Development of non-invasive methods for recording short- and long-latency auditory evoked potentials in Atlantic bottlenose dolphins and Atlantic Sea Lions
 - Interactive Multimedia Materials: Interactive Multimedia Animations for teaching and clinical application in shaping communication pace and fluid Speech Movement
- **Clinical Application and Program Development**: Developed and implemented a "systems" based evaluation and treatment program in fluency disorders. This program integrates research on movement, motor control, and performance psychology. This model and original assessment scales are presented in the texts, *A Systems Approach to Stuttering Therapy: SAST* (Cross, 1998, 2003) and *Evaluation and Diagnosis of Fluency Disorders* (Cross, 1999).

GRANTS AND AWARDS

Cross., D., (1980) Latency and duration of rapid movement speech sequences of adult stutterers and nonstutterers. Faculty Research Seed Grant, University of Iowa.

Cross., D., (1987) Hemispheric specialization for discrimination of vocalization patterns by Atlantic bottlenose dolphins. Faculty Research Grant, Ithaca College.

Cross., D., (1988) Surface recorded auditory evoked potentials from the Atlantic bottlenose dolphin and California sea Lion . Faculty Research Grant, Ithaca College.

Cross., D., (1990) Neurophysiology of Stuttering and Spastic Dysphonia. Instructional Development Award, Ithaca College.

Cross., D., (1990) Analysis of Electrophysiological Correlates of Segmental and Suprasegmental Cues in Human Language. Faculty Reassignment Time Award, Ithaca College.

Cross., D., (1992) Electrophysiological Correlates of Linguistic Intonation in Normal Speaking Five-Year-Old Children . Faculty Research Grant, Ithaca College.

Cross., D., (1992) Electrophysiological Correlates of Tonal Stress Pattern in Normal Adults. Faculty Research Grant Ithaca College.

Cross., D., (2003) Interactive Multimedia Animations for Teaching Concepts, Perception, and Modification of Fluid Speech Movement . Ithaca College Faculty Research Grant.

PUBLICATIONS (PEER REVIEWED)

Cross, D.E., (1974) Inter and intra-rater reliability on a standardized test of articulation. Journal of the Alabama Speech and Hearing Association, 1973.

Cross, D.E. and Cooper, E.B. (1976). Self - versus investigator-administered presumed fluency reinforcing stimuli. Journal of Speech and Hearing Research, 19, 2, 241-246.

Cross, D.E., (1977). Effects of false increasing, decreasing, and true electromyographic biofeedback on the frequency of stuttering. Journal of Fluency Disorders, 2, 2, 109-116.

Cross, D.E., Shadden, B., and Luper, H.L., (1979). Effects of stimulus ear presentation on the voice reaction times of adult stutterers and nonstutterers. Journal of Fluency disorders, 4, 45-58.

Cross, D.E., and Luper, H.L., (1979). Voice reaction times of stuttering and nonstuttering children and adults. Journal of Fluency Disorders, 4, 59-77.

Cross, D.E., and Luper, D.E., (1983). Relationship between the finger and voice reaction times of stuttering and nonstuttering children and adults. Journal of Speech and Hearing Research, 26, 356-361.

Cross, D.E., (1987). Comparison of reaction time and accuracy measures of laterality for normal speakers and stutterers. *Journal of Fluency Disorders*, 12, 271-286.

Cross, D.E., and Olson, P. (1987). Interaction between jaw kinematics and voicing onset for stutterers and nonstutterers in a VRT task. *Journal of Fluency Disorders*, 12, 367-380.

Cross, D.E., and Olson, P. (1987). Articulatory-Laryngeal Interaction in Stutterers and Normal Speakers: Effects of a Bite-Block on Rapid Voice Initiation. *Journal of Fluency Disorders*, 12, 6, 407-418.

Cross, D.E., and Luper, H.L. (1987). Relation between finger reaction time and voice reaction time in stuttering and nonstuttering children and adults. In: *Readings in Stuttering* (C. Healey, ed.). Longman, New York.

PRESENTATIONS (PEER REVIEWED)

Cross, D.E., "Self - versus investigator-administered presumed fluency reinforcing stimuli". Annual Meeting of the American Speech and Hearing Association, Washington, D.C., 1975.

Cross, D.E., "Effects of false increasing, decreasing, and true electromyographic biofeedback on the frequency of stuttering". Annual Meeting of the American Speech and Hearing Association, Houston, Texas, 1976.

Cross, D.E., and Shadden, B., "Effects of ear presentation on the voice reaction times of adult stutterers and nonstutterers". Annual Meeting of the American Speech and Hearing Association, Chicago, Illinois, 1977.

Cross, D.E., and Luper, H.L., "Voice reaction time of stuttering and nonstuttering children and adults". Annual Meeting of the American Speech and Hearing Association, San Francisco, California, 1978.

Luper, H.L., and Cross, D.E., "Relation between finger reaction time and voice reaction time in stuttering and nonstuttering children and adults". Annual Meeting of the American Speech and Hearing Association, San Francisco, California, 1978.

Cross, D.E., "Reaction times of stuttering and nonstuttering children and adults: Evidence of neurophysiological factors". Annual Meeting of the North Carolina State Speech and Hearing Association, Wilmington, N.C., 1978.

Cross, D.E., "Diagnosis and treatment of stuttering: Current consideration and biases". Annual Meeting of the North Carolina State Speech and Hearing Association, Southern Pines, N.C., 1980.

Cross, D.E., "Inter-hemispheric asymmetries and stuttering: Evidence from choice reaction time". Annual Meeting of the American Speech, Language, and Hearing Association, Detroit, Michigan, 1980.

Cross, D.E., Mitch, J., and Kelsey, S., "Effects of movement complexity on the motor programming strategies of stutterers and nonstutterers". Annual Meeting of the American Speech, Language, and Hearing Association, Toronto, Canada, 1982.

Cross, D.E., and Olson, P., "Articulatory - vocal timing during voice reaction-time tasks for stutterers and nonstutterers". Annual Meeting of the American Speech, Language, and Hearing Association, Toronto, Canada, 1982.

Cross, D.E., "Articulatory - vocal interaction for stutterers and normal speakers: Effects of speaking rate". Annual Meeting of the American Speech, Language, and Hearing Association, Cincinnati, Ohio, 1983.

Cross, D.E., and Sweet, J., "Mental imagery and stuttering: Electroencephalographic characteristics". Annual Meeting of the American Speech, Language, and Hearing Association, Washington, D.C., 1985.

Cross, D.E., and Sweet, J., "Mental imagery and stuttering: Behavioral characteristics". Annual Meeting of the American Speech, Language, and Hearing Association, Washington, D.C., 1985.

Cross, D.E., "Speech Motor Investigations in Stuttering: Perspectives and Directions". Invited paper at the Annual Meeting of the American Speech, Language, and Hearing Association, Detroit, Michigan, 1986.

Cross, D.E., "Research Methodologies and Funding: A Comparison of Academic versus Corporate Institutions". Meeting of Post Secondary Programs of Excellence in Math, Science, and Computer Education. United Technologies, Lake Buena Vista, Florida, 1988.

Cross, D.E., Demoors, T., and Sprague, M., "Electrophysiological Correlates of Linguistic Intonation". International Conference on Theoretical and Experimental Neuropsychology, Montreal, Canada, 1991.

Cross, D.E., Demoors, T., and Sprague, M., "Electrophysiological Correlates of Prosody in American English". Annual Meeting of the American Speech, Language, and Hearing Association, Atlanta, Georgia, 1991.

Cross, D.E., Sprague, M., and Demoors, T., "Electrophysiological Correlates of Non-Speech Intonation Patterns". International Conference on Theoretical and Experimental Neuropsychology, Montreal, Canada, 1992.

Cross, D.E., Cannon-Houlahan, M., and Hodgens, K., "Electrophysiological Correlates of Linguistic Stress in Single Words". International Conference on Theoretical and Experimental Neuropsychology, Montreal, Canada, 1992.

Cannon-Houlahan, M., Hodgens, K, Cross, D., and Sprague, M., "Electrophysiological Correlates of Non-Phonemic Intonation". Annual Meeting of the American Speech, Language, and Hearing Association, San Antonio, Texas, 1992.

Cross, D., "Electrophysiological Correlates of Linguistic Stress". Annual Meeting of the American Speech, Language, and Hearing Association, San Antonio, Texas, 1992.

Cross, D., "Speech Fluidity Versus Speech Fluency: A Dynamic Approach to Understanding, Measuring, and Shaping Effective Communication". Paper presented for the Sixth International Online Conference on Stuttering, October 2003.

Cross, D., "Understanding Speech Fluidity: A More Natural Approach to Assessing and Shaping Continuous Speech and Communication". Accepted for 2004 Special Interest Division 4 Clinical Leadership Conference on Stuttering, Portland, Oregon, June 2004.

TEXTS, EVALUATION PROTOCOLS, AND MULTIMEDIA MATERIALS

Texts

Cross, D.E. (1996, revised, 1998, 1999, 2003) *A Systems Approach To Stuttering Therapy: SAST* . Text presenting a systems based model on the nature, evaluation, and treatment of fluency disorders.

Cross, D.E. (1996, revised 1999) *Evaluating Fluency and Stuttering*. A model for evaluating and diagnosing disorders of fluency. Includes original protocols for measuring and profiling both segmental and non-segmental features of fluency disorders.

Cross, D.E. (1995) *Anatomy and Physiology of the Speech Mechanism: A Supplemental Text* . Compilation of two hundred plus drawings, graphs, and original materials on the anatomy and physiology of speech production. This text is used as a text in the course Anatomy and Physiology of Speech Production

Cross, D.E. (1995) *Assessment and Diagnosis of Speech and Language Disorders: Supplemental Materials* . A two hundred and fourteen page text of information, drawings, graphs, figures, and other materials pertinent to the evaluation and diagnosis of speech and language disorders. This text was compiled as a supplemental text for graduate and undergraduate courses in diagnosis of speech-language disorders.

Fluency Evaluation Protocols and Materials

Cross., D., (1998) *Evaluation Planning and Information Organization Checklist*

Cross., D., (1996, 2001, 2004, 2005) *The Individualized Fluency Profile*

Cross., D., (1996, 2003) *Interviewing the Adult Fluency Client*

Cross., D., (1996, 2003) *Interviewing the Child Fluency Client*

Cross., D., (1996, 2002, 2004, 2005) *Analysis of Fluid Speech Movement*

Cross., D., (1996, 2004, 2005) *Analysis of Fluid Speech Movement by Movement Phase*

Cross., D., (1996, 2002, 2003, 2005) *Analysis of Communication Pace*

Cross., D., (1998, 2001, 2003) *Writing the Fluency Evaluation Report*

Interactive Multimedia Software Programs: The following are completed computer-based animation programs used to teach and facilitate development of dynamic patterns of speech behavior in fluency and other movement related communication disorders.

Cross, D., (2000, 2002, 2003) *Teaching Communication and Movement Pace*. (Macromedia Director and Flash).

Cross, D. (2001, 2003) *Teaching Speech Movement Onset and Offset Transitions*. (Macromedia Director and Flash).

Cross, D. (2005, 2007) Instructional DVD Series: *Anatomy and Physiology of Speech: Articulation*

Cross, D. (2006, 2007) Instructional DVD Series: *Anatomy and Physiology of Speech: Respiration*.

Cross, D. (2007) Instructional DVD Series: *Anatomy and Physiology of Speech: Phonation*.

Cross, D. (2006, 2007) Instructional DVD Series: *Treatment of Stuttering – The Iowa Series*.

INVITED PRESENTATIONS AND PROFESSIONAL CONTRIBUTIONS

Cross, D., (1978) "Phonatory aspects of stuttering: Evidence from reaction time investigation". Presentation at the Research Colloquium, University of North Carolina at Greensboro.

Cross, D., (1980) "Diagnosis and treatment of stuttering in the public school setting". Workshop presented to the Davidson County Speech Pathologists, North Carolina

Cross, D., (1981) "Current trends in stuttering research and therapy". In-service training workshop presented to the Speech Pathology and Audiology Division, St. Lukes Hospital, Cedar Rapids, Iowa.

Cross, D., (1985) "Principles for treating dysfluency in the public school environment". A three part invited workshop for the Binghamton School District Conference Day.

Cross, D., (1985) "The nature and treatment of stuttering: An overview". Seminar presented at Cornell University Health Center Symposium.

Cross, D., (1986) "A systems approach to treating the young stutter: De-mystifying the problem". Workshop presented to the Ithaca City School District Speech Pathologists.

Cross, D., (1986) "Treating stuttering in the school-aged child". In-service workshop presented to Speech Pathology and Audiology Division, St. Joseph's Hospital, Elmira, N.Y.

Cross, D., (1986) "Issues in stuttering therapy for the school aged child". Invited presentation at the University of Tennessee Speech, Language, and Hearing Summer Conference.

Cross, D., (1986) "Directions in Dolphin Communication Research: A Comparison of Human and Marine Mammal Communication Models". Seminar presented to the Marine Mammal Research Staff, The Living Seas, Epcot Center, Lake Buena Vista Florida.

Cross, D., (1987) "Speech Motor Investigations in Stuttering: Perspectives and Directions". Invited paper at the Annual Meeting of the American Speech, Language, and Hearing Association, Detroit, Michigan.

Cross, D., (1987) "De-mystifying Stuttering Treatment for Children". Invited presentation to the Southern Tier Area Speech/Language/Hearing Association, Elmira, N.Y..

Cross, D., (1987) "Hemispheric Specialization for Discrimination of Vocalization Patterns By the Atlantic Bottlenose Dolphin". Faculty Forum, Ithaca College, N.Y.

Cross, D., (1988) "Non-invasive techniques for recording auditory evoked potentials from the Atlantic bottlenose dolphin". Faculty Forum, School of Health and Human Performance, Ithaca College.

Cross, D., (1988) "The Nature of Research: Concepts and Methods". World of Water Educational Program, United Technologies, Inc., Lake Buena Vista, Fl.

Cross, D., (1988) "Surface Recorded AEPs in Dolphins: A Summary". Presented at The Living Seas, Epcot Center, Lake Buena Vista, Florida.

Cross, D., (1988) "Dolphin Auditory Evoked Potentials". Faculty Forum, Ithaca College.

Cross, D., (1989) "Measurement of Cognition and Auditory Evoked Potentials in Atlantic Bottlenose Dolphins", Language and Cognition Series, Southern Illinois University.

Cross, D., (1990) "Treatment of Stuttering in the School-Age Child". Symposium presented at BOCES Superintendents' Conference, Binghamton, N.Y.

Cross, D., (1996) "Cortical Processing of Linguistic and Non-Linguistic Intonation and Stress Patterns". University of North Carolina at Chapel Hill.

Cross, D., (2003) Panel member on new directions in stuttering research and treatment. Sixth International Online Conference on Stuttering.

Cross, D., (2004) Panel member on evaluation and treatment of stuttering in children. Seventh International Online Conference on Stuttering.

Cross, D., (2004) "Panel member on the nature and direction in stuttering research in children. Seventh International Online Conference on Stuttering.

Cross, D., (2005) "Panel member: "The Researcher is In". Eighth International Online Conference on Stuttering.

DIRECTED STUDENT RESEARCH

Bowman, K.L. and Cross, D.E., (1979) Intra-hemispheric interference: Effects of verbal and nonverbal perceptual task on a unimanual motor task. Masters paper, University of North Carolina-Greensboro.

Cooley, M.J., and Cross, D.E., (1980) Effects of time limited response latency on the duration and interword interval of rapid movement speech sequences. Honors project, University of Iowa.

Olson, P., and Cross, D.E., (1982) Effects of bite block on the vocal reaction time of adult stutterers and normal speakers. Directed research project, University of Iowa.

Long, J., and Cross, D.E., (1983) Organizational characteristics of jaw movement during perceived fluent and dysfluent utterances. Honors project, University of Iowa.

Dedovich, M., Howland, J., and Cross, D.E., (1989) Segmental combination patterns for whistles of the Atlantic Bottlenosed dolphin. Directed student internship project at The Living Seas, Epcot Center, Lake Buena Vista, Florida.

Cannon-Houlahan, M., Hodgens, K., Cross, D., and Sprague, M., (1991) Electrophysiological Correlates of Non-Phonemic Intonation. Ithaca College.

OTHER PROFESSIONAL ACTIVITIES AND INVITED CONTRIBUTIONS

- Editorial Consultant, Journal of Speech and Hearing Research.
- Editorial Consultant, Journal of Fluency Disorders.
- Program Proposal Review Committee, 1983 Meeting of the American Speech, Language, and Hearing Association.
- Program Proposal Review Committee, 1986 Meeting of the American Speech, Language, and Hearing Association.
- Coordinator: Technical Session entitled, "Reaction Time and Hemispheric Lateralization Studies of Persons Who Stutter". Annual Meeting of the American Speech, Language, and Hearing Association, 1981.
- Coordinator: Technical Session entitled, "The Treated Stutterer". Annual Meeting of the American Speech, Language, and Hearing Association, 1982.
- Coordinator and discussant: Technical Session entitled, "Update on Vocal Reaction Time and Stuttering". Annual Meeting of the American Speech, Language, and Hearing Association, 1984.
- Coordinator and discussant: Technical Session entitled, "Speech Motor Investigations of Stuttering" Annual Meeting of the American Speech, Language, and Hearing Association, 1986.
- Invited discussant: Conference on motor and linguistic factors in stuttering, Northwestern University, Spring, 1981.

- Invited discussant: Conference on brain function in stuttering, Northwestern University, Fall, 1986.
- "Hemispheric Specialization for Discrimination of Vocalizations By the Atlantic Bottlenose Dolphin: Summary of Training and Test Data. Presented to the research staff, The Living Seas, Epcot Center, Lake Buena Vista, Florida. October, 1987.
- Review of Text and Video Tape Supplement, *A Primer for Stuttering Therapy*, Allyn and Bacon(Eds), 1998.

COURSES TAUGHT (asterisks indicate courses currently taught on at least a yearly basis)

Graduate Level

- *Fluency Development and Disorders
- *Advanced Fluency Disorders
- Diagnostic Processes in Communication Disorders
- *Speech Science
- Research Methods (1984-1999)

Undergraduate Level

- Phonetics (1978-1980)
- *Anatomy and Physiology of Speech
- *Basic Speech Science
- Diagnostic Processes

Clinical Teaching/Supervision

- *Clinical teaching supervision activities include diagnosis and treatment of fluency and other production related disorders.
- *Direct stuttering treatment program at the Sir Alexander Ewing Speech and Hearing Center, Ithaca College

ADMINISTRATION AND SERVICE (Ithaca College Only)

All-College Service

- Steering Committee For Middle States Re-accreditation of Ithaca College (1984-87)
- Academic Policies Committee: 1984-96; 1998-2001 (Chair, 1985-90),
 - Chair of Curriculum Subcommittee,
 - Chair, of Program Review Subcommittee,
 - Policy Subcommittee
- Faculty Council: (1987-90) and 1998-2000 (Executive Committee of Faculty Council, 1998-2000; Chair, Ad Hoc Committee on Procedures for Accommodation of Students with Disabilities, 1999)
- Faculty Grievance Committee (1998-2000)
- Faculty Justice: 1991-Present
- Human Subjects Research Review Committee: 1984-88
- All College Tenure and Promotion Committee: 2003-2004

School of Health Sciences and Human Performance

- Dean's Steering Committee 1999-2003
- Curriculum Committee (chair): 1986-87

- Ad Hoc Curriculum Committee: 1988-1989
- Personnel Committee: 1987-90,1992
- Tenure and Promotion Committee: 1988, 2002
- Personnel Committee (2007)

Department of Speech-Language Pathology and Audiology

- Graduate Committee: 1984-Present
- Graduate Curriculum Committee: 2000-Present
- Space and Equipment Committee (chair): 1989-2003
- Resource Committee (Chair) 2006-present
- Recruitment Committee (2006-Present)
- Undergraduate Curriculum Committee (chair): 2000-2003
- Policy Committee: 2000-2004
- Personnel Committee (graduate): 1984-Present
- Clinic Committee: 1987-90,1992, 1995-96
- Course Evaluation Review Committee (chair): 1992-1998
- Faculty Search Committees: 1985(2), 1998(2), 2000(1), 2002(1)
- Developed and implemented three department research/teaching laboratories (2000-2004)
 - Speech Acoustics and Physiology Research Lab
 - Multimedia/Digital Audio-Video Editing Lab
 - Clinician Voice Analysis and Treatment Lab