

## CURRICULUM VITA

**Name:** Smith, Anne

**Address:** Department of Speech, Language, and Hearing Sciences  
Purdue University,  
College of Liberal Arts, Heavilon Hall,  
500 Oval Drive  
West Lafayette, Indiana 47907-2038, U.S.A.

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**Nationality:** U.S. Citizen

### **Education:**

Kalamazoo College    B.A.    Psychology                      1972  
Kalamazoo, Michigan

University of Iowa    M.A.    Speech Pathology                      1974  
Iowa City, Iowa

University of Iowa    Ph.D.    Speech Pathology                      1978  
Iowa City, Iowa

### **Professional Experience:**

Distinguished Professor, Speech, Language, and Hearing Sciences, Purdue University, 2005-present.

Member, National Institute on Communicative Disorders and Deafness Advisory Council, 2008-present

Head, Department, Speech, Language, and Hearing Sciences (Dept. name changed to Speech, Language, and Hearing Sciences, 2004), 1998-2006.

Professor, Speech, Language, and Hearing Sciences, Purdue University 1990-2005.

Convener and Chair of the Executive Committee, Purdue University Neuroscience Program 1993-1996.

Acting Head, Department of Audiology and Speech Sciences, Purdue University 1991-1992.

Associate Professor, Department of Audiology and Speech Sciences, Purdue University 1986-1990.

Assistant Professor, Department of Audiology and Speech Sciences, Purdue University 1981-1986.

Postdoctoral Fellow, Department of Physiology and Biophysics, University of Washington, 1979-1981.

**Awards and Honors:**

Individual Post-doctoral Fellow Award, National Institutes of Health, 1979.

Department of Audiology and Speech Sciences Outstanding Teaching Award, 1988.

AUS Departmental Nominee for School of Humanities, Social Sciences and Education Award for Educational Excellence, 1989.

Editor's Award with Margaret Denny, 1992, Journal of Speech, Language, and Hearing Research.

Editor's Award with Lisa Goffman, 1998, Journal of Speech, Language, and Hearing Research.

Fellow, American Speech, Language, and Hearing Association, 2007.

**Teaching Interests:**

Normal Bases of Speech Production and Perception  
Neuroscience of Human Communication  
Research and Theory on Stuttering  
Advanced Speech Physiology  
Anatomy and Physiology for Speech and Hearing  
Speech Motor Processes

**Memberships in Societies:**

American Speech-Language-Hearing Association  
Society for Neuroscience  
International Fluency Association  
Society for Cognitive Neuroscience

**Extramural Funding:**

National Institutes of Health, Principal Investigator,  
"Physiological Correlates of Stuttering." R01 DC00559, Funded 12/01/1988 – 02/28/2013  
(current 5-year project period, Total Direct Costs = \$2,936,000).

National Institutes of Health, Principal Investigator  
"Speech Motor Processes: Age Related Changes." RO1 DC02527,  
Funded 8/1/96 to 7/31/03 (Total Direct Costs = \$1,200,000).

National Institutes of Health, Co-Investigator, L. Goffman, (PI)  
"Language-Motor Relations in Children's Speech Production." R01 DC04826, Funded  
10/1/01-9/30/06 (Total Direct Costs, \$1,000,000).

National Institutes of Health, Co-Investigator, L. Ramig (PI)  
"Efficacy of Voice Treatment for Parkinson's Disease." R01 DC01150,  
Funded 7/1/95 to 6/30/00 (Total Direct Costs = \$1,420,000).

National Institutes of Health, Principal Investigator,  
"Oral-Motor Reflexes in Speech." R01 NS19173,  
Funded 7/1/83 to 6/30/89 (Total Direct Costs = \$308,731).

**Publications:**

*\*indicates refereed publications*

Moll, K., Zimmermann, G., & Smith, A. (1977). The study of speech as a human neuromotor system. In Dynamic Aspects of Speech Production, M. Sawashima and F.S. Cooper (Eds.). Tokyo: University of Tokyo Press.

\*Zimmermann, G., Smith, A., & Hanley, J. (1981). Stuttering: In need of a unifying conceptual framework. Journal of Speech and Hearing Research, 24, 25-31.

\*Smith, A., Zimmermann, G., & Abbas, P. (1981). Recruitment patterns of motor units in speech production. Journal of Speech and Hearing Research, 24, 567-576.

Larson, C.R., Smith, A., & Luschei, E.S. (1981). Response characteristics of jaw muscle spindle and tooth mechanoreceptor afferents in monkeys during a controlled isometric task. In Oral-Facial Sensory and Motor Functions, Y. Kawamura (Editor), Quintessence, Tokyo, pp. 175-185.

\*Larson, C., Smith, A., & Luschei, E. (1981). Discharge characteristics and stretch sensitivity of jaw muscle afferents in the monkey during controlled isometric bites. Journal of Neurophysiology, 46, 130-142.

\*McClellan, M. & Smith, A. (1982). The reflex responses of single motor units in human lower lip muscles to mechanical stimulation. Brain Research, 251, 65-75.

\*Smith, A. & Luschei, E. (1983). Assessment of oral-motor reflexes in stutterers and normal speakers: Preliminary observations. Journal of Speech and Hearing Research, 26, 322-328.

\*Larson, C., Finocchio, D., Smith, A. & Luschei, E. (1983). Jaw muscle afferent firing during an isotonic jaw-positioning task in the monkey. Journal of Neurophysiology, 50, 61-73.

\*Smith, A., Moore, C.A., & Pratt, C.A. (1985). Distribution of the human jaw stretch reflex response elicited by percutaneous, localized stretch of jaw-closing muscles. Experimental Neurology, 88, 544-561.

\*Smith, A., Moore, C.A., McFarland, D.J., & Weber, C.M. (1985). Reflex responses of human lip muscles to mechanical stimulation during speech. Journal of Motor Behavior, 17, 131-147.

\*Smith, A., Moore, C., Weber, C., McFarland, D., & Moon, J. (1985). Reflex responses of the human jaw-closing system depend on the locus of intraoral mechanical stimulation. Experimental Neurology, 90, 489-509.

\*McFarland, D., Smith, A., Moore, C. & Weber, C. (1986). Relationship between amplitude of tremor and reflex responses of the human jaw-closing system. Brain Research, 366, 272-278.

\*Blair, C. & Smith, A. (1986). EMG recording in human lip muscles: Can single muscles be isolated? Journal of Speech and Hearing Research, 29, 256-266.

\*Smith, A., McFarland, D., & Weber, C. (1986). Co-production of speech and limb movements: An exploration of the dynamic pattern perspective. Journal of Speech and Hearing Research, 29, 471-480.

\*Weber, C. & Smith, A. (1987). Reflex responses in human jaw, lip, and tongue muscles elicited by mechanical stimulation. Journal of Speech and Hearing Research, 30, 70-79.

\*Smith, A., McFarland, D. Weber, C. & Moore, C. (1987). Spatial organization of perioral reflexes. Experimental Neurology, 98, 233-248.

\*Smith, A. & Weber, C.M. (1988). The need for an integrated perspective on stuttering. ASHA, 30, 30-32.

\*Moore, C.A., Smith, A. & Ringel, R.L. (1988). Task-specific organization of human jaw muscles. Journal of Speech and Hearing Research, 31, 670-680.

\*Smith, A. (1989). Neural drive to muscles in stuttering. Journal of Speech and Hearing Research, 32, 252-264.

\*McFarland, D. & Smith, A. (1989). Surface recordings of respiratory muscle activity in speech: Some preliminary findings. Journal of Speech and Hearing Research, 32, 657-667.

\*Smith, A. (1990). Towards a comprehensive theory of stuttering: A commentary. Journal of Speech and Hearing Disorders, 55, 398-401.

\*Smith, A. & Denny, M. (1990). High frequency oscillations as indicators of neural control mechanisms in human respiration, mastication, and speech. Journal of Neurophysiology, 63, 745-758.

\*Smith, A. (1990). Factors in the etiology of stuttering. ASHA Reports, Research Needs in Stuttering: Roadblocks and Future Directions, 18, 39-47.

Smith, A. & Zelaznik, H. (1990). Comparative investigations of speech and other neuromotor systems. In Advances in Psychology: Cerebral Control of Speech and Limb Movements, Geoffrey R. Hammond (Ed.). Amsterdam: North Holland, p. 575-594.

\*Weber, C.M. & Smith, A. (1990). Autonomic correlates of stuttering and speech assessed in a range of experimental tasks. Journal of Speech and Hearing Research, 33, 690-706.

\*Smith, A., Weber, C.M., Newton, J., & Denny, M. (1991). Developmental and age-related changes in reflexes of the human oral motor system. Electroencephalography and Clinical Neurophysiology, 81, 118-128.

Smith, A., Denny, M., & Wood, J. (1991). Instability in speech muscle systems in stuttering. In Speech Motor Dynamics in Stuttering, H. Peters, W. Hulstijn, and C.W. Starkweather (Eds.). Amsterdam: Excerpta Medica, p. 231-242.

Smith, A. (1991). Neurophysiological indices of speech production processes. In Assessment of Speech and Voice Production: Research and Clinical Applications. J. Cooper (Ed.). National Institutes of Health, NIDCD Monograph 1, p. 150-160.

\*Wood, J. & Smith, A. (1991). Cutaneous oral motor reflexes in normal-speaking and articulation-disordered children. Developmental Medicine and Child Neurology, 33, 797-812.

\*Franz, E.A., Zelaznik, H., & Smith, A. (1992). Evidence of common timing processes in the control of manual, orofacial, and speech movements. Journal of Motor Behavior, 24, 281-287.

\*Smith, A. (1992). The control of orofacial movements in speech. Critical Reviews in Oral Biology and Medicine, 3, 233-267.

\*McFarland, D. & Smith, A. (1992). The effects of vocal task and respiratory phase on prephonatory chest wall movements. Journal of Speech and Hearing Research, 35, 971-982.

\*Smith, A. (1992). Commentary on "A theory of neuropsycholinguistic function in stuttering." Journal of Speech and Hearing Research, 35, 805-809.

\*Denny, M. & Smith, A. (1992). Gradation in a neuromuscular pattern associated with stuttering. Journal of Speech and Hearing Research, 35, 1216-1229.

\*Smith, A., Luschei, E., Denny, M. Wood, J., Hirano, M., & Badylak, S. (1993). Spectral analyses of activity of laryngeal and orofacial muscles in stutterers, Journal of Neurology, Neurosurgery, and Psychiatry, 56, 1303-1311.

Smith, A. & Zimmermann, G. (1993). Stuttering: Physiological correlates and theoretical perspectives. In Linguistic Disorders and Pathologies: An International Handbook. G. Blanken, J. Dittmann, H. Grimm, J. Marshall, and C. Wallesch (Eds.). Berlin: Walter de Gruyter, p. 864-870.

\*Zelaznik, H., Smith, A., & Franz, E. (1994). Motor performance of stutterers and nonstutterers on timing and force control tasks. Journal of Motor Behavior, 26, 340-347.

\*Goffman, L. & Smith, A. (1994). Motor unit territories in the human perioral musculature. Journal of Speech and Hearing Research, 37, 975-984.

Smith, A., Goffman, L., and Stark, R. (1995). Speech motor development. Seminars in Speech and Language, 16, 87-99.

Smith, A. (1995). Muscle activity in stuttering. Stuttering: Proceedings of the First World Congress on Fluency Disorders, p. 39-43.

Smith, A. & Kelly, E. (1995). Application of an integrated multifactorial theory to the development of stuttering. Stuttering: Proceedings of the First World Congress on Fluency Disorders, p. 210-213.

\*Smith, A., Goffman, L., Zelaznik, H., Ying, G., & McGillem, C. (1995). Spatiotemporal stability and patterning of speech movement sequences. Experimental Brain Research, 104, 493-501.

\*Kelly, E., Smith, A., & Goffman, L. (1995). Orofacial muscle activity in children who stutter. Journal of Speech and Hearing Research, 38, 1025-1036.

\*Smith, A., Denny, M., Shaffer, L., Kelly, E., & Hirano, M. (1996). Activity of intrinsic laryngeal muscles in fluent and disfluent speech. Journal of Speech and Hearing Research, 39, 329-348.

Denny, M., & Smith, A. (1997). Respiratory and laryngeal control in stuttering. In Nature and Treatment of Stuttering: New Directions. R. Curlee and G. Siegel (Eds). Boston: Allyn & Bacon, 128-142.

Smith, A., & Kelly, E. (1997). Stuttering: A dynamic, multifactorial model. In Nature and Treatment of Stuttering: New Directions. R. Curlee and G. Siegel (Eds). Boston: Allyn & Bacon, 204-217.

\*Zelaznik, H.N., Smith, A., Franz, E., & Ho, M. (1997). Differences in bimanual coordination associated with stuttering. Acta Psychologica, 96, 229-243.

Smith, A. (1997). Dynamic interactions of factors that impact speech motor stability in children and adults. Speech Production: Motor Control and Fluency Disorders. W. Hulstijn, H. Peters, and P. van Lieshout (Eds). Amsterdam: Elsevier.

\*Wohlert, A.B., & Smith, A. (1998). Spatiotemporal stability of lip movements in older adult speakers. Journal of Speech, Language, and Hearing Research, 41, 41-50.

\*Smith, A., & Goffman, L. (1998). Stability and patterning of speech movement sequences in children and adults. Journal of Speech, Language, and Hearing Research. 41, 18-30.

Smith, A. (1999). Stuttering: A unified approach to a multifactorial, dynamic disorder. In Research and Treatment of Fluency Disorders: Bridging the Gap. N. Ratner and C. Healey (Eds). Mahwah, NJ: Erlbaum, p. 27-44.

\*Goffman, L. & Smith, A. (1999). Development and differentiation of speech movement patterns. Journal of Experimental Psychology : Human Perception and Performance, 25, 649-

660.

\*Smith, A., Johnson, J., McGillem, C., & Goffman, L. (2000). On the assessment of stability and patterning of speech movement sequences. Journal of Speech, Language, and Hearing Research, 43, 277-286.

\*Maner, K., Smith, A., & Grayson, L. (2000). Influences of length and syntactic complexity on speech motor performance of children and adults. Journal of Speech, Language, and Hearing Research, 43, 560-573.

\*Kleinow, J., & Smith, A. (2000). Influences of length and syntactic complexity on the speech motor stability of the fluent speech of adults who stutter. Journal of Speech, Language, and Hearing Research 43, 548-559.

\*Smith, A., & Kleinow, J. (2000). Kinematic correlates of speaking rate changes in stuttering and normally fluent adults. Journal of Speech, Language, and Hearing Research, 43, 521-536.

\*Denny, M. & Smith, A. (2000). Respiratory control in stuttering speakers: Evidence from respiratory high-frequency oscillations. Journal of Speech, Language, and Hearing Research, 43, 1024-1037.

\*Kleinow, J., Smith, A., & Ramig, L.O. (2001) Speech motor stability in IPD: Effects of rate and loudness manipulations. Journal of Speech, Language, and Hearing Research, 44, 1041-1051.

\*Wohlert, A. & Smith, A. (2002). Developmental change in variability of lip muscle activity during speech. Journal of Speech, Language, and Hearing Research, 45, 1077-1087.

\*Walsh, B. & Smith, A. (2002). Articulatory movements in adolescents: Evidence for protracted development of speech motor control processes. Journal of Speech, Language, and Hearing Research, 45, 1119-1133.

\*Riely, R. & Smith, A. (2003). Speech movements do not scale by orofacial structure size. Journal of Applied Physiology, 94, 2119-2126.

\*Weber-Fox, C., Spencer, R., Cuadrado, E., & Smith, A. (2003). Development of neural processes mediating rhyme judgments: Phonological and orthographic interactions. Developmental Psychobiology, 43, 128-145.

\*Smith, A. & Goffman, L. (2004). Interaction of language and motor factors in speech production. In Speech Motor Control in Normal and Disordered Speech. B. Maasen, R.D. Kent, H.F.M. Peters, H. Peters, P. van Lieshout, and W. Hulstijn (Eds.). Oxford University Press, 225-252.

\*Smith, A. & Zelaznik, H. (2004). The development of functional synergies for speech motor coordination in childhood and adolescence. Developmental Psychobiology, 45, 22-33.

\*Weber-Fox, C., Spencer, R., Spruill, III, J. E., & Smith, A. (2004). Phonological processing in adults who stutter: Electrophysiological and behavioral evidence. Journal of

Speech, Language, and Hearing Research, 47, 1244-1258.

\*Finan, D.S. & Smith, A. (2005). Jaw stretch reflexes in children. Experimental Brain Research, 164, 58-66.

\*Kleinow, J. & Smith, A. (2006). Potential interactions among, linguistic, autonomic, and motor factors in speech. Developmental Psychobiology, 48, 275-287.

\*Smith, A. (2006). Speech motor development: Integrating muscles, movements, and linguistic units. Communicative Disorders, 39, 331-349.

\*Walsh, B., Smith, A. & Weber-Fox, C. (2006). Short-term plasticity in children's speech motor systems. Developmental Psychobiology, 48, 660-674.

\*Weber-Fox, C., Spruill, J. E. III, Spencer, R., & Smith, A. (2008). Atypical neural functions underlying phonological processing and silent rehearsal in children who stutter. Developmental Science, 11, 321-337.

\*Chakraborty, R., Goffman, L., & Smith, A. (In press). Physiological indices of bilingualism: Oral motor coordination and speech rate in Bengali-English speakers. Journal of Speech, Language, and Hearing Research, 51, 321-332.

\*Goffman, L., Smith, A., Heisler, L., & Ho., M. (2008). The breadth of coarticulatory units in children and adults. Journal of Speech, Language, and Hearing Research , 51, 1424-1437.

\*Sadagopan, N. & Smith, A. (2008) Effects of utterance length and complexity on speech motor performance: A large-scale developmental study. Journal of Speech, Language, and Hearing Research., 51, 1138-1151.

\*Smith, A. (In press) Development of Neural Control of Orofacial Movements for Speech. In Handbook of Phonetic Sciences. W. Hardcastle and J. Laver (Eds). Oxford: Blackwell.

\*Sasisekaran, J., Smith, A. , Sadagopan, N., & Weber-Fox, C. (2010). Nonword repetition in children and adults: Effects on movement coordination. Developmental Science, 13, 521-532.

\*Smith, A., Sadagopan, N., Walsh, B., Weber-Fox, C. (2010). Increasing phonological complexity reveals heightened instability in articulatory coordination in adults who stutter. (2010). Journal of Fluency Disorders, 35, 1-18.

\*Olander, L., Smith A., & Zelaznik, H.N. (2010, Preprint available online). Journal of Speech, Language, and Hearing Research

**Presentations** – I have presented on average 2-4 papers per year since 1980. I include my presentations since 2000.

Smith, A. & Zelaznik. Maturation of interarticulator coordination for speech. Conference on Speech Motor Control, San Antonio, TX, February, 2000.

Smith, A

Finan, D. & Smith, A. Maturation of human jaw stretch reflexes in children. Conference on Speech Motor Control, San Antonio, TX, February, 2000.

Walsh, B. & Smith, A. Developmental profiles of speech motor control. American Speech, Language, and Hearing Association Meeting, Washington, D.C., November, 2000.

Riely, R. & Smith, A. Does a size-scaling principle apply to speech motor control? American Speech, Language, and Hearing Association Meeting, Washington, D.C., November, 2000.

Smith, A. Invited. Stuttering: A model and predictions for the next decade. American Speech, Language, and Hearing Association Meeting, November, 2000, Washington, D.C.

Smith, A. Invited Keynote Address, Workshop on Grant-Writing in Communication Sciences and Disorders, Sponsored by the American Speech-Language-Hearing Foundation, Rockville, Maryland, May, 2001.

Smith, A. Invited Keynote. Dynamic interactions of motor and language factors in the development of speech production. Fourth International Conference on Speech Motor Control and Disordered Speech, University of Nijmegen, Netherlands, June, 2001, Abstract in Proceedings, p. 351-354.

Smith, A. Invited. Factors in the etiology of stuttering. American Speech-Language-Hearing Meeting, New Orleans, LA. November, 2001.

Smith, A. Invited. Two decades of research on stuttering. American Speech-Language-Hearing Meeting, New Orleans, LA., November, 2001.

Smith, A. and Goffman, L. Invited Keynote. A multiple component model of normal speech motor development: Implications for childhood apraxia of speech. Childhood Apraxia of Speech Symposium, Scottsdale, AZ., February, 2002.

Weber-Fox, C., Davis, L., Spruill, J., Way, H., & Smith, A. Peak latencies of children's event-related brain potentials are undifferentiated for processing different grammatical categories. Cognitive Neuroscience Society, New York, NY, April, 2003.

Smith, A. Invited. Raising the bottom line: How to increase extramural funding for research in communication sciences and disorders departments. Council of Academic Programs in Communication Sciences and Disorders, Albuquerque, New Mexico, April, 2003.

Smith, A. Invited Panelist. Neurologic Motor Speech Disorders in Adults: Research Needs and Opportunities. NIH Workshop sponsored by National Institute on Deafness and Other Communication Disorders, Chevy Chase, Maryland, June, 2003.

Smith, A. Invited. Factors in the development of stuttering. Illinois Speech and Hearing Association Meeting, Chicago, Illinois, February, 2004.

Smith, A

Walsh, B., Smith, A., & Weber-Fox, C. Motor learning occurs in children (but not young adults) in a novel nonword production task. Conference on Motor Speech Disorders and Speech Motor Control, Albuquerque, New Mexico, March, 2004.

Sadagopan, N. & Smith, A. Influence of utterance length and complexity on trajectory stability and phrase durations--age related changes. Conference on Motor Speech Disorders and Speech Motor Control, Albuquerque, New Mexico, March, 2004.

Finan, D. & Smith, A. An investigation of jaw stiffness in children. Conference on Motor Speech Disorders and Speech Motor Control, Albuquerque, New Mexico, March, 2004.

Chakraborty, R., Goffman, L., & Smith, A. Physiological indices of bilingualism. Conference on Motor Speech Disorders and Speech Motor Control, Albuquerque, New Mexico, March, 2004.

Smith, A. (2005, Invited). Integrating Muscles, Movements, and Syntax. American Speech-Language-Hearing Meeting, San Diego, CA, November, 2005. Keynote address within the ASHA Research Symposium sponsored by the NIDCD.

Smith, A. (2006, Invited). A developmental perspective on units of language production. University of South Carolina, April, 2006.

Smith, A. (2006, Invited). Physiological indices of speech and language processes: New windows on the onset of stuttering in young children. International Fluency Association, Dublin, Ireland, July, 2006. Keynote address.

Smith, A., Walsh B., Sasisekaran, J., Sadagopan, N., and Weber-Fox, C. (2007). Short term plasticity in children's and adults' speech motor systems. Meeting of the Society for the Neural Control of Movement. Seville, Spain, March, 2007.

Smith, A. (2007, Invited). Stuttering research: Past success and future challenges. American Speech-Language-Hearing Meeting, Boston, MA, November, 2007.

Smith, A. (2008, Invited Keynote). Physiological bases of stuttering in young children. Oxford Disfluency Conference. Oxford, England, July, 2008.

Smith, A. (2008, Invited). Driving critical initiatives in understanding speech motor development. Conference on Speech Motor Control. Monterey, CA, March, 2008.

Walsh, B. & Smith, A. (2008). Speech production in individuals Parkinson's disease: Basic kinematic parameters and effects of increased linguistic demands on articulatory coordination. Conference on Speech Motor Control, Monterey, CA, March, 2008.

Sadagopan, N. & Smith, A. (2008). Neural plasticity in speech motor learning in older speakers: Evidence from a non-word learning task. Conference on Speech Motor Control, Monterey, CA, March, 2008.

Smith, A

Sasisekaran, J., Smith, A., Sadagopan, N., Walsh, B. & Weber Fox, C. (2008). Nonword repetition in children and adults: Evidence for consolidation of speech motor learning. Conference on Speech Motor Control, Monterey, CA, March, 2008.

**Highlights of Service Activities:**

for Purdue University 1981-2004. I have been very active in service in a variety of ways in my 25 years at Purdue. These are some highlights of my service.

Department: Chair or member of numerous faculty search committees, including chair, Head Selection Advisory Committee (1993); member, Graduate Committee, multiple terms; member, Doctoral Training Task Force; Chair, Audiology Task Force; member Strategic Planning Committee.

School of Liberal Arts: Member, Dean Selection Advisory Committee; member Selection Committee for University Scholars Award; member, Distinguished Professor Search Committee; member Curriculum Committee; member Grievance Committee; member Educational Policy Committee; member, School of Liberal Arts Promotions Committee, multiple terms.

University: University Senator; member, Faculty Affairs Committee of University Senate; member, Search Committee for Dean of the Graduate School; member, Search Committee for Vice President for Research; member, Purdue University Neuroscience Graduate Admissions Committee; member and chair, Purdue University Neuroscience Executive Committee.

for the National Institutes of Health

Member, National Institute of Deafness and Other Communication Disorders Advisory Council, 2008 – 2011.

Member, Review Panel for High-Impact, High-Risk Projects, National Institute on Deafness and Other Communication Disorders, July, 1998.

Co-Chair, Expert Panel, Speech and Speech Disorders Strategic Plan for the National Institute on Deafness and Other Communication Disorders, 1996-1997.

Ad hoc Member, Sensory Disorders and Language Study Section, October, 1997 and February, 1998.

Member, Special Emphasis Panel for Review of Multiproject Applications, December, 1996. National Institute on Deafness and other Communication Disorders.

Member, Communicative Disorders Review Committee of the National Institute for Deafness and Other Communicative Disorders, July 1991-1995.

Member, Expert Panel, National Strategic Research Plan, National Institute for Deafness and Other Communicative Disorders, 1993.

Ad hoc Member, Communication Disorders Review Committee, National Institute for

Deafness and Other Communicative Disorders, three site visits, 1989-1990.

Member, Special Review Committee for Applications for National Multipurpose Research and Training Centers, National Institute for Deafness and Other Communication Disorders, May, 1990.

Member, Hearing Research Study Section, Public Health Service Small Business Innovative Research Review Committee, July, 1990.

Ad hoc Member, Sensory Disorders and Language Study Section, October, 1990, February 1991.

### ASHA

Editor for Speech, Journal of Speech, Language, and Hearing Research, 2008-2011.

Member, Publications Board, American Speech, Language, Hearing Association, 2004-2007 and 2008-2011.

Chair, Speech Science Sub-Committee, ASHA, Seattle, Washington, 1996.

Member, Speech Science and/or Fluency Sub-Committee, ASHA, various years.

Associate Editor, Journal of Speech and Hearing Research, 1988 - 1991.

### OTHER

Current or Past Reviewer, Journal of Speech, Language, and Hearing Research, Journal of Motor Behavior, Journal of Dental Research, Oral Biology, Journal of Neurophysiology, Brain Research, Behavioral and Brain Sciences, Science.

Program Chair, Conference on Speech Motor Control, Boulder, Colorado, April 10-12, 1992.

Member Program Committee, Conference on Speech Motor Control, Amelia Island, Florida, February 22-25, 1996.