# Curriculum Vitae for

Benjamin W.Y. Hornsby

#### PERSONAL INFORMATION

**Business Address:** 

Vanderbilt University Medical Center Department of Hearing and Speech Sciences Graduate Studies and Research Room 8310 Medical Center East, South Tower

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### EDUCATIONAL BACKGROUND

Institution	Year	Degree
Maryville College, TN	1985	B.A.
Vanderbilt University	1995	M.S.
Vanderbilt University	2002	Ph.D.

### LICENSURE AND CERTIFICATION

Certificate of Clinical Competence in Audiology, American Speech-Language- Hearing Association, 1996-present.

Tennessee State License in Audiology, 1996-2004.

### ACADEMIC APPOINTMENTS/POSITIONS

Vanderbilt University School of Medicine: Assistant Professor, 2006-Present.

Vanderbilt University School of Medicine: Research Assistant Professor, 2002-2006.

Vanderbilt University, Kennedy Center Member, 2004-Present

#### EMPLOYMENT EXPERIENCE

Vanderbilt University School of Medicine, Department of Audiology and Speech Pathology, Nashville, TN, Associate Professor, 2014-present.

Vanderbilt University School of Medicine, Department of Audiology and Speech Pathology, Nashville, TN, Assistant Professor, 2006-2014.

Vanderbilt University School of Medicine, Department of Audiology and Speech Pathology, Nashville, TN, Research Assistant Professor, 2002-2006.

Vanderbilt University School of Medicine, Department of Audiology and Speech Pathology, Nashville, TN, Research Assistant, 1995-2002.

Clinical Audiologist, Vanderbilt Bill Wilkerson Center, Nashville, TN (8/95-9/97).

### PROFESSIONAL ACTIVITIES

#### Intramural

Member, Vanderbilt University Institutional Review Board, Behavioral Science Committee, 2006-present

Member Delegate, Vanderbilt University Graduate Faculty Delegate Assembly, 2005-2010.

Member, Vanderbilt University Doctor of Audiology (AuD) Committee, 2004-present.

#### Extramural

Member, American Speech Language-Hearing Association, 1993-present.

Member, American Academy of Audiology, 1994-present.

Member, Research Presentation Review committee, 2004 Annual Meeting

Moderator, Research Presentations, 2004 Annual Meeting

Member, AAA Research Committee, 2008-2011

Member, Audiology Research Conference Organizing Committee, 2009-10

Member, AAA Educational Grants Review Committee, 2010-2012

Member, American Auditory Society, 2002-present.

Moderator, Technical Sessions, 2005 Annual Meeting

Member, Acoustical Society of America, 1997-2012.

Member planning committee for the 145th meeting of the Acoustical Society of America (Spring, 2003) in Nashville, TN

Member, International Society of Audiology, 2006-2011.

Member, ANSI S3.5 (1997) American National Standards Institute, Methods for Calculation of the Speech Intelligibility Index. 2009-present.

Technical Co-chair, 2010 International Hearing Aid Conference (IHCON).

Reviewer, U.S. Department of Veterans Affairs Office of Research and Development Rehabilitation Summer Merit Review (August, 2009-Present)

#### **Senior Editor**

Trends in Amplification, 2005-2008.

#### **Guest Editor**

Ear and Hearing, 2009-2011

**Section Editor: Amplification** Ear and Hearing, 2012-Current

#### **Ad-Hoc Reviewer**

Journal of the American Academy of Audiology, 1997- present.

Journal of the Acoustical Society of America, 1997-present.

Ear and Hearing, 1997-present.

Journal of Speech Language Hearing Research, 2007- present.

International Journal of Audiology, 2007- present.

### **Editorial Advisory Board**

### PROFESSIONAL AWARDS AND HONORS

2002	American Auditory Society Mentored Student Research Award recipient
	(Spring, 2002 meeting).
2000	Biennial International Hearing Aid Conference (IHCON 2000) student
	scholarship recipient.
1995	Jay W. Sanders 1995 Honors in Audiology Award presented by
	Vanderbilt University and The Bill Wilkerson Center.
1993-1995	1993-1995 Graduate Training Full Tuition Scholarship, Vanderbilt
	University.
1985	Cum Laude Graduation, Maryville College.

## **TEACHING ACTIVITIES**

**Graduate School Courses:** As part of my teaching responsibilities the following courses were substantially revised (HRSP 217 and AUD 5328) or developed (AUD 5327).

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Course Number	Title	Credit Hours	Years Taught
AUD 5327	Hearing Loss and Speech	3	2004-Present
	Understanding		
AUD 5328	Psychoacoustics	3	2002-Present
Doctoral Seminar	Advanced	3	2008-present
	Psychoacoustics		(offered bi-
	•		annually)
AUD 5310	Measurement of Hearing	3	2010-Present

### **RESEARCH PROGRAM**

Title: Minimal Competing Masker: Distance and Hearing Loss Effects on Adaptive

Directional Benefit

Funding Agency: Phonak, Inc

Amount of funding: \$38,700

Role: Co-Investigator

Funding period: 10/01/2003-09/30/2004

Percent Effort: 10%

Title: Effects of Volume Control Adjustment and Monaural/Binaural Directional

Microphone Use on HA Benefit Funding Agency: Siemens, Inc

Amount of funding: \$20,000

Role: Principal Investigator

Funding period: 2/1/04-5/31/05 Percent Effort: 30% (1/04-7/04)

Title: Bandwith and Digital Feedback Reduction in Current Digital Hearing Aids

Funding Agency: GN Resound

Amount of funding: \$50,000

Role: Co-Investigator

Funding period: 02/01/04-12/31/05 Percent Effort: 13% (2/04-1/05) Title: Factors Affecting Directional Hearing Aid Performance in Children

Funding Agency: Department of Education

Amount of funding: \$444,207

Role: Co-Investigator

Funding period: 09/01/02-08/31/06

Percent Effort: 15-35%

Title: Benefits of Digital Noise Reduction in Hearing Aids

Funding Agency: Siemens, Inc

Amount of funding: \$11,200

Role: Principal Investigator

Funding period: 2/1/06-1/31/08

Percent Effort: 5%

Title: Hearing Loss and the Utility of Speech Information Funding Agency: NIH/NIDCD R03-DC006576-01A1

Amount of funding: \$224,726

Role: Principal Investigator

Funding period: 8/1/2004- 7/31/08

Percent Effort: 25%

Title: Hearing Loss, Cognitive Processing and Listening Effort Throughout the Day

Funding Agency: Starkey, Inc

Amount of funding: \$35,000

Role: Principal Investigator

Funding period: 11/1/07-12/31/08

Percent Effort: 12%

Title: Variability Among Hearing Aid Users: Speech Recognition in Noise and

Benefits from Amplification Funding Agency: Starkey, Inc

Amount of funding: \$35,400

Role: Principal Investigator

Funding period: 03/01/08-05/31/09

Percent Effort: 15%

Title: Appropriate Directional Hearing Aid Switching in School Aged Children

Funding Agency: Department of Education

Amount of funding: \$447,564

Role: Co-Investigator

Funding Period: 11/1/06-4/30/10 Effort: 7% (11/06-7/09)

Title: Open Canal Verification & Examination of Listening Effort

Funding Agency: Phonak, Inc.

Amount of funding: \$119,325

Role: Co- Investigator

Funding period: 01/1/08-6/30/10

Percent Effort: 12%

Title: Hearing loss, hearing aids and mental fatigue

Funding Agency: Starkey, Inc

Amount of funding: \$57,738

Role: Principal Investigator

Funding period: 10/25/10-5/31/13

Percent Effort: 7%

Title: Vehicle Sound Level Study

Funding Agency: Nissan Technical Center of North America

Amount of funding: \$44,326

Role: Co- Investigator

Funding period: 2/1/02-6/30/13 Percent Effort: 10% (2/12-8/12)

Title: Blind Pedestrians' Access to Complex Intersections

Funding Agency: NIH/NEI/Sub with Western Michigan University 5R01EY012894

Amount of funding: \$624,866

Role: Consultant

Funding Period: 7/1/07-6/30/13 Effort: 4% (9/12-6/30/13)

Title: Fatigue and Listening: Quantifying the Relationship between Speech Processing

and Mental Fatigue.

Funding Agency: ASHFoundation

Amount of Funding: \$10,000

Role: Principal Investigator

Funding period: 11/01/12-11/01/13

Percent Effort: 0%

Title: A Taxonomy of fatigue: Relations to hearing loss

Funding Agency: Oticon, Inc

Amount of Funding: \$7,220

Role: Principal Investigator

Funding period: 05/01/13-06/30/13

Percent Effort: 20%

Title: A comparison of subjective preference for Siemens Micon first fit and NAL-NL2 prescriptive fitting algorithms.

Funding Agency: Siemens, Inc

Amount of Funding: \$19,404

Role: Principal Investigator

Funding period: 07/01/13-06/30/14

Percent Effort: 20% (7/01/13-10/30/13)

Title: Fatigue and Listening effort in school-aged children with hearing loss

Funding Agency: IES

Amount of funding: \$1,495,212

Role: Co- Investigator

Funding period: 07/01/11-06/30/15Percent Effort: 5% (11/1/11 - 6/30/16)

Title: Development of a Monitor for Circadian Regulation of Human Thermogenesis and

Metabolism

Funding Agency: Vanderbilt Discovery Grant

Amount of Funding: \$100,000

Role: Co- Investigator

Funding period: 06/01/13-05/15/15

Percent Effort: 0%

Title: Quantifying the "Fatigue Factor": Hearing Loss, Speech Processing and Fatigue

Funding Agency: NIH/NIDCD 1R21DC012865-01A1

Amount of funding: \$412,593

Role: Principal Investigator

Funding period: 8/1/13- 7/31/16

Percent Effort: 35%

Title: Development of a Hearing Loss Related Fatigue Scale (FS-HL)

Funding Agency: Starkey, Inc

Amount of funding: \$32,240

Role: Principal Investigator

Funding period: 8/1/14- 10/31/15

Percent Effort: 10%

Title: Measurement of Listening Fatigue in School-Age Children with Disabilities

Funding Agency: IES

Amount of funding: \$1,600,000

Role: Co- Investigator

Funding period: 07/01/15-06/30/19

Percent Effort: 15%

### **PUBLICATIONS**

#### **Refereed Journal Articles**

Hornsby, B. and Ricketts, T. (2001). The effects of compression ratio, presentation level, and signal-to-noise ratio on speech recognition in normal-hearing subjects. <u>The</u> Journal of the Acoustical Society of America, 109(6), 2964-2973.

- <u>Hornsby, B.</u>, and Ricketts, T. (2003). The effects of hearing loss on the contribution of high- and low- frequency speech information to speech understanding. <u>The</u> Journal of the Acoustical Society of America, 113(3), 1706-1717.
- Grantham, D., <u>Hornsby, B.</u>, and Erpenbeck, E. (2003). Auditory spatial resolution in horizontal, vertical, and diagonal planes. <u>The Journal of the Acoustical Society of America</u>, 114(2), 1009-1022.
- Ricketts, T., and Hornsby, B. (2003). Distance and reverberation effects on directional benefit. Ear and Hearing, 24(6), 472-483.
- Ricketts T., <u>Hornsby B.</u>, & Johnson, E. (2005). Adaptive Directional benefit in the near field: Competing sound angle and level effects. <u>Seminars in Hearing</u>, 26(2), 59-69.
- Ricketts T. and <u>Hornsby B</u>. (2005). Sound quality measures for speech in noise through a commercial hearing aid implementing "digital noise reduction". <u>Journal of the</u> American Academy of Audiology, 16, 272-279.
- Hornsby, B., Trine, T. and Ohde, R. (2005). The Effects of High Presentation Levels on Consonant Feature Transmission in Normal-Hearing Subjects. <u>The Journal of the Acoustical Society of America</u>, 118(3), 1719-1729.
- Ricketts T., Henry P., and <u>Hornsby B.</u> (2005). Application of Frequency Importance Functions to Directivity for Prediction of Benefit in Uniform Fields. <u>Ear and</u> Hearing, 26(5), 473-486.
- <u>Hornsby, B.</u>, and Ricketts, T. (2006). The effects of hearing loss on the contribution of high- and low- frequency speech information to speech understanding II. Sloping Hearing Losses. <u>The Journal of the Acoustical Society of America</u>, 119(3), 1752-1763.
- Ricketts T. and <u>Hornsby B.</u> (2006). Directional Hearing Aid Benefit in Listeners with Severe to Profound Hearing Loss. <u>International Journal of Audiology</u>, 45(3), 190-197.
- Hornsby, B., Ricketts, T. and Johnson, E. (2006). The Effects of Speech and Speech-like Maskers on Unaided and Aided Speech Recognition in Persons with Hearing Loss. Journal of the American Academy of Audiology, 17(6), 432-447.
- Mueller, H.G., Weber, J., and <u>Hornsby, B.</u> (2006). The effects of digital noise reduction on the acceptable noise level. <u>Trends in Amplification</u>, 10(2), 83-94.
- <u>Hornsby, B.</u> and Ricketts, T. (2007). Directional Benefit in the presence of speech and speech-like maskers. Journal of the American Academy of Audiology 18(1), 5-16.

- <u>Hornsby, B.</u> and Ricketts, T. (2007). Effects of noise source configuration on directional benefit using symmetric and asymmetric directional hearing aid fittings. <u>Ear and Hearing</u>, 28(2),177-186.
- Johnson, E., Ricketts, T. and <u>Hornsby, B.</u> (2007). The Effect of Digital Phase Cancellation Feedback Reduction Systems on Amplified Sound Quality. <u>Journal</u> of the American Academy of Audiology 18(5):404-16.
- Ricketts, T. and <u>Hornsby, B.</u> (2007). Estimation of Directional Benefit in Real Rooms: A Clinically Viable Method. In R.C. Seewald (ed.) <u>Hearing Care for Adults 2006:</u> <u>Proceedings of the First International Conference</u>, Phonak, Chicago.
- Hornsby, B. and Mueller, H.G. (2008). User preference and reliability of bilateral hearing aid gain adjustments. <u>Journal of the American Academy of Audiology 19(2): 158-170</u>.
- Mueller, H.G., <u>Hornsby, B.</u>, and Weber, J. (2008). Using trainable hearing aids to examine real-world preferred gain. <u>Journal of the American Academy of</u> Audiology 19(10): 758-773.
- Hornsby, B. and Dundas, A. (2009). Factors Affecting Prevalence Estimates of Dead
   Regions in Adults with Hearing Loss. <u>Journal of the American Academy of</u>
   Audiology 20(4): 251-263.
- Stach., B., Hornsby, B., Rosenfeld, M., and DeChicchis, A. (2009). The Complexity of Auditory Aging. Seminars in Hearing 30(2): 94-111.
- Johnson, E., Ricketts, T. and <u>Hornsby, B.</u> (2009). The effect of extending high-frequency bandwidth on the Acceptable Noise Level (ANL) of hearing-impaired listeners. International Journal of Audiology 48(6): 353 362.
- Hornsby, B., Johnson, E. and Picou, E. (2011). Effects of degree and configuration of hearing loss on the contribution of high- and low- frequency speech information to bilateral speech understanding. Ear and Hearing 32(5): 543-555.
- Picou, E., Ricketts, T., and <u>Hornsby, B.</u> (2011). Visual cues and listening effort: Individual variability. <u>Journal of Speech, Language and Hearing Research 54(5): 1416-1430.</u>
- Grantham, D.W., Ashmead, D., Haynes, D., <u>Hornsby, B.</u>, Labadie, R. and Ricketts, T. (2012). Horizontal-plane localization in single-sided deaf adults fitted with a bone-anchored hearing aid (Baha). <u>Ear and Hearing 33(5), 595-603</u>.
- Ashmead, D., Grantham, D.W., Maloff, E.S., <u>Hornsby, B.</u>, Nakamura, T., Davis, R., Pampel, F., and Rushing, E.G. (2012). Auditory Perception of Motor Vehicle Travel Paths. <u>Human Factors 54(3): 437-453</u>.

- Hornsby, B. (2013). The Effects of Hearing Aid Use on Listening Effort and Mental Fatigue Associated With Sustained Speech Processing Demands. <u>Ear and Hearing</u>, 34(5), 523-534. doi: 10.1097/AUD.0b013e31828003d8
- Picou, E., Ricketts, T., and <u>Hornsby, B.</u> (2013). How Hearing Aids, Background Noise, and Visual Cues Influence Objective Listening Effort. <u>Ear and Hearing 34(5)</u>, e52-e64.
- Hornsby, B. W. Y., Werfel, K., Camarata, S., & Bess, F. H. (2014). Subjective Fatigue in Children With Hearing Loss: Some Preliminary Findings. <a href="mailto:American Journal of Audiology">American Journal of Audiology</a>, 23(1), 129-134. doi: 10.1044/1059-0889(2013/13-0017)
- Moore, T., Hood, L., and Hornsby, B. (2014). Estimates of cochlear compression using distortion product otoacoustic emissions and growth of forward masking. Ear and Hearing, 35(6), 711-714.
- Bess, F.H. & <u>Hornsby</u>, <u>B.</u> (2014). Listening Can Be Exhausting: Fatigue in Children and Adults with Hearing Loss. <u>Ear and Hearing</u>. 35(6), 592-599.
- Bess, F. H., Gustafson, S. J., & Hornsby, B. W. (2014). How Hard Can It Be To Listen? Fatigue in School-Age Children with Hearing Loss. Journal of Educational Audiology, 20, 1-14.
- Gustafson, S. J., Davis, H., Hornsby, B. W. Y., & Bess, F. H. (2015). Factors Influencing Hearing Aid Use in the Classroom: A Pilot Study. American Journal of Audiology, [Advance online publication], 1-6.
- Bess, F.H., Gustafson, S.J., Corbett, B., Lambert, W., Camarata, S., & <u>Hornsby</u>, B. (2015). Salivary Cortisol Profiles of Children with Hearing Loss. Ear and Hearing. E-pub ahead of print. doi:10.1097/aud.0000000000000056
- Hornsby, B., Bess, F.H., & Naylor., G. (2016, in press). Hearing Loss and Fatigue- A Taxonomy of fatigue concepts. Ear and Hearing.
- Bess, F.H., Key, A. S., Gustafson, S.J., & <u>Hornsby</u>, B. (2016, in review). Auditory P300 as a measure of listening fatigue in children. Journal of Speech, Language and Hearing Research.
- Pichora-Fuller, K., Kramer, S. Eckert, M., Edwards, B., Hornsby, B., Humes, L., ... Windgfield, A. (2016, in review). Hearing impairment and cognitive energy: The Framework for Understanding Effortful Listening (FUEL). Ear and Hearing.

- Hornsby, B.W.Y., Ashmead, D., and Bess, F.H. (in preparation). Perceived Effort, Not Performance, Modulates Subjective Fatigue Due to Sustained Speech Processing Demands in Adults with Hearing Loss.
- <u>Hornsby</u>, <u>B.</u>, Doss, Z., and Smith, A. (in preparation). The relationship between listening effort and mental fatigue.
- <u>Hornsby</u>, <u>B.</u>, and Rokuson, J. (in preparation). MP3 and beyond: Word recognition testing without the compact disc player.
- <u>Hornsby</u>, <u>B.</u> and Picou, E. (in preparation). The effect of hearing aid use on cognitive processing throughout the day.
- <u>Hornsby</u>, <u>B.</u> (in preparation). Effect of visual cues on the contribution of high- and low-frequency speech information to persons with flat and sloping hearing losses.
- Hornsby, B., Rosenfeld, M., Gudlewski, K. and Bratt, G. (in preparation). Using the SII to predict Hearing Aid Benefit.
- <u>Hornsby</u>, <u>B.</u> (in preparation). Effects of DNR on speech understanding at high presentation levels.

#### **Non- Refereed Journal Articles**

- Hornsby, B., Kelly, T., and Hall, J.W. III. (1996). Normative data for five FDA-approved distortion product OAE systems. <u>The Hearing Journal</u>, 49(9), 39-46.
- Hornsby, B. (2004). The Speech Intelligibility Index: What is it and what's it good for? The Hearing Journal, 57(10), 10, 12, 14, 16-17.
- Hornsby, B. (2004). Amplification Issues and Considerations in the Teenage Population.
   Perspectives on Hearing and Hearing Disorders in Childhood, ASHA Special
   Interest Division 9- Newsletter, 14(2), 8-12.
- Nelson, P., <u>Hornsby, B.</u>, Moore, B.C. and Trine, T. (2007). Understanding Individual Differences in Aided Speech Recognition and Hearing Aid Success. <u>The Hearing Review</u>, 14(6), 30, 32-33.
- Bentler, R., Eiler, C., <u>Hornsby, B.</u>, Moodie, S., Olson, L., and Valente, M. (2007). Practical Approaches to Evidence-based Practice. <u>The Hearing Review</u>, 14(6), 36, 40-41.
- Hornsby, B. (2010). Hearing Loss & Listening Effort: New Benefits from Hearing Aids. Minnesota Academy of Audiology Newsletter, Summer, 2010. Retrieved from http://www.minnesotaaudiology.org/newsletter/printpage.php?page=sum10/scitec h.php[7/1/2010 7:52:54 AM].

- Hornsby, B. (2010). Understanding the Problems with Aided Speech Understanding.
   Starkey Audiology Series. Vol.2 (3). Retrieved from <a href="http://www.starkeypro.com/public/pdfs/sas/SAS">http://www.starkeypro.com/public/pdfs/sas/SAS</a> 2010 v2i3.pdf [9/16/2010]
- Bess, F. H., & Hornsby, B. W. (2014). The Complexities of Fatigue in Children with Hearing Loss. <u>SIG 9 Perspectives on Hearing and Hearing Disorders in Childhood</u>, 24(2), 25-39.

### **Book Chapters**

Mueller, H. G. and <u>Hornsby, B.</u> (2002). Selection and verification of maximum output. In: Valente M, ed. Strategies for selecting and verifying hearing aid fittings (2<sup>nd</sup> edition). New York: Thieme Medical Publishers, Inc.

#### CONTRIBUTED PRESENTATIONS

- Kelly, T., Hornsby, B., Kang, J. and Hall, J.W. III. (1995, April). <u>Distortion product otoacoustic emissions (DPOAE)</u>: Comparative normative data for five commercially available instruments. Poster session presented at the American Academy of Audiology 7<sup>th</sup> Annual Convention, Dallas, TX.
- Hall, J.W. III, Hornsby, B. and Kelly, T. (1996, February). Similarities and differences in distortion product otoacoustic emissions (DPOAE) among five commercially-available devices. Poster session presented at The Association for Research in Otolaryngology, ST. Petersburg Beach, FL.
- Trine, T.D., and <u>Hornsby, B.</u> (1997, April). <u>Loudness growth measures: Are they worth</u> the time? Poster session presented at the American Academy of Audiology 8<sup>th</sup> Annual Convention, Fort Lauderdale, FL.
- Trine, T.D. and <u>Hornsby, B.</u> (1997, September). <u>Measurement vs prediction of loudness growth function for the selection of hearing aid characteristics.</u> Poster session presented at the NIDCD/VA 2<sup>nd</sup> Biennial Hearing aid Research and Development Conference, Bethesda, MD.
- Grantham, D. W. and <u>Hornsby, B.</u> (1999). "Minimum audible movement angle in vertical, horizontal, and oblique planes: Effects of velocity and frequency content," J. Acoust. Soc. Am. 105, 1344.
- Hornsby, B., Trine, T.D., Grantham, D.W., Ohde, R.N., and Ashmead, D.H. (1999, November). The effects of high-intensity speech on consonant feature transmission in normal hearing subjects. Poster session presented at the 138th meeting of the Acoustical Society of America, Columbus, Ohio.
- <u>Hornsby, B.</u> and Ricketts, T. (2000, August). <u>The effects of multichannel compression, presentation level, and signal-to-noise ratio on speech recognition in normal-</u>

- <u>hearing subjects.</u> Paper presented at the International Hearing Aid Conference, Lake Tahoe, CA.
- Hornsby, B., and Ricketts, T. (2001, November). Factors affecting the benefits of amplified high- and low-frequency speech. Paper presented at the American Speech-Language-Hearing Association, New Orleans, LA.
- Hornsby, B., and Ricketts, T. (2002, March). The usability of high-frequency information: Hearing loss effects. Poster session presented at the spring meeting of the American Auditory Society, Scottsdale, AZ.
- Ricketts, T.A., Henry, P and <u>Hornsby, B.</u> (2002, August). Frequency effects and directional hearing aid benefit. Paper presented at the International Hearing Aid Research Conference, Lake Tahoe, CA.
- Hornsby, B. and Ricketts, T. (2002, August). <u>Distance and reverberation effects on directional benefit.</u> Poster presented at the International Hearing Aid Conference, Lake Tahoe, CA.
- Ricketts, T.A. and <u>Hornsby B.</u> (2003, March). Adaptive Directional Hearing Aids: Benefits and Limitations. Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Hornsby, B. and Ricketts, T. (2004, April). <u>High-frequency hearing loss and frequency importance</u>. Paper presented at the American Academy of Audiology 16th Annual Convention, Salt Lake City, UT.
- Hornsby, B. and Ricketts, T. (2004, March). <u>High-frequency Hearing loss: The Utility of High and Low-frequency Information</u>. Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Hornsby, B. and Ricketts, T. (2005, March). Benefits of Bilateral Use of Directional
   Microphones. Paper presented at the American Auditory Society Annual Meeting,
   Scottsdale, AZ.
- Hornsby, B. and Ricketts, T. (2005, April). <u>Consistency and impact of user volume</u> <u>control adjustments.</u> Paper presented at the American Academy of Audiology 17th Annual Convention, Washington, D.C.
- Hornsby, B. and Ricketts, T. (2006, March). <u>Directional benefit in the presence of speech</u> and speech-like maskers. Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Hornsby, B. and Ricketts, T. (2006, August). Factors affecting the benefit of asymmetric directional fittings. Paper presented at the International Hearing Aid Conference, Lake Tahoe, CA.

- Johnson, E., Ricketts, T.A., <u>Hornsby B.</u>, and Federman, J. (2008, June). <u>Modern Digital Hearing Aid Feedback Suppression Systems: Measures of Gain Margin and Effect on Amplified Sound Quality.</u> Poster presented at the XXIX International Congress of Audiology Annual Meeting, Hong Kong.
- Hornsby, B. and Picou, E. (2008, August). Effect of hearing aid use on cognitive processing and listening effort in everyday settings. Poster presented at the International Hearing Aid Conference (IHCON), Lake Tahoe, CA.
- Hornsby, B. and Picou, E. (2009, March). Hearing loss, hearing aids and cognitive processing throughout the day. Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Pollman, M., <u>Hornsby, B.</u> and Hood, L., (2010, March). <u>Efferent effects and speech understanding</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Amornpongchai, G., Ohde, R., Ricketts, T., and Hornsby, B. (2010, April). The Effect of Visual Cues on Speech Recognition Performance in Noise at High Presentation

  Levels. Poster presented at the American Academy of Audiology Annual Convention, San Diego, CA.
- Lim, S., Grantham, D.W., Ricketts, T., and <u>Hornsby, B.</u> (2010, April). <u>The Effect of Asymmetric Microphones on Localization Ability in Open-Fit Hearing Aids.</u>
  Poster presented at the American Academy of Audiology Annual Convention, San Diego, CA.
- <u>Hornsby, B.</u> (2011, March). <u>Effect of hearing aid use on mental fatigue.</u> Paper presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Moore, T., and <u>Hornsby, B.</u> (2011, March). <u>Predicting Hearing Aid Benefit from Speech</u> <u>Recognition Measures</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Kim, H., Ricketts, T., Tharpe, A. and Hornsby, B (2011, April). <u>Test-Retest Reliability of Open Hearing Aid Fittings in Children.</u> Poster presented at the American Academy of Audiology Annual Convention, Chicago, IL.
- Hornsby, B. (2012, August). <u>Tired of Listening: Subjective and Objective Measures of Hearing Related Fatigue.</u> Paper presented at the International Hearing Aid Conference (IHCON), Lake Tahoe, CA.
- Moore, T., <u>Hornsby, B.</u> and Hood, L. (2013, March). <u>Psychophysical and Otoacoustic Emission Estimates of Cochlear Compression</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

- Doss, Z., and <u>Hornsby, B.</u> (2013, March). <u>Fatigue and Listening</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Hornsby, B. and Kipp, A. (2013, March). Hearing Loss, Hearing Handicap, and
   Subjective Fatigue. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Rentmeester, L., Shuster, A., <u>Hornsby, B.</u>, and Bess, F.H. (2013, November). <u>Measures of Fatigue in Children With and Without Hearing Loss</u>. Poster presented at the American Speech-Language-Hearing Association convention, Chicago, IL.
- Bess, F.H., <u>Hornsby, B.</u>, Camarata, S. and Werfel, K. (2013, November). <u>Measuring Fatigue in School-Age Children with Hearing loss</u>. Paper presented at the American Speech-Language-Hearing Association convention, Chicago, IL.
- Rentmeester, L., Shuster, A., Key, A., <u>Hornsby, B.</u>, and Bess, F.H. (2014, March). Objective Measures of Fatigue in Children With and Without Hearing Loss. Poster presented at the American Academy of Audiology convention, Orlando, FL.
- Stangl, S., Tharpe, A., and <u>Hornsby, B.</u> (2014, March). Accuracy of Audiometry Conducted Outside of a Sound-Treated Booth: An Assessment of the KUDUwave. Poster presented at the American Academy of Audiology convention, Orlando, FL.
- Hornsby, B. (2014, August). Hearing Loss, Effort and Speech-Processing Related Fatigue. Poster presented at the International Hearing Aid Conference, Lake Tahoe, CA.
- Gustafson, S., Key, A., <u>Hornsby, B.,</u> & Bess, F.H. (2014, August). Objective Assessment of Speech in Noise Abilities & the Effect of Amplification in Children with Hearing Loss. Poster presented at the International Hearing Aid Conference, Lake Tahoe, CA.
- Headley, A., Fustos, E., Gustafson, S.J., <u>Hornsby, B.W.</u>, & Bess, F.H. (2015). <u>Profiling Hearing Aid Use in School-Age Children with Mild-to-Moderate Hearing Loss.</u>
  Poster presented at the Early Hearing, Detection & Intervention (EHDI) Meeting, Louisville, KY.
- Headley, A., Gustafson, S., <u>Hornsby, B.</u>, and Bess, F.H. (2014, November). <u>A</u>

  <u>Comparison of Parent Proxy & Self-Reports of Fatigue in Children with Hearing Loss</u>. Poster presented at the American Speech-Language-Hearing Association convention, Orlando, FL.
- Davis, H., Gustafson, S. <u>Hornsby</u>, B., and Bess, F.H. (2015, November). <u>Beyond the Fitting Appointment: Patterns of Hearing Aid and FM System Use in the Classroom</u>. Poster presented at the American Academy of Audiology convention,

- Headley, A., Fustos, E., Gustafson, S.J., <u>Hornsby, B.W.Y.</u>, & Bess, F.H. (2015). <u>Profiling Hearing Aid Use in School-Age Children with Mild-to-Moderate Hearing Loss.</u>
  Poster presented at the Early Hearing, Detection & Intervention (EHDI) Meeting, Louisville, KY.
- Hornsby, B. and Moore, T. (2015, March). <u>Hearing Loss, Mental Effort and Fatigue</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- Schwarcz, S. and Hornsby, B. (2015, March). <u>Cognitive Complexity, Cognitive Effort and Mental Fatigue</u>. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

### **INVITED PRESENTATIONS**

- Hornsby, B. (1997, April) Loudness growth measures: Clinical benefits vs clinical efficiency. Invited paper presented at the Tennessee Association of Audiologists and Speech Language Pathologists State Convention, Chattanooga, TN.
- Hornsby, B. (2002, October). High-frequency Speech Information: To Amplify or Not To Amplify. That is the Question. Invited paper presented at the Tennessee Association of Audiologists and Speech Language Pathologists (TAASLP) Fall 2002 meeting, Franklin, TN.
- <u>Hornsby, B.</u> and Ricketts, T. (2004, August). <u>Effects of Informational Masking on</u>
  <u>Hearing Aid Benefit</u>. Invited paper presented at the International Hearing Aid Conference, Lake Tahoe, CA.
- Hornsby, B. (2006, March). Factors Affecting the Benefit of Amplified Speech for Persons with Hearing Loss. Invited paper presented at the National Center for Rehabilitative Auditory Research (NCRAR) Research Seminar. Portland, OR.
- Hornsby, B. (2006, April). Factors Affecting the Speech Understanding of Older Adults
   with Hearing Loss. Invited paper presented at the California Speech Language
   and Hearing Association (CSHA) Annual meeting, San Francisco, CA.
- Hornsby, B., Ricketts, T. and Armstrong, S. (2007, April). Extending Hearing Aid

  Bandwidth: Benefits and challenges. Invited paper presented at the American

  Academy of Audiology 19th Annual Convention, Denver, CO.
- Hornsby, B. (2008, June). Effects of noise configuration and type on binaural benefit with asymmetric directional fittings. Invited paper presented at the 155th Meeting of the Acoustical Society of America, Paris, France.

- Hornsby, B. (2008, November). Hearing Loss, Hearing Aids and Listening Effort. Invited paper presented at the Berkley University Ear Club meeting, Berkley, CA.
- Hornsby, B. (2009, May). The relationship between hearing loss and listening effort:

  <u>Consequences and potential remediation.</u> Invited paper presented at the 2<sup>nd</sup>
  Biennial Modern Developments in Audiology Conference, Nashville, TN.
- Hornsby, B. (2009, June). Open Canal (OC) Fittings: Potential Impact of Cochlear Dead Regions on OC Candidacy. Invited online presentation through AudiologyOnline. http://www.audiologyonline.com/ceus/recordedcoursedetails.asp?class\_id=13851
- Hornsby, B. (2010, August). Recent Research on Factors that Can Influence Speech
   Processing. Invited presentation via Audiology Online Continuing Education
   (CEU) Course.
   http://www.audiologyonline.com/ceus/recordedcoursedetails.asp?class\_id=16788
- Hornsby, B. (2010, August). <u>Hearing Loss and Listening Effort.</u> Invited presentation at the National Center for Rehabilitative Auditory Research (NCRAR) Research Seminar. Portland, OR.
- Hornsby, B. (2011, May). Amplification and Listening Fatigue: A Hearing Aid "Pick me up"? Invited paper presented at the 3<sup>rd</sup> Biennial Modern Developments in Audiology Conference, Nashville, TN.
- Hornsby, B. (2012, November). Hearing Loss and Mental Fatigue: Tired from Listening.Invited presentation at the National Centre for Audiology (NCA), University of Western Ontario, London, Ontario.
- Hornsby, B. (2013, February). Word Recognition Testing: The Puzzling Clinical

  Disconnect from Best Practice. Invited presentation via Audiology Online
  Continuing Education (CEU) Course.

  <a href="http://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-s-journal-club-22139">http://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-s-journal-club-22139</a>
- Hornsby, B. (2013, April). <u>Hearing loss and fatigue: Assessment and interventions.</u>
  Invited paper presented at the 4<sup>th</sup> Biennial Modern Developments in Audiology Conference, Nashville, TN.
- Hornsby, B. (2013, November). Assessment and Interventions for Hearing Loss-Related Fatigue. Invited paper presented at the UCSF Audiology Amplification Update XI, San Francisco, CA.
- Hornsby, B. (2014, October). Too Tired to Listen? Assessing Fatigue Children with
   Hearing Loss. Invited paper presented at the Knowles Hearing Center Research
   Symposium, Northwestern University, Evanston, IL.

- <u>Hornsby, B.</u> (2014, November). <u>Auditory Fatigue in Children with Hearing Loss.</u> Invited paper presented at the Oticon Pediatrics Clinical Update conference, Chicago, IL
- Hornsby, B., Naylor, G. and Bess, F.H. (2015, June). A taxonomy of fatigue concepts and relations to hearing impairment. Invited paper presented at the Fifth Eriksholm Workshop on "Hearing impairment and Cognitive Energy", Snekkersten, Denmark.