

Sid P. Bacon

Curriculum Vitae

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EDUCATIONAL HISTORY:

Univ. of Kansas, Lawrence, KS	B.G.S. (Speech Path. & Audiology)	1977
Univ. of Kansas, Lawrence, KS	M.A. (Audiology)	1979
Boys Town Institute, Omaha, NE	Visiting Graduate Student (Psychoacoustics)	1979
Univ. of Minnesota, Minneapolis, MN	Ph.D. (Experimental Psychology)	1985

PROFESSIONAL EXPERIENCE:

Visiting Research Fellow	Dept. of Experimental Psychology, Univ. of Cambridge, Cambridge (UK)	1985
Research Fellow	Auditory Physiology Lab and Psychoacoustics Lab, Boys Town National Institute, Omaha, NE	1985-86
Assistant Professor	Division of Hearing & Speech Sciences Vanderbilt Univ. School of Medicine Nashville, TN	1986-88
Director of Research	Bill Wilkerson Hearing & Speech Center, Nashville, TN	1986-88

Kennedy Center Investigator	John F. Kennedy Center for Research on Education and Human Development, Vanderbilt University, Nashville, TN	1988
Associate Professor	Department of Speech and Hearing Science Arizona State University, Tempe, AZ	1988-92
Director	Interdisciplinary Ph.D. program in Speech and Hearing Science, Arizona State University, Tempe, AZ	1989-99
Visiting Professor	Dept. of Experimental Psychology, Univ. of Cambridge, Cambridge (UK)	1992
Professor	Department of Speech and Hearing Science Arizona State University, Tempe, AZ	1992-
Acting Chair	Department of Speech and Hearing Science Arizona State University, Tempe, AZ	1996 (fall)
Chair	Department of Speech and Hearing Science Arizona State University, Tempe, AZ	2004-2006
Interim Dean	Division of Natural Sciences and Mathematics College of Liberal Arts and Sciences Arizona State University	2006-2007
Dean	Division of Natural Sciences College of Liberal Arts and Sciences Arizona State University	2007-

RESEARCH FIELDS OF INTEREST:

Temporal processing in the normal and impaired auditory systems
The role of compression in auditory processing
The role of temporal processing in understanding speech
Electric-acoustic hearing

PROFESSIONAL ACTIVITIES:

Editorships

Associate editor for Hearing, *J. of Speech, Language, and Hearing Research*, 1996-1998
Associate editor, *J. of the Acoustical Society of America*, 1999-2001
Editorial Board, Continuing Education for Special Interest Division 6, ASHA, 2005-
Guest editor, *Journal of Communication Disorders*, 2006-

Associate editor for Hearing, *J. of Speech, Language, and Hearing Research*, 2006-2007

Scientific Reviews

Ad hoc reviewer for:

Journal of the Acoustical Society of America
Journal of the Acoustical Society of America – Express Letters
Journal of Speech, Language, and Hearing Research
Perception and Psychophysics
Hearing Research
Ear and Hearing
Acustica
British Journal of Audiology
Journal of the Association for Research in Otolaryngology

Ad hoc grant reviewer for:

National Science Foundation
National Institutes of Health
Office of Naval Research
American Speech-Language-Hearing Foundation

Committee Memberships

Hearing Science sub-committee member, ASHA convention (1980)
Research Award committee, Tennessee Speech-Language-Hearing Association (1987)
Technical committee on psychological and physiological acoustics, Acoustical Society of America (ASA: 1987-1990)
Hearing Science sub-committee member, ASHA (1990)
Education committee, ASA (1990-1993)
Technical committee on psychological and physiological acoustics, ASA (1987-1990)
Microcomputer Applications subcommittee member, ASHA (1993)
Ad hoc committee member, NIDCD (June, 1994)
Ad hoc committee member, Hearing Research Study Section, NIDCD (October, 1997)
Hearing Science sub-committee member, ASHA (1997)
Ad hoc committee member, NIDCD (June, 1998)
Research and Scientific Affairs Committee, ASHA (1998-2001)
Nominating committee for the 2000 election, Acoustical Society of America
Ex officio member of Technical committee on psychological and physiological acoustics, ASA (1999-2001)
Ex officio member of Technical committee on biomedical ultrasound/bioresponse to vibration, ASA (1999-2001)
Ad hoc committee member, NIDCD (November, 1999)
Ad hoc editorial advisory committee for *Acoustics Research Letters Online* (2000-2003)
Review panel, Research in Higher Education Mentoring Program, ASHA (2000)
Ad hoc committee member, NIDCD (August, 2000)
Grant-writing workshop planning committee, ASHA (2001)

Review panel, Science and Research Career Forum, ASHA (2001)
Research Symposium Committee, ASHA (2001-2006)
Review panel, Research in Higher Education Mentoring Program, ASHA (2002)
Steering Committee for Special Interest Division 6, ASHA (2002-2004)
Associate Coordinator, Steering Committee for Special Interest Division 6, ASHA (2003-2004)
Ad hoc committee member, NIDCD (June, 2003)
Review panel, Minority Student Travel Fellowship Program, ASHA (2003)
Review panel, Student Research Awards, Council of Academic Programs in Communication Sciences and Disorders (2004)
Review panel, Minority Student Travel Fellowship Program, ASHA (2004)
Review panel, Student Research Awards, Council of Academic Programs in Communication Sciences and Disorders (2005)
Review panel, Minority Student Travel Fellowship Program, ASHA (2005)
Review panel, Advancing Academic Research Careers, ASHA (2005)
Review panel, Minority Student Travel Fellowship Program, ASHA (2006)
Review panel, Advancing Academic Research Careers, ASHA (2007)
Review panel, Minority Student Travel Fellowship Program, ASHA (2007)
Technical committee on psychological and physiological acoustics, ASHA (2007-2010)
Publications Board, ASHA (2008-2010)
Review panel, Advancing Academic Research Careers, ASHA (2009)
Review panel, New Century Scholars Doctoral Scholarship, ASHA Foundation (2009)

Consultantships/Sponsorships

Consultant, MRC grant (1991-1993), Brian C.J. Moore, University of Cambridge, U.K.
Consultant, NIDCD grant (1991-1996), Linda M. Thibodeau, University of Texas, Austin
Sponsor, NIDCD postdoctoral grant (1991-1992), Gail A. Takahashi
Consultant, NIDCD grant (1999-2002), Michelle L. Hicks, University of Maryland
Sponsor, French foundation for medical research (2000-2001), Nicolas Grimault
Sponsor, NIDCD predoctoral grant (2001-2003), Renè H. Gifford, Arizona State University
Consultant, NIDCD grant (2002-2004), Eric W. Healy, University of South Carolina, Columbia
Mentor, AAA Foundation New Investigator grant (2004), Shaum Bhagat, Louisiana State University
Sponsor, NIDCD postdoctoral grant (2005-2008), Kumiko T. Boike, Arizona State University
Consultant, NOHRF grant (2006), Christopher A. Brown, Arizona State University
Consultant, NOHRF grant (2006), Eric W. Healy, University of South Carolina, Columbia
Consultant, NIDCD grant (2007-2012), Eric W. Healy, University of South Carolina, Columbia
Sponsor, NIDCD postdoctoral grant (2007-2009), Kang Li, Arizona State University
Sponsor, NIDCD predoctoral grant (2007-2009), Erica J. Williams, Arizona State University

PROFESSIONAL AFFILIATIONS:

Acoustical Society of America

American Association for the Advancement of Science
American Auditory Society
American Speech-Language-Hearing Association
American Speech-Language-Hearing Association, Special Interest Division on Hearing and
Hearing Disorders
Association for Research in Otolaryngology

HONORS AND AWARDS:

Editor's award, Ear and Hearing	2004
Fellow, American Speech-Language-Hearing Association	2003
Finalist, Professor of the Year (ASU)	2000
Fellow, Acoustical Society of America	1996
Unsolicited Basic Research Grant (\$3,500) from 3M	1988
Research Award, Tennessee Speech- Language-Hearing Association	1988
Sigma Xi	1980
Phi Kappa Phi	1980
M.A. Thesis defense with honors	1979
Research Services Award	1979-80
B.G.S. with distinction	1977
Dean's List	1974-77

PUBLICATIONS:

Refereed Articles:

- [1] Marshall, L. and Bacon, S.P. (1981). "Prediction of speech discrimination scores from audiometric data," *Ear Hear.* **2**, 148-155. *PMID: 7319153*
- [2] Bacon, S.P. and Brandt, J.F. (1982). "Auditory processing of vowels by normal- hearing and hearing-impaired listeners," *J. Speech Hear. Res.* **25**, 339-347. *PMID: 7176605*
- [3] Jesteadt, W., Bacon, S.P. and Lehman, J.R. (1982). "Forward masking as a function of frequency, masker level, and signal delay," *J. Acoust. Soc. Am.* **71**, 950-962. *PMID: 7085983*
- [4] Viemeister, N.F. and Bacon, S.P. (1982). "Forward masking by enhanced components in harmonic complexes," *J. Acoust. Soc. Am.* **71**, 1502-1507. *PMID: 7108024*
- [5] Bacon, S.P. and Viemeister, N.F. (1985a). "Temporal modulation transfer functions in normal-hearing and hearing-impaired listeners," *Audiology* **24**, 117-134. *PMID: 3994589*
- [6] Bacon, S.P. and Viemeister, N.F. (1985b). "Simultaneous masking by gated and continuous sinusoidal maskers," *J. Acoust. Soc. Am.* **78**, 1220-1230. *PMID: 4056216*

- [7] Bacon, S.P. and Viemeister, N.F. (1985c). "The temporal course of simultaneous tone-on-tone masking," *J. Acoust. Soc. Am.* **78**, 1231-1235. *PMID: 4056217*
- [8] Bacon, S.P. and Viemeister, N.F. (1985d). "A case study of monaural diplacusis," *Hear. Res.* **19**, 49-56. *PMID: 4066513*
- [9] Widin, G.P., Viemeister, N.F. and Bacon, S.P. (1986). "Effects of forward and simultaneous masking on intensity discrimination," *J. Acoust. Soc. Am.* **80**, 108- 111. *PMID: 3745655*
- [10] Bacon, S.P. and Moore, B.C.J. (1986a). "Temporal effects in simultaneous pure-tone masking: Effects of signal frequency, masker/signal frequency ratio, and masker level," *Hear. Res.* **23**, 257-266. *PMID: 3745024*
- [11] Bacon, S.P. and Moore, B.C.J. (1986b). "Temporal effects in masking and their influence on psychophysical tuning curves," *J. Acoust. Soc. Am.* **80**, 1638-1645. *PMID: 3794069*
- [12] Bacon, S.P. and Moore, B.C.J. (1987). "Transient masking and the temporal course of simultaneous tone-on-tone masking," *J. Acoust. Soc. Am.* **81**, 1073-1077. *PMID: 3571723*
- [13] Glasberg, B.R., Moore, B.C.J., and Bacon, S.P. (1987). "Gap detection and masking in hearing-impaired and normal-hearing subjects," *J. Acoust. Soc. Am.* **81**, 1546- 1556. *PMID: 3584692*
- [14] Moore, B.C.J., Poon, P.W.F., Bacon, S.P., and Glasberg, B.R. (1987). "The temporal course of masking and the auditory filter shape," *J. Acoust. Soc. Am.* **81**, 1873-1880. *PMID: 3611508*
- [15] Bacon, S.P. and Jesteadt, W. (1987). "Effects of pure-tone forward masker duration on psychophysical measures of frequency selectivity," *J. Acoust. Soc. Am.* **82**, 1925-1932. *PMID: 3429730*
- [16] Viemeister, N.F., and Bacon, S.P. (1988). "Intensity discrimination, increment detection, and magnitude estimation for 1-kHz tones," *J. Acoust. Soc. Am.* **84**, 172-178. *PMID:*
- [17] Bacon, S.P., Hedrick, M.S., and Grantham, D.W. (1988). "Temporal effects in simultaneous pure-tone masking in subjects with high-frequency sensorineural hearing loss," *Audiology* **27**, 313-323. *PMID: 3240129*
- [18] Kimberley, B.P., Nelson, D.A., and Bacon, S.P. (1989). "Temporal overshoot in simultaneous-masked psychophysical tuning curves in normal and hearing-impaired listeners," *J. Acoust. Soc. Am.* **85**, 1660-1665. *PMID: 2708681*
- [19] Bacon, S.P. and Grantham, D.W. (1989). "Modulation masking: effects of modulation frequency, depth, and phase," *J. Acoust. Soc. Am.* **85**, 2575-2580. *PMID: 2745880*
- [20] Bacon, S.P., Blake, P.E. (1990). "Temporal effects in simultaneous masking by vowels and consonant-vowels," *J. Speech and Hear. Res.* **33**, 38-44. *PMID: 2314083*

- [21] Bacon, S.P. (1990). "Effect of masker level on overshoot," *J. Acoust. Soc. Am.* **88**, 698-702. *PMID: 2212293*
- [22] Grantham, D.W., and Bacon, S.P. (1991). "Binaural modulation masking," *J. Acoust. Soc. Am.* **89**, 1340-1349. *PMID: 2030221*
- [23] Hicks, M.L., and Bacon, S.P. (1991). "The effect of pure-tone forward masking on overshoot," *J. Acoust. Soc. Am.* **90**, 228-230. *PMID: 1880293*
- [24] Bacon, S.P., and Smith, M.A. (1991). "Spectral, intensive, and temporal factors influencing overshoot," *Q. J. Exp. Psych.* **43A (3)**, 373-399. *PMID: 1775648*
- [25] Bacon, S.P., and Takahashi, G.A. (1992). "Overshoot in normal-hearing and hearing-impaired subjects," *J. Acoust. Soc. Am.* **91**, 2865-2871. *PMID: 1629479*
- [26] Bacon, S.P., and Gleitman, R. (1992). "Modulation detection in subjects with relatively flat hearing losses," *J. Speech and Hear. Res.* **35**, 642-653. *PMID: 1608256*
- [27] Bacon, S.P., and Grantham, D.W. (1992). "Fringe effects in modulation masking," *J. Acoust. Soc. Am.*, **91**, 3451-3455. *PMID: 1619121*
- [28] Takahashi, G.A., and Bacon, S.P. (1992). "Modulation detection, modulation masking, and speech understanding in the elderly," *J. Speech and Hear. Res.* **35**, 1410-1421. *PMID: 1494284*
- [29] Hicks, M.L., and Bacon, S.P. (1992). "Factors influencing temporal effects with notched-noise maskers," *Hear. Res.* **64**, 123-132. *PMID: 1490895*
- [30] Bacon, S.P., and Konrad, D.L. (1993). "Modulation detection interference under conditions favoring within- or across-channel processing," *J. Acoust. Soc. Am.* **93**, 1012-1022. *PMID: 8445112*
- [31] Bacon, S.P., and Moore, B.C.J. (1993). "Modulation detection interference: Some spectral effects," *J. Acoust. Soc. Am.* **93**, 3442-3453. *PMID: 8326070*
- [32] Moore, B.C.J., and Bacon, S.P. (1993). "Detection and identification of a single modulated carrier in a complex sound," *J. Acoust. Soc. Am.* **94**, 759-768. *PMID: 8370882*
- [33] Bacon, S.P., and Viemeister, N.F. (1994). "Intensity discrimination and increment detection at 16 kHz," *J. Acoust. Soc. Am.* **95**, 2616-2621. Erratum: *J. Acoust. Soc. Am.* **96**, 1922. *PMID: 8207133*
- [34] Bacon, S.P., and Opie, J.M. (1994). "Monotic and dichotic modulation detection interference in practiced and unpracticed subjects," *J. Acoust. Soc. Am.* **95**, 2637-2641. *PMID: 8207136*

- [35] Bacon, S.P., Moore, B.C.J., Shailer, M.J., and Jorasz, U. (1995). "Effects of combining maskers in modulation detection interference," *J. Acoust. Soc. Am.* **97**, 1847-1853. *PMID: 7699166*
- [36] Hicks, M.L., and Bacon, S.P. (1995). "Some factors influencing Comodulation Masking Release and Across-Channel Masking," *J. Acoust. Soc. Am.* **98**, 2504-2514. *PMID: 7593933*
- [37] Overson, G.J., Bacon, S.P., and Webb, T.M. (1996). "The effect of level and relative frequency region on the recovery of overshoot," *J. Acoust. Soc. Am.* **99**, 1059-1065. *PMID: 8609289*
- [38] Bacon, S.P., and Smith, M.A. (1996). "Profile analysis with amplitude-modulated nontarget components," *J. Acoust. Soc. Am.* **99**, 1653-1659.
- [39] Bacon, S.P. (1996). "Comments on 'Manipulations of the duration and relative onsets of two-tone forward maskers,' [J. Acoust. Soc. Am. 94, 1269-1274 (1993)]," *J. Acoust. Soc. Am.* **99**, 3246-3248. *PMID: 8642129*
- [40] Cook, J.A., Bacon, S.P., and Sammeth, C.A. (1997). "The effect of low-frequency gain reduction and its relation to upward spread of masking," *J. Speech and Hear. Res.* **40**, 410-422. *PMID: 9130209*
- [41] Bacon, S.P., Lee, J., Peterson, D.N., and Rainey, D. (1997). "Masking by modulated and unmodulated noise bands: effects of bandwidth, modulation rate, signal frequency, and masker level," *J. Acoust. Soc. Am.* **101**, 1600-1610. *PMID: 9069628*
- [42] Bacon, S.P., and Lee, J. (1997). "The modulated-unmodulated difference: Effects of signal frequency and masker modulation depth," *J. Acoust. Soc. Am.* **101**, 3617-3624. *PMID: 9193049*
- [43] Lee, J., and Bacon, S.P. (1997). "Amplitude modulation depth discrimination of a sinusoidal carrier: effect of stimulus duration," *J. Acoust. Soc. Am.* **101**, 3688-3693. *PMID: 9193056*
- [44] Gregan, M.J., Bacon, S.P., and Lee, J. (1998). "Masking by sinusoidally amplitude-modulated tonal maskers," *J. Acoust. Soc. Am.* **103**, 1012-1021. *PMID: 9479755*
- [45] Bacon, S.P., Opie, J.M., and Montoya, D.Y. (1998). "The effects of hearing loss and noise masking on the masking release for speech in temporally complex backgrounds," *J. Speech, Lang., Hear. Res.* **41**, 549-563. *PMID: 9638921*
- [46] Lee, J., and Bacon, S.P. (1998). "Psychophysical suppression as a function of signal frequency: Noise and tonal maskers," *J. Acoust. Soc. Am.* **104**, 1013-1022. *PMID: 9714921*
- [47] Hicks, M.L., and Bacon, S.P. (1999a). "Psychophysical measures of auditory nonlinearities as a function of frequency in individuals with normal hearing," *J. Acoust. Soc. Am.* **105**, 326-338. *PMID: 9921659*

- [48] Bacon, S.P. (1999). "Some effects of background noise on modulation detection interference," *Hear. Res.* **129**, 20-26. PMID: 10190748
- [49] Bacon, S.P., Boden, L.N., Lee, J., and Repovsch, J.L. (1999). "Growth of simultaneous masking for $f_m < f_s$: Effects of overall frequency and level," *J. Acoust. Soc. Am.* **106**, 341-350. PMID: 10420626
- [50] Hicks, M.L., and Bacon, S.P. (1999b). "Effects of aspirin on psychophysical measures of frequency selectivity, two-tone suppression, and growth of masking," *J. Acoust. Soc. Am.* **106**, 1436-1451. PMID: 10489702
- [51] Bacon, S.P., Hicks, M.L., and Johnson, K.L. (2000). "Temporal integration in the presence of off-frequency maskers," *J. Acoust. Soc. Am.* **107**, 922-932. PMID: 10687701
- [52] Bacon, S.P., and Healy, E.W. (2000). "Effects of ipsilateral and contralateral precursors on the temporal effect in simultaneous masking with pure tones," *J. Acoust. Soc. Am.* **107**, 1589-1597. PMID: 10738812
- [53] Gifford, R.H., and Bacon, S.P. (2000). "Contributions of suppression and excitation to simultaneous masking: effects of signal frequency and masker-signal frequency relation," *J. Acoust. Soc. Am.* **107**, 2188-2200. PMID: 10790044
- [54] Bacon, S.P., and Liu, L. (2000). "On the decline in overshoot at high masker levels," *J. Acoust. Soc. Am.* **107**, 2295-2297. PMID: 10790056
- [55] Bacon, S.P., and Liu, L. (2000). "Effects of ipsilateral and contralateral precursors on overshoot," *J. Acoust. Soc. Am.* **108**, 1811-1818. PMID: 11051507
- [56] Bacon, S.P., and Opie, J.M. (2002). "Modulation detection interference in listeners with normal and impaired hearing," *J. Speech, Lang., Hear. Res.* **45**, 392-402. PMID: 12003520
- [57] Grimault, N., Bacon, S.P., and Micheyl, C. (2002). "Auditory stream segregation on the basis of amplitude-modulation rate," *J. Acoust. Soc. Am.* **111**, 1340-1348. PMID: 11931311
- [58] Millman, R.E., Lorenzi, C., Apoux, F., Füllgrabe, C., Green, G.G.R., and Bacon, S.P. (2002). "Effect of duration on amplitude-modulation masking," *J. Acoust. Soc. Am.* **111**, 2551-2554. PMID: 12083184
- [59] Bacon, S.P., Grimault, N., and Lee, J. (2002). "Spectral integration in bands of modulated or unmodulated or unmodulated noise," *J. Acoust. Soc. Am.* **112**, 219-226. PMID: 12141347
- [60] Bacon, S.P., Repovsch-Duffey, J.L., and Liu, L. (2002). "Effects of signal delay on auditory filter shapes derived from psychophysical tuning curves and notched-noise data obtained in simultaneous masking," *J. Acoust. Soc. Am.* **112**, 227-237. PMID: 12141348
- [61] Healy, E.W., and Bacon, S.P. (2002). "Across-frequency comparison of temporal speech information by listeners with normal and impaired hearing," *J. Speech, Lang., Hear. Res.* **45**, 1262-1275. PMID: 12546492

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- [63] Savel, S., and Bacon, S.P. (2003a). "Effectiveness of narrowband vs. tonal off-frequency maskers," *J. Acoust. Soc. Am.* **114**, 380-385. *PMID: 12880049*
- [64] Savel, S., and Bacon, S.P. (2003b). "Effect of contralateral precursor type on the temporal effect in simultaneous masking with tone and noise maskers," *J. Acoust. Soc. Am.* **114**, 580-582. *PMID: 12942941*
- [65] Oxenham, A.J., and Bacon, S.P. (2003). "Cochlear compression: Perceptual measures and implications for normal and impaired hearing," *Ear Hear.* **24**, 352-366. *PMID: 14534407*
- [66] Bacon, S.P., and Savel, S. (2004). "Temporal effects in simultaneous masking with on- and off-frequency noise maskers: effects of signal frequency and masker level," *J. Acoust. Soc. Am.* **115**, 1674-1683. *PMID: 15101646*
- [67] Apoux, F., and Bacon, S.P. (2004). "Relative importance of temporal information in various frequency regions for consonant identification in quiet and in noise," *J. Acoust. Soc. Am.* **116**, 1671-1680. *PMID: 15478433*
- [68] Williams, E.J., and Bacon, S.P. (2005). "Compression estimates using behavioral and otoacoustic emission measures" *Hear. Res.* **201**, 44-54. *PMID: 15721560*
- [69] Healy, E. W., Kannabiran, A., and Bacon, S.P. (2005). "An across-frequency processing deficit in listeners with hearing impairment is supported by acoustic correlation" *J. Speech, Lang., Hear. Res.* **48**, 1236-1242. *PMID: 16411807*
- [70] Gifford, R.H., and Bacon, S.P. (2005). "The effect of a steep high-frequency hearing loss on growth-of-masking functions in simultaneous masking for $f_m < f_s$," *Hear. Res.* **208**, 47-53. *PMID: 16039077*
- [71] Gifford, R.H., and Bacon, S.P. (2005). "Psychophysical estimates of nonlinear cochlear processing in younger and older listeners," *J. Acoust. Soc. Am.* **118**, 3823-3833. *PMID: 16419827*
- [72] Healy, E.W., and Bacon, S.P. (2006). "Measuring the critical band for speech," *J. Acoust. Soc. Am.* **119**, 1083-1091. *PMID: 16521770*
- [73] Healy, E.W., and Bacon, S.P. (2007). "The effect of spectral frequency range and separation on the perception of asynchronous speech," *J. Acoust. Soc. Am.* **121**, 1691-1700. *PMID: 17407905*
- [74] Gifford, R. H., Dorman, M. F., Spahr, A. J., and Bacon, S. P. (2007). "Auditory Function and Speech Understanding in Listeners Who Qualify for EAS Surgery," *Ear Hear.* **28**, 114-118. *PMID: 17496661*

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- [76] Bacon, S.P. (2007). "Issues of development and plasticity of the auditory system," *J. Commun. Disord.* **40**(4):273-4. *PMID: 17433355*
- [77] Millman, R.E., and Bacon, S.P. (2008). "The influence of spread of excitation on the detection of amplitude modulation imposed on sinusoidal carriers at high levels," *J. Acoust. Soc. Am.* **123**, 1008-16. *PMID: 18247903*
- [78] Apoux, F., and Bacon, S.P. (2008). "Selectivity of modulation interference for consonant identification in normal-hearing listeners," *J. Acoust. Soc. Am.* **123**, 1665-72. *PMID: 18345854*
- [79] Apoux, F., and Bacon, S.P. (2008). "Differential contribution of envelope fluctuations across frequency to consonant identification in quiet," *J. Acoust. Soc. Am.* **123**, 2792-2800. *PMID: 18529195*
- [80] Gifford, R. H., Dorman, M. F., Spahr, A. J., Bacon, S. P., Skarzynski, H., and Lorens, A. (2008). "Hearing preservation surgery: Psychophysical estimates of cochlear damage in recipients of a short electrode array," *J. Acoust. Soc. Am.* **124**, 2164-2173. *PMID: 19062856*
- [81] Brown, C.A., and Bacon, S.P. (2009). "Low-frequency speech cues and simulated electric-acoustic hearing," *J. Acoust. Soc. Am.* **125**, 1658-1665. *PMID: 19275323*
- [82] Brown, C.A., and Bacon, S.P. (2009). "Achieving electric-acoustic benefit with a modulated tone," *Ear Hear.* **30**,:489-93. *PMID: 19546806*
- [83] Brown, C.A., and Bacon, S.P. (2009). "Fundamental frequency and speech intelligibility in background noise," *Hear. Res.* *PMID: 19748564*
- [84] Brown, C.A., Scherrer, N.M., and Bacon, S.P. (submitted). "Shifting fundamental frequency in simulated electric-acoustic listening I: Effects of sensation level," *J. Acoust. Soc. Am.*
- [85] Brown, C.A., and Bacon, S.P. (in prep.). "Further observations on the effect of fundamental frequency in simulated electric-acoustic hearing,"
- [86] Boike, K.T., Dworsak, M.M., and Bacon, S.P. (submitted). "Influence of filtering, level and background modulation characteristics on speech recognition," *J. Speech, Lang. Hear. Res.*
- [87] Li, K., and Bacon, S.P. (submitted). "Psychophysical masking patterns of the fricative /ð/," *J. Speech, Lang. Hear. Res.*

Published Abstracts/Presentations:

- [1] Brandt, J.F. and Bacon, S.P. (1979). "Analysis of synthetic vowels by pulsation threshold techniques," *J. Acoust. Soc. Am.* **65**, S57(A).
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Book:

[1] Bacon, S.P., Fay, R.R, and Popper, A.N. (eds.) (2004). *Compression: From Cochlea to Cochlear Implant* (Springer-Verlag).

Book chapters:

[1] Bacon, S.P. (2004). “Overview of auditory compression,” in *Compression: From Cochlea to Cochlear Implant*, edited by S.P. Bacon, R.R. Fay, and A.N. Popper (Springer-Verlag), pp. 1-17.

[2] Oxenham, A.J., and Bacon, S.P. (2004). “Psychophysical manifestations of compression: Normal-hearing listeners,” in *Compression: From Cochlea to Cochlear Implant*, edited by S.P. Bacon, R.R. Fay, and A.N. Popper (Springer-Verlag), pp. 62-106.

[3] Bacon, S.P., and Oxenham, A.J. (2004). “Psychophysical manifestations of compression: Hearing-impaired listeners,” in *Compression: From Cochlea to Cochlear Implant*, edited by S.P. Bacon, R.R. Fay, and A.N. Popper (Springer-Verlag), pp. 107-152.

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Edited volumes:

[1] ASHA 2006 Research Symposium: “Issues of development and plasticity of the auditory system,” *J. of Communication Disorders* **40(4)** (2007).

[2] ASHA 2007 Research Symposium: "Genetic and Biological Pathways Underpinning Communication Disorders Across the Lifespan," *J. of Communication Disorders* **41(5)** (2008).

[3] ASHA 2008 Research Symposium: "Neurobiological Determinants of Human Communication: Prematurity and Early Childhood," *J. of Communication Disorders* **42(4)** (2009).

Published Book Reviews:

[1] *Auditory Physiology and Perception*, Cazals, Y., Demany, L., and Horner, K. (eds.) . Pergamon Press (Oxford), 1992. Review published in *British J. of Audiology* **27**, 64-65 (1993).

[2] *Introduction to Sound -- Acoustics for the Hearing and Speech Sciences*, Speaks, C.E. Singular Publishing Group, Inc., 1992. Review published in *Ear and Hearing* **14**, 219 (1993).

[3] *Processing of Complex Sounds by the Auditory System*, Carlyon, R.P., Darwin, C.J., and Russell, I.J. (eds.). Oxford University Press, 1992. Review published in *Ear and Hearing* **16**, 329 (1995).

Other publications:

Bacon, S.P. (2002). "An overview of cochlear compression," in Perspectives on Hearing and Hearing Disorders: Research and Diagnostics, ASHA Division 6, Volume 6, Number 2, October 2002 (invited).

Bacon, S.P. (2006). "Auditory compression and hearing loss," *Acoustics Today*, Vol. 2, issue 2, pp. 30-34, April 2006 (invited).

INVITED SCIENTIFIC LECTURES AND SEMINARS:

[1] "Temporal effects in simultaneous masking: Implications for measures of frequency selectivity," presented to MRC Institute for Hearing Research, Nottingham, England, June 1985.

[2] "Hearing and the effects of overstimulation," presented to Nashville Audio Engineering Society, Nashville, Tennessee, December 1986.

[3] "Sound and hearing," presented at Industrial Hearing Conservation Certification Workshop, Nashville, Tennessee, June 1987.

[4] "Temporal envelope processing in audition," presented to the Department of Speech and Hearing Sciences, University of Arizona, Tucson, February 1989.

[5] "On the importance of the temporal envelope for hearing," presented to the Arizona Speech-Language-Hearing Association, Scottsdale, Arizona, April 1989.

[6] "Adaptation of overshoot: Evidence for peripheral adaptation in the auditory system?" presented to the Department of Psychology, University of Texas, Austin, June 1990.

[7] "Measurements of temporal masking in hearing-impaired persons," presented at the Committee on Hearing, Bioacoustics, and Biomechanics Symposium on Presbycusis at the National Academy of Sciences, Washington, D.C. October, 1990.

[8] "Some effects of amplitude modulation on signal detection," presented to the Department of Experimental Psychology, University of Cambridge, England, August 1992.

[9] "Auditory temporal resolution," presented at the annual meeting of the American Speech-Language-Hearing Convention, San Antonio, Texas. November, 1992.

[10] "Identification of a single modulated component in a complex sound," presented during a special session on Musical Acoustics and Psychological and Physiological Acoustics: Modulation and Auditory Grouping at the 125th meeting of the Acoustical Society of America, Ottawa, Canada, May 1993.**

[11] "The psychophysics of complex envelope processing," presented during a special session on Physiological and Psychological Aspects of Modulation Processing at the 133rd meeting of the Acoustical Society of America, State College, Pennsylvania. June, 1997.**

[12] "Hot topics in psychological and physiological acoustics: Compression," presented during a special session on Hot Topics in Acoustics at the 139th meeting of the Acoustical Society of America, Atlanta, Georgia. June, 2000.**

[13] "Effects of aspirin-induced, temporary hearing loss on various psychoacoustic measures of cochlear nonlinearity," presented at a conference on *The Perceptual Consequences of Cochlear Nonlinearity*, Delmenhorst, Germany, August 2001.

[14] "Auditory compression," presented to the Department of Speech and Hearing Sciences, University of Arizona, Tucson, March 2003.

[15] "Why research," presented at the 2007 meeting of the American Auditory Society, Scottsdale, Arizona, March 2007.

** also listed with published abstracts

OTHER PROFESSIONAL PRESENTATIONS/PANELS:

[1] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, San Antonio, Texas. November 1998.

- [2] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, San Francisco, California. November, 1999.
- [3] "Thinking about a Ph.D.?" Invited participant in a session at the annual meeting of the American Speech-Language-Hearing Convention, San Francisco, California. November, 1999.
- [4] Invited speaker and panelist at the Workshop on Grant Writing in Communication Sciences and Disorders, Rockville, Maryland, 5-6 May 2000.
- [5] "Frequent criticisms of submitted manuscripts," invited presentation during a special session on Education in Acoustics: Publishing Excellence in JASA at the 139th meeting of the Acoustical Society of America, Atlanta, Georgia. June, 2000.
- [6] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, Washington, D.C. November, 2000.
- [7] "Thinking about a Ph.D.?" Invited participant in a session at the annual meeting of the American Speech-Language-Hearing Convention, Washington, D.C. November, 2000.
- [8] Science and Research Career Forum. Invited speaker at a special session at the annual meeting of the American Speech-Language-Hearing Convention, Washington, D.C. November, 2000.
- [9] ASHA-sponsored Telephone Seminar on Doctoral Education in Communication Sciences and Disorders. September, 2001.
- [10] ASHA-sponsored Web Forum on Doctoral Education (October 2002).
- [11] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, Atlanta, Georgia. November, 2002.
- [12] "Thinking about a Ph.D.?" Invited participant in a session at the annual meeting of the American Speech-Language-Hearing Convention, Atlanta, Georgia. November, 2002.
- [13] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, Chicago, Illinois. November, 2003.
- [14] New investigator's roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, Chicago, Illinois. November, 2008.
- [15] Pathways to research funding opportunities roundtable. Invited participant in a special session at the annual meeting of the American Speech-Language-Hearing Convention, Chicago, Illinois. November, 2008.

RESEARCH GRANTS:

1. Active

“Cochlear Implants - Auditory Processing and Speech Perception; (S.P. Bacon, Invest.), NIDCD Research Grant, 7/05-6/10. Total direct costs: \$1,175,000.

“Understanding the benefits of electric-acoustic stimulation,” (S.P. Bacon, P.I.), NIDCD Research Grant, 1/08-12/10. Total direct costs: \$711,711.

“Understanding the benefits of electric-acoustic stimulation,” (S.P. Bacon, P.I.), NIDCD Research Grant, Administrative Supplement 9/09-12/10. Total direct costs: \$121,028.

2. Past

"Mechanisms of masking," (S.P. Bacon, P.I.), NINCDS postdoctoral fellowship F32 NS07718, 3/85-7/86.

"Modulation masking in normal-hearing and hearing-impaired subjects," (S.P. Bacon, P.I.) NIH-DRR Biomedical Research Support Grant RR-05424-25, 9/86-8/87. Total direct cost: \$5,000.

"Temporal effects in masking and their influence on frequency selectivity in hearing-impaired subjects," (S.P. Bacon, P.I.), Deafness Research Foundation, 1/87 - 12/87. Total direct cost: \$12,500.

"Temporal effects in masking and their influence on frequency selectivity in hearing-impaired subjects," (S.P. Bacon, P.I.), Deafness Research Foundation, 1/88 - 12/88. Total direct cost: \$15,000.

"Development of auditory threshold: A 'true' change in sensitivity?" (S.P. Bacon, P.I.), Vanderbilt University Research Council, 4/87 - 6/88. Total direct cost: \$5,384.

"Studies on amplification selection for the hearing-impaired veteran," (S.P. Bacon, Co-P.I.), Veterans Administration, 10/87 - 9/90. Total direct cost: \$482,332. (Dr. Bacon resigned as Co-P.I. when he left Vanderbilt University.)

"Effects of a hearing aid's temporal response on modulation detection and speech perception," (S.P. Bacon, P.I.), Research Assistant Proposal, Arizona State University, 8/89-7/90.

"Detection of amplitude modulation in the elderly," (S.P. Bacon, P.I.), American Federation For Aging Research, 7/1/90 - 6/30/91. Total direct cost: \$25,000.

"Dynamic characteristics of auditory masking," (S.P. Bacon, P.I.), NIDCD Research Grant R29-DC00424, 7/87 - 6/92. Total direct cost: \$327,064.

"Temporal properties of auditory masking," (S.P. Bacon, P.I.), NIDCD Research Grant 7/92 - 6/96. Total direct cost: \$434,730.

"Temporal properties of auditory masking," (S.P. Bacon, P.I.), NIDCD Research Grant, 7/96 - 6/01. Total direct cost: \$818,065.

"Temporal properties of auditory masking," (S.P. Bacon, P.I.), NIDCD Research Grant, 7/01-6/06 (no-cost extension through 6/08). Total direct costs: \$955,500.

TRAINEESHIPS:

1. Active

Sponsor, NIDCD postdoctoral grant (2007-2009), Kang Li (trainee)

Sponsor, NIDCD predoctoral grant (2007-2009), Erica J. Williams (trainee)

2. Past

Sponsor, NIDCD postdoctoral grant (1991-1992), Gail A. Takahashi (trainee)

Sponsor, NIDCD predoctoral grant (2001-2003), Renè H. Gifford (trainee)

Sponsor, NIDCD postdoctoral grant (2005-2008), Kumiko T. Boike (trainee)

OTHER FUNDING:

1. Active

"Professional Enhancement Program for SLP" (S.P. Bacon, P.I.), Arizona Department of Education Contract, 7/1/06-6/30/11. Total costs: \$630,000.

"Science Teachers in Arizona - Recruitment and Retention (STARR)" (S.P. Bacon, co-PI), Noyce Program, National Science Foundation, 9/1/08-8/31/13. Total costs: \$750,000.

2. Pending

"Psychology Research Renovation" (S.P. Bacon, P.I.), National Institutes of Health. Total direct costs: \$15,000,000.

"Chemistry Proteomics Core Facility" (S.P. Bacon, P.I.), National Institutes of Health, Total direct costs: \$8,041,102.

"Environmental Safety Renovation Project" (S.P. Bacon, P.I.), National Institutes of Health, Total direct costs: \$3,826,859.

PATENTS:

Tone Modulation for Enhanced Speech Understanding (S.P. Bacon, C.A. Brown, and F. Apoux). Patent pending; Arizona Technology Enterprises (AzTE) Case #M8-079.

RESEARCH SUPERVISION:

Undergraduate Theses:

1990-1991: Michelle L. Hicks. "Temporal effects with complex maskers: A study of spectral, temporal, and intensive parameters". (Honor's thesis, ASU).

1997-1998: Larissa Nelson Boden. "Effects of signal frequency and signal duration on growth-of-masking functions". (Honor's thesis, ASU).

2000-2001: Erika Porter. "The effect of frequency on the temporal course of masking and overshoot." (Honor's thesis, ASU).

Other undergraduate research:

1989: Michelle L. Hicks. "The effect of pure-tone forward masking on overshoot". (Honor's project, ASU).

1994: Melanie Gregan. "Effects of background noise on modulation detection interference." (Independent study, ASU).

1994-1995: Gretchen VanBoven. "Effects of stimulus gating on modulation detection interference". (Independent study, ASU).

1998: Jennifer Repovsch. "Growth of masking in simultaneous and forward masking." (Independent study, ASU).

1998: Robert St. Pierre and Colleen Nieschwietz. "Effects of overall frequency on the difference between the masking produced by an unmodulated and modulated masker." (Independent studies, ASU).

1998-1999: Krista Johnson. "Effects of overall frequency region on masked and unmasked temporal integration." (Independent study, ASU).

1999: Kristen Berglie and Lori Kostrewa. "Effects of masker level on overshoot in different frequency regions." (Independent studies, ASU).

1999-2000: Diana Ayala and David Braatz. "Effects of masker level and masker depth on the modulated-unmodulated difference at different frequency regions." (Independent studies, ASU).

1999-2000: Chris Taylor. "On the frequency resolution for processing modulation patterns of speech." (Independent study, ASU).

2000-2001: Kellie Keating and Melissa Rodriguez. "Effects of low-pass and high-pass filtering on the recognition of speech in modulated and unmodulated noise." (Independent studies, ASU).

2000-2001: Ryan Cain. "On the threshold for masking under conditions where $f_m < f_s$." (Independent study, ASU).

2000: Melissa Wait: "Effects of signal frequency and masker level on the Schroeder phase effect" (Independent study, ASU).

2001: Douglas Edge. "Auditory streaming without spectral cues" (Independent study, ASU).

2001: Gayle Thorpe: "On the threshold for upward spread of masking" (Independent study, ASU)

2004: Ashley Sundin: "Modulation detection at low spectral frequencies" (Honor's project, ASU)

2006: Nicole Scherrer: "Fundamental frequency and amplitude envelope cues with simulated implant listening: effects of shifting F0" (Directed research, ASU)

2007: Farris Walling: "Speech recognition in electric-acoustic hearing: effects of restricting the low-frequency acoustic signal" (Directed research, ASU)

Graduate Theses and Dissertations:

1989: Jami D. Brummett. "The relationship between auditory filter width and vowel recognition in normal-hearing and hearing-impaired subjects." (M.S. thesis, ASU).

1991: Dawn L. Konrad. "Within- versus across-channel differences in modulation masking: Do they exist?". (M.S. thesis, ASU).

1993: Gary J. Overson. "The effect of level and relative frequency region on the recovery of overshoot." (M.S. thesis, ASU).

1994: Melissa K. Braudaway. "Temporal resolution and speech understanding in the hearing impaired." (M.S. thesis, ASU).

1994: Patricia A. Pieper. "Temporal effects in simultaneous notched-noise masking and their influence on auditory filter shapes." (M.S. thesis, ASU).

1995: Danielle Y. Montoya. "Distortion product otoacoustic emissions: Suprathreshold and threshold responses from normal and hearing-impaired subjects." (M.S. thesis, ASU).

1995: Daniel N. Peterson. "Bandwidth, rate, and level effects on temporal resolution as measured by the modulated-unmodulated difference." (M.S. thesis, ASU).

1997: Melanie J. Gregan. "Masking of pure tones by sinusoidally amplitude modulated tonal maskers." (M.S. thesis, ASU).

1997: Michelle L. Hicks. "Psychophysical measures of auditory nonlinearities in individuals with normal hearing and temporary, aspirin-induced hearing loss." (Ph.D. dissertation, ASU).

1998: Jodi A. Cook. "Speech recognition in modulated noise: effect of simulated hearing loss, hearing loss, and amplification." (Ph.D. dissertation, ASU).

1998: Mona Dworsack. "Effects of low-pass and high-pass filtering on speech understanding in modulated and unmodulated noise." (M.S. thesis, ASU).

1999-2000: Jennifer Repovsch. "Psychophysical tuning curves and auditory filter shapes sharpen over time." (M.S. thesis, ASU).

2002-2003: Erica Brooks Williams. "Effects of overall frequency on estimates of basilar membrane compression." (M.S. thesis, ASU).

2002-2003: René Gifford. "The effects of aging and hearing loss on psychophysical measures of the cochlear nonlinearity." (Ph.D. dissertation, ASU).

2007-present: Erica J. Williams. "The effects of quinine-induced hearing loss on speech and psychophysical tasks." (Ph.D. dissertation, ASU).

Other graduate research:

1987: Jeanne D. Dodd. "Absolute thresholds and frequency selectivity in children". (Ph.D. research project, Vanderbilt).

1987: Jeanne D. Dodd. "Loudness functions in normal-hearing and hearing-impaired subjects". (Ph.D. research project, Vanderbilt).

1987: Mark S. Hedrick. "Temporal effects in pure-tone masking in hearing-impaired subjects". (Ph.D. research project, Vanderbilt).

1988: LuAnn E. Van Campen. "Modulation masking patterns". (Ph.D. research project, Vanderbilt).

1988: Patricia E. Blake. "Temporal effects in vowel and consonant-vowel masking". (Ph.D. research project, Vanderbilt).

1991-1992: Michelle L. Hicks. "Effects of across-frequency amplitude modulation on signal detection." (Ph.D. research project, ASU).

1992-1993: Michael A. Smith. "On the relationship between pedestal levels and the effects of amplitude modulation on profile analysis." (Ph.D. research project, ASU).

1993-1994: Jodi A. Cook. "The effect of low-frequency gain reduction on speech recognition and upward spread of masking." (Ph.D. research project, ASU).

1993-1994: Michael P. Sabo. "The use of EOAEs for monitoring pediatric patients receiving ototoxic drugs." (Ph.D. research project, ASU).

1995: Debbie Venkatesh. "Sentence recognition in noise: fixed versus adaptive frequency responses." (Independent study, ASU).

1995: Dawne Rainey. "Effects of level and frequency region on overshoot." (Independent study, ASU).

1996: Nicolas Grimault. "Complex tone detection in modulated and unmodulated noise and its implication in speech understanding." (Research internship project, Université de la Méditerranée, France).

1998-1999: René Gifford. "The roles of excitatory and suppressive masking: Effects of overall frequency region and masker-signal frequency relation." (Ph.D. research project, ASU).

2000-2002: Marci Weinberg. "On the cause of the change in slope of growth-of-masking functions at high levels when $f_m < f_s$." (Graduate project, ASU).

2003-2004: Changmo Jeung. "A behavioral study of the shift in the peak of the basilar membrane traveling wave" (Ph.D. research project, ASU).

2004-2005: Erica J. Williams. "Psychophysical estimates of the frequency extent of compression" (Ph.D. research project, ASU).

2005-2006: Erica J. Williams. "On the relation between compression and overshoot" (Ph.D. research project, ASU).

2006-2007: Nicole Scherrer. "Combining vocoder stimulation with F0 and envelope cues in the low-frequency region: effects of frequency shift and sensation level" (Ph.D. research project, ASU).

2007-2008: Kate Helms-Tillery. "The Relationship between Loudness Balancing and Speech Intelligibility in Simulated Electric-Acoustic Listening" (Ph.D. research project, ASU).

2007-2008: Farris Walling. "Binaural Release from Masking in Simulated Electric-Acoustic Stimulation" (Ph.D. research project, ASU).

Supervision of postdoctoral fellows:

Gail Takahashi (1990-1992), Director of Audiology, VA, Iowa City, IA.

Jane M. Opie (1992-1994), Clinical Investigator, Med-El, Innsbruck, Austria.
Jungmee Lee (1994-1997), Assistant Professor, University of Arizona, Tucson, AZ.
Li Liu (1997-2003), Patent examiner, US Patent and Trademark Office, Alexandria, VA.
Eric Healy (1998-2001), Associate Professor, Ohio State University, Columbus, OH.
Michelle L. Hicks (1998-2000), Research Audiologist, Sonic Innovations, and Adjunct Instructor, University of Utah, Salt Lake City, UT.
Nicolas Grimault (2000-2001), Research Scientist, CNRS, Lyon, France.
Sophie Savel (2002-2003), Research Scientist, CNRS, Marseille, France.
Frédéric Apoux (2002-2006), Research Scientist, Ohio State University, Columbus, OH.
Rebecca E. Millman (2004-2005), Research Scientist, University of York, UK.
Christopher A. Brown (2004-).
Kumiko T. Boike (2004-2007), Assistant Professor, University of Utah, Salt Lake City, UT.
Kang Li (2007-).

COURSES TAUGHT:

Undergraduate

Psychoacoustics
Physical and Physiological Bases of Hearing
Research Seminar
Freshman Seminar: Hearing and Hi-Fi's
Freshman Seminar: Hearing, Deafness, and Cochlear Implants
The ASU Experience

Graduate

Advanced Hearing Science
Instrumentation and Calibration
Otoacoustic emissions as a diagnostic tool
Auditory Perception by the Hearing Impaired
Seminar: Advanced Topics in Hearing Science

UNIVERSITY, COLLEGE, AND DEPARTMENT SERVICE (Arizona State University):

University:

Member, Biomedical Research Support Grant Use Committee (1989)
Chair, Executive Committee, Interdisciplinary Ph.D. Program in Speech and Hearing Science (1989-1999)
Member, Focus Group for Council of Graduate Schools Study of the Dissertation (1990)
Member, Ad hoc Committee for the Biomedical Research Support Grant (1992)
Member, Human Research Institutional Review Board (1994)
Co-Chair, Provost's Working Group on Teacher Preparation in Science, Technology, Engineering and Math (2007)
Member, Environmental Health and Safety Committee (2007-)

Member, ASU Leadership Council on Sustainability (2007-)
Member, Teacher Development Council (2007-)
Internal Grant Review, NSF Major Research Instrumentation program (2007)
Internal Grant Review, NSF Integrative Graduate Education and Research Traineeship program (2008)
Internal Grant Review, NSF Science and Technology Centers: Integrative Partnerships (2008)
Internal Grant Review, SFAz Strategic Research Group program (2008)
Member, Origins Executive Committee (2008-)
Member, Origins Program Committee (2008-)
Member, Directorship for Renewable Energy (2008-)
Member, Biodesign Institute Guidance Council (2009-)
Member, Advisory Committee for Biomedicine@ASU

College of Liberal Arts and Sciences:

Department representative, CLAS-ACT (1993-1994)
Dean's Advisory Council (1993-1994)
Interdisciplinary Programs Committee (1994-1999)
Search Committee, Physics Department Chair (2005-2006)
Chair, Search Committee, Chemistry and Biochemistry Chair (2007)
Chair, Search Committee, Director of First Year Mathematics (2007-2008)
Chair, Search Committee, Director of School of Mathematical Sciences (2007-2008)
Chair, Search Committee, Associate Dean for Research (2009)

Barrett Honors College:

Member, Honors Faculty Council (2005-)
Honors Disciplinary Faculty (2006-)

Department:

Personnel and Budget committee, Chair (1988-1995)
Human Experimentation and Safety committee (1988-1993; Chair in 1991)
Search committee, audiology (1988-1989)
Search committee, audiology, Chair (1990-1991)
Ad hoc space/building committee (1989-1990)
Ad hoc Program Review committee (1992-1993)
Graduate Admissions (1993-1998)
Search committee, adult neurogenics (1994)
Search committee, child language (1994)
Ad hoc Au.D. committee, Chair (1993-1994)
Affirmative Action committee, Chair (1994-2000)
Search committee, audiology (position 1), Chair (1994-1995)
Search committee, audiology (position 2), Chair (1994-1995)
Search committee, audiology (position 3), Chair (1994-1995)
Ad hoc Reaccreditation committee (1994-1995)
Acting Department Chair (fall 1996)
Personnel and Budget committee (1996)
Search committee, coordinator of American Sign Language (1996-1997)

Search committee, clinic director (1997-1998)
Search committee, department chair (1997-1998)
Search committee, American Sign Language lecturers (1997-1998)
Personnel and Budget committee, Chair (1997-2000)
Ad hoc space/building committee (1997-2004)
Search committee, clinical faculty in speech (1998)
Ad hoc Program Review committee (1998-2000)
Promotion and Tenure (1998-2004; Chair in 2000-2002)
Search committee, child language (1999-2000)
Graduate Admissions (2000-2002; Chair in 2001-2002)
Search committee, assistant clinical professor, Chair (2000-2001)
Ad hoc Au.D. committee (2001-2004)
Personnel and Budget committee, Chair (2002-2004)
Affirmative Action committee, Chair (2002-2004)
University Senator (spring 2002)
Search committee, audiology, Chair (2003-2004)
Search committee, clinical faculty in audiology, Chair (2004)