

Curriculum Vitae (abbreviated)

Brad H. Story

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University Address: University of Arizona
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Educational and Professional History

A. Higher Education

1995	Ph.D.	Speech and Hearing Science	University of Iowa
1987	B.S.	Applied Physics	University of Northern Iowa

B. Professional and Academic Employment

2013 -present	Professor	Dept. of Speech, Lang. & Hear. Sci.	University of Arizona
2011-present	Associate Dept. Head	Dept. of Speech, Lang. & Hear. Sci.	University of Arizona
2006-2013	Associate Professor	Dept. of Speech, Lang. & Hear. Sci.	University of Arizona
2000-2006	Assistant Professor	Dept. of Speech and Hearing Sciences	University of Arizona
1997-2000	Senior Scientist	WJ Gould Voice Research Center	Denver Center for the Performing Arts
1995-1999	Adjunct Assistant Professor	Dept. of Speech Path. and Aud.	University of Iowa
1994-1997	Assistant Research Scientist	Dept. of Speech Path. and Aud.	University of Iowa
1991-1994	Pre-Doctoral Trainee	National Center for Voice and Speech	University of Iowa
1987-1991	Acoustical Engineer	Donaldson Company, Inc.	Minneapolis, MN

Publications/Creative Works

A. Refereed Journal Articles

1. Story, B. H., and Bunton, K., (2017). An acoustically-driven vocal tract model for stop consonant production, *Speech Comm.*, 87, 1-17. Final version published online: 20-Dec-2016. DOI: 10.1016/j.specom.2016.12.001.
2. Samlan, R., and Story, B. H., (accepted for publication). Influence of left-right vocal fold asymmetries on voice quality in simulated paramedian vocal fold paralysis, *J. Spch. Lang. Hear. Res.*
3. Lester-Smith, R. A., and Story, B. H. (2016). The effects of physiological adjustments on the perceptual and acoustical characteristics of vibrato as a model of vocal tremor. *J. Acoust. Soc. Am.* 140(5), 3827-3833.
4. Bunton, K., and Story, B. H. (2016). Arizona Child Acoustic Database Repository. *Folia Phoniatica et Logopaedica*, 68(3), 107-111.
5. Neely, K. D., Bunton, K., and Story, B. H. (2016). A modeling study of the effects of vocal tract movement duration and magnitude on the F2 trajectory in CV words. *J. Spch., Lang., & Hear. Res.*, 59, 1327-1334.
6. Story, B.H., and Bunton, K., (2016). Formant measurement in children's speech based on spectral filtering, *Speech Communication*, 76, 93-111, [<http://dx.doi.org/10.1016/j.specom.2015.11.001>]

7. Lester, R.L., and Story, B.H., (2015). The effects of physiological adjustments on the perceptual and acoustical characteristics of simulated laryngeal vocal tremor. *J. Acoust. Soc. Am.* 138(2), 953-963, [<http://dx.doi.org/10.1121/1.4927561>].
8. Titze, I.R., Baken, R., Bozeman, K., Granqvist, S., Henrich, N., Herbst, C., Howard, D., Hunter, E., Kaelin, D., Kent, R., Kreiman, J., Kob, M., Lofqvist, A., McCoy, S., Miller, D., Noe, H., Scherer, R., Smith, J., Story, B.H., Svec, J., Ternstrom, S., & Wolfe, J., (2015). Toward a consensus on symbolic notation of harmonics, resonances, and formants in vocalization, *J. Acoust. Soc. Am.*, 137(5), 3005-3007, [<http://dx.doi.org/10.1121/1.4919349>]
9. Carbonell, K. M., Lester, R. A., Story, B. H., and Lotto, A. J., (2015). Discriminating simulated vocal tremor using amplitude modulation spectra, *J. Voice*, 29(2), 140-147, doi:10.1016/j.jvoice.2014.07.020
10. Story, B. H., (2014). Structure, Movement, Sound, and Perception, *Perspectives on Speech Science and Orofacial Disorders*, 24, 7-20, doi: 10.1044/ssod24.1.7.
11. Monson, B. B., Lotto, A. L., and Story, B. H., (2014). Gender and vocal production mode discrimination using the high frequencies for speech and singing. *Frontiers in Psychology*, section Auditory Cognitive Neuroscience, 5, Article 1239.
12. Monson, B. B., Hunter, E. J., Lotto, A. J., and Story, B. H., (2014). The perceptual significance of high-frequency energy in the human voice, *Frontiers in Psychology*, section Auditory Cognitive Neuroscience, 5, Article 587.
13. Samlan, R., Story, B. H., Lotto, A., and Bunton, K., (2014). The acoustic and perceptual effects of left-right vocal fold asymmetries based on computational modeling, *J. Spch., Lang., Hear. Res.*, 1-19, doi: 10.1044/2014_JSLHR-S-12-0405.
14. Auvinen, H., Raitio, T., Siltanen, S., Story, B. H., and Alku, P., (2014). Automatic glottal inverse filtering with Markov chain Monte Carlo method, *Computer Speech and Language*, 28(5), 1139-1155.
15. Airaksinen, M., Raitio, T., Story, B., and Alku, P., (2014). Quasi closed phase glottal inverse filtering analysis with weighted linear prediction, *IEEE Trans. Aud. Spch. Lang. Proc.*, 22(3), 596-607. DOI 10.1109/TASLP.2013.2294585.
16. Monson, B. B., Lotto, A. J., and Story, B. H., (2014). Detection of high-frequency energy level changes in speech and singing, *J. Acoust. Soc. Am.*, 135(1), 400-406.
17. Samlan, R., Story, B. H., and Bunton, K., (2013). Relation of perceived breathiness to laryngeal kinematics and acoustic measures based on computational modeling, *J. Spch., Lang., Hear. Res.*, 56, 1209-1223.
18. Alku, P., Pohjalainen, J., Vaino, M., Laukkanen, A-M., and Story, B. H. (2013). Formant frequency estimation from high-pitched vowels using weighted linear prediction, *J. Acoust. Soc. Am.*, 134(2), 1295-1313.
19. Lester, R. A., Barkmeier-Kraemer, J., and Story, B. H., (2013). Physiologic and acoustic patterns of essential vocal tremor, *J. Voice*, published online 13 March 2013, //dx.doi.org/10.1016/j.jvoice.2013.01.002.
20. Story, B.H., (2013). Phrase-level speech simulation with an airway modulation model of speech production, *Computer Speech and Language*. 27(4), 989-1010.
21. Lester, R.A., and Story, B.H., (2013). Acoustic characteristics of respiratory-induced vocal tremor, *Am. J. Spch. Lang. Path.*, 22, 205-211.
22. Schleusing, O., Kinnunen, T., Story, B. H., and Vesin, J-M., (2013). Joint source-filter optimization for accurate vocal tract estimation using differential evolution, *IEEE Trans. Aud., Speech, and Lang. Proc.*, 21(8), 1560-1572.

23. Story, B.H., and Bunton, K., (2013). Simulation and identification of vowels based on a time-varying model of the vocal tract area function, In *Vowel Inherent Spectral Change*, G. Morrison and P. Assmann, Eds. Springer, 155-174. doi:10.1007/978-3-642-14209-3
24. Bunton, K. and Story, B. (2012). The relation of nasality and nasalance to nasal port area based on a computational model. *The Cleft Palate-Craniofacial Journal*, 49 (6), 741-749.
25. Monson, B.B., Hunter, E., and Story, B.H., (2012). Horizontal directivity of low- and high-frequency energy in speech and singing, *J. Acoust. Soc. Am.*, 132(1), 433-441.
26. Monson, B.B., Lotto, A., and Story, B.H., (2012). Analysis of high-frequency energy in long-term average spectra of singing, speech and voiceless fricatives, *J. Acoust. Soc. Am.*, 132(3), 1754-1764.
27. Bunton, K., and Story, B.H., (2011). The relation of nasality and nasalance to nasal port area based on a computational model, *The Cleft Palate-Craniofacial Journal*, DOI: 10.1597/11-131.
28. Samlan, R., and Story, B.H., (2011). Relation of structural and vibratory kinematics of the vocal folds to two acoustic measures of breathy voice based on computational modeling, *J. Spch. Lang. Hear. Res.*, 54, 1267-1283.
29. Titze, I.R., Worley, A.S., and Story, B.H., (2011). Source-vocal tract interaction in female operatic singing and theater belting, *J. Singing*, 67(5), 561-572.
30. Story, B.H., and Bunton, K., (2010). Relation of vocal tract shape, formant transitions, and stop consonant identification, *J. Spch. Lang. Hear. Res.*, 53, 1514-1528.
31. Bunton, K., & Story, B.H., (2010). Identification of synthetic vowels based on a time-varying model of the vocal tract area function, *J. Acoust. Soc. Am.*, 127(4), EL146-EL152.
32. Story, B.H., (2009). Vowel and consonant contributions to vocal tract shape, *J. Acoust. Soc. Am.*, 126, 825-836.
33. Alku, P., Magi, C., Yrttiaho, S., Bäckström, T., & Story, B.H., (2009). Closed-phase covariance analysis based on constrained linear prediction for glottal inverse filtering, *J. Acoust. Soc. Am.*, 125(5), 3289-3305.
34. Story, B.H., (2009). Vocal tract modes based on multiple area function sets from one speaker, *J. Acoust. Soc. Am.*, 125(4), EL141-EL147.
35. Bunton, K., and Story, B.H., (2009). Identification of synthetic vowels based on selected vocal tract area functions, *J. Acoust. Soc. Am.*, 125(1), 19-22.
36. Lowell, S.Y., Barkmeier-Kraemer, J.M., Hoit, J.D., and Story, B.H., (2008). Respiratory and laryngeal function during spontaneous speaking in teachers with voice disorders, *J. Speech, Lang., and Hear. Res.*, 51, 333-349.
37. Story, B. H., (2008). Comparison of Magnetic Resonance Imaging-based vocal tract area functions obtained from the same speaker in 1994 and 2002, *J. Acoust. Soc. Am.*, 123(1), 327-335.
38. Carmichel, E.L., Harris, F.P., and Story, B.H., (2007). Effects of binaural electronic hearing protectors on localization and response time to sounds in the horizontal plane, *Noise and Health*, 9(37), 83-95.
39. Story, B. H., (2007). A comparison of vocal tract perturbation patterns based on statistical and acoustic considerations, *J. Acoust. Soc. Am. Exp. Let.*, 122(4), EL107-EL114.
40. Sapir, S., Spielman, J., Ramig, L.O., Story, B.H., & Fox, C., (2007). Effects of Intensive Voice Treatment (LSVT) on Vowel Articulation in Dysarthric Individuals with Idiopathic Parkinson Disease: Acoustic and Perceptual Findings, *J. Spch. Lang. Hear. Res.*, 50, 899-912.

41. Story, B. H., (2007). Time-dependence of vocal tract modes during production of vowels and vowel sequences, *J. Acoust. Soc. Am.*, 121(6), 3770–3789.
42. Pruthi, T., Espy-Wilson, C., and Story, B. H., (2007). Simulation and analysis of nasalized vowels based on magnetic resonance imaging data, *J. Acoust. Soc. Am.*, 121(6), 3858–3873.
43. Mathur, S., Story, B. H., and Rodriguez, J. J., (2006). Vocal-tract modeling: Fractional elongation of segment lengths in a waveguide model with half-sample delays, *IEEE Transactions on Audio, Speech and Language Processing*, 14(5), 1754–1762.
44. Lowell, S., and Story, B.H., (2006). Simulated effects of cricothyroid and thyroarytenoid muscle activation on vocal fold vibration in males, *J. Acoust. Soc. Am.*, 120, 386–397.
45. Farinella, K. A., Hixon, T. J., Hoit, J. D., Story, B. H., and Jones, P. A., (2006). Listener perception of respiratory-induced voice tremor, *Am. J. of Speech, Lang. Pathology*, 15, 72–84.
46. Alku, P., Story, B. H., and Airas, M., (2006). Estimation of the voice source from speech pressure signals: Evaluation of an inverse filtering technique using physical modeling of voice production, *Folia Phoniatica et Logopaedica*, 58(2), 102-113.
47. Story, B. H., (2006). A technique for “tuning” vocal tract area functions based on acoustic sensitivity functions, *J. Acoust. Soc. Am.*, 119(2), 715–718.
48. Story, B. H., (2005). Synergistic modes of vocal tract articulation for American English vowels, *J. Acoust. Soc. Am.*, 118(6), 3834–3859.
49. Story, B.H., (2005). A parametric model of the vocal tract area function for vowel and consonant simulation, *J. Acoust. Soc. Am.* 117(5), 3231–3254.
50. Bergan, C.C., Titze, I.R., and Story, B.H., (2004). Perception of two vocal qualities in a synthesized vocal utterance: Ring and pressed voice, *J. Voice*, 18(3), 305-317.
51. Story, B. H. (2004). Vowel acoustics for speaking and singing, *Acta Acustica united with Acustica*, 90(4), 629–640.
52. Story, B.H., (2004). On the ability of a physiologically-constrained area function model of the vocal tract to produce normal formant patterns under perturbed conditions, *J. Acoust. Soc. Am.* 115(4), 1760-1770.
53. Titze, I.R., Bergan, C.C., Hunter, E., and Story, B.H., (2003). Source and filter adjustments affecting the perception of the vocal qualities twang and yawn, *Logopedics, Phoniatrics, and Vocology*, 28(4), 147-155.
54. Sapir, S., Spielman, J., Ramig, L., Hinds, S.L., Countryman, S., Fox, C., and Story, B.H. (2003). Effects of Intensive Voice Treatment (the Lee Silverman Voice Treatment (LSVT)) on Ataxic Dysarthria: A Case Study, *American Journal of Speech-Language Pathology*, 12, 387-399.
55. Titze, I.R., and Story, B.H., (2002). Rules for controlling low-dimensional vocal fold models with muscle activities, *J. Acoust. Soc. Am.*, 112(3), 1064-1076.
56. Story, B.H., and Titze, I.R., (2002). A preliminary study of voice quality transformation based on modifications to the neutral vocal tract area function, *J. Phonetics*, 30, 485–509.
57. Titze, I.R., Story, B.H., Smith, M., and Long, R., (2002). A reflex resonance model of vocal vibrato, *J. Acoust. Soc. Am.*, 111(5), 2272–2282.
58. Story, B.H., Titze, I.R., and Hoffman, E.A., (2001). The relationship of vocal tract shape to three voice qualities, *J. Acoust. Soc. Am.*, 109, 1651–1667.

59. Tom, K., Titze, I.R., Hoffman, E.A., and Story, B.H., (2001). 3-D vocal tract imaging and formant structure: Varying vocal register, pitch, and loudness, *J. Acoust. Soc. Am.*, 109(2), 742-747.
60. Story, B.H., Laukkanen, A-M., and Titze, I.R., (2000). Acoustic impedance of an artificially lengthened and constricted vocal tract, *J. Voice*, 14(4), 455-469.
61. Titze, I.R., Story, B.H., Burnett, G., Holzrichter, J., Ng, L., and Lea, W. (1999). Comparison between electroglottography and electromagnetic glottography, *J. Acoust. Soc. Am.*, 107(1), 581-588.
62. Story, B.H., and Titze, I.R., (1998). Parameterization of vocal tract area functions by empirical orthogonal modes, *J. Phonetics*, 26(3), 223-260.
63. Story, B.H., Titze, I.R., and Hoffman, E.A., (1998). Vocal tract area functions for an adult female speaker based on volumetric imaging, *J. Acoust. Soc. Am.*, 104(1), 471-487.
64. Story, B.H., Titze, I.R., and Wong., D., (1997). A simplified model for the simulation and transformation of speech, *Engineering Applications of Artificial Intelligence*, 10(6), 593-601.
65. Titze, I.R., Wong, D., Story, B.H., and Long, R., (1997). Considerations in voice transformation with physiologic scaling principles, *Speech Comm.*, 22, 113-123.
66. Titze, I.R., and Story, B.H., (1997). Acoustic interactions of the voice source with the lower vocal tract, *J. Acoust. Soc. Am.*, 101(4), 2234-2243.
67. Story, B.H., Titze, I.R., and Hoffman, E.A., (1996). Vocal tract area functions from magnetic resonance imaging, *J. Acoust. Soc. Am.*, 100(1), 537-554.
68. Berry, D.A., Herzel, H., Titze, I.R., and Story, B.H., (1996). Bifurcations in excised larynx experiments, *J. Voice*, 10(2), 129-138.
69. Story, B.H., and Titze, I.R., (1995). Voice simulation with a body-cover model of the vocal folds, *J. Acoust. Soc. Am.*, 97(2), 1249-1260.
70. Titze, I.R., Mapes, S.J., and Story, B.H., (1994). Acoustics of the tenor high voice, *J. Acoust. Soc. Am.*, 95(2), 1133-1142.

B. Non-Refereed Proceedings Articles and Tutorials

1. Story, B. H., and Bunton, K. (2015). A spectral filtering method for tracking formants in children's speech, *Proceedings of Meetings on Acoustics*, 23, Technical area: Paper 2pSC23.
2. Story, B. H., (2013). A model of nonlinear source-filter interaction for simulation of the soprano voice, in *The Continuing Influence of Ingo R. Titze on Voice, Science, and Music: A Festschrift Collection*, R. Scherer and K. Verdolini Abbott, Eds., National Center for Voice and Speech, University of Utah.
3. Lester, R. A., and Story, B. H., (2013). Modulation of voice related to simulated vocal fold length change with cricothyroid and thyroarytenoid muscle activation, *Proc. 10th Intl. Conf. Adv. Quan. Laryng., Voice, and Spch Res.*, 63-64.
4. Story, B.H., (2011). TubeTalker: An airway modulation model of human sound production, *Proceedings of the International Workshop on Performative Speech and Singing Synthesis March 14-15, 2011, Vancouver, BC.*
5. Barkmeier, J., and Story, B.H., (2010). Conceptual and clinical updates on vocal tremor, *ASHA Leader*, Nov. 23, 2010.

6. Alku, P., Story, B.H., and Airas, M., Evaluation of an inverse filtering technique using physical modeling of voice production, Proceedings of the ICSLP 2004.
7. Mathur, S., and Story, B.H., (2003). Vocal tract modeling: Implementation of continuous length variations in a half-sample delay Kelly-Lochbaum model, Proceedings of IEEE International Symposium on Signal Processing and Information Technology, 14-17 December 2003, Darmstadt, Germany.
8. Story, B.H., (2003). Using imaging and modeling techniques to understand the relation between vocal tract shape to acoustic characteristics, Proceedings of the Stockholm Musical Acoustics Conference (SMAC), Stockholm, Sweden, 6-9 August. **[Invited]**.
9. Story, B.H., (2003). Physical modeling of voice and voice quality, Proceedings of VOQUAL03 (Voice Quality: Functions, Analysis and Synthesis), Geneva, Switzerland, 27-29 August. **[Invited]**.
10. Story, B.H., (2002). An overview of the physiology, physics, and modeling of the sound source for vowels, Acoustical Science and Technology, 23(4), 195-206. **[Invited]**.
11. Titze, I.R., and Story, B.H., (2002). Voice quality: What is most characteristic about "You" in speech, Echoes (Acoust. Soc. Am.), 12(4), pages 1 & 4.
12. Verdolini, K., Story, B., and Taylor, M., (2001). Investigation of perceptual and articulatory correlates of tonal ideals in German and Italian schools of classical singing, Proceedings of the 17th International Congress on Acoustics, Rome, Italy, 2-7 September, 2001.
13. Story, B.H., and Titze, I.R., (2000). An investigation of voice quality based on modifications of the neutral vocal tract shape, Proceedings of the 5th Speech Production Seminar, Kloster Seeon, Germany, 1-4 May, 2000.
14. Story, B.H., Titze, I.R., and Long, R., (1998). Synthesis of sentence-level speech based on measured vocal tract area functions, Proceedings of the ICA/ASA Joint Meeting, Seattle, WA, 20-26 June, 2663-2664.
15. Long, R., Story, B.H., and Titze, I.R., (1998). Vocal tract shape estimation using three non-invasive transducers, Proceedings of the ICA/ASA Joint Meeting, Seattle, WA, 20-26 June, 2661-2662.
16. Druker, D.G., Titze, I.R., and Story, B.H., Glottal source parameter estimation by comparison of measured signals with simulated signals, Proceedings of the ICA/ASA Joint Meeting, Seattle, WA, 20-26 June, 251-252.
17. Michaelis, D., Fröhlich, M., Strube, H.W., Kruse, E., Story, B., and Titze, I.R., (1998). Some simulations concerning jitter and shimmer measurement, Proceedings of the 3rd International Workshop on Advances in Quantitative Laryngoscopy, June, 19-20, Universitätsklinikum, RWTH Aachen.
18. Michaelis, D., Fröhlich, M., Strube, H.W., Kruse, E., Story, B.H., Titze, I.R., (1998). Grenzen der jitter- und shimmer-messung pathologischer stimmen mit dem unüberwachten waveform-matching-verfahren, in Fortschritte der Akustik, DAGA 98, Zurich, Switzerland, 23-27 March.
19. Patterson, D.K., Pepperberg, I.M., Story, B.H., and Hoffman, E.A., (1997). How parrots talk: Insights based on CT scans, image processing, and mathematical models, SPIE Proc. Physiology and Function from Multidimensional Images, 3033, Newport Beach, CA, 22-28 Feb.
20. Story, B.H., Hoffman, E.A., and Titze, I.R., (1997). Volumetric image-based comparison of male and female vocal tract shapes, SPIE Proc. Physiology and Function from Multidimensional Images, 3033, Newport Beach, CA, 22-28 Feb., 25-37.
21. Story, B.H., Titze, I.R., and Wong, D., (1996). A simplified model for simulation and transformation of speech, Proc. of the IEEE Joint Symposia on Systems and Intelligence, Rockville, MD. 4-5 Nov.

22. Titze, I.R., Wong, D., Lange, R., and Story, B.H., (1996). Comparison of three techniques for voice transformation, in Proc. of 1st ESCA Tutorial and Research Workshop on Speech Production Modeling and 4th Speech Production Seminar, Aufrans, France, pp. 215-220.
23. Story, B.H., Hoffman, E.A., and Titze, I.R., (1996). Vocal tract imaging: A comparison of MRI and EBCT, SPIE Proc. Physiology and Function from Multidimensional Images, 2709, Newport Beach, CA, 10-15 Feb.
24. Story, B.H., Hoffman, E.A., and Titze, I.R., (1995). Speech simulation based on MRI images of the vocal tract, SPIE Proc. Physiology and Function from Multidimensional Images, 2433, San Diego, CA, 26 Feb-2 Mar.
25. Tom, K., Titze, I.R., Hoffman, E.A., and Story, B.H., Volumetric EBCT imaging of the vocal tract applied to male falsetto singing, SPIE Proc. Physiology and Function from Multidimensional Images, 2709, Newport Beach, CA, 10-15 Feb.

C. Book Chapters

1. Story, B. H., (2016). The vocal tract in singing, in *The Handbook of Singing*, G. Welch, D. Howard & J. Nix, Eds., Oxford University Press. DOI: 10.1093/oxfordhb/9780199660773.013.012
2. Story, B. H., (2015). Mechanisms of voice production, in *The Handbook of Speech Production*, M. Redford, Ed., John Wiley and Sons, West Sussex, UK, 34-58.
3. Story, B. H., (2007). Modification of emotional speech and voice quality based on changes to the vocal tract structure, in *Emotions in the Human Voice: Volume I*, K. Izdebski, Ed., Plural Publishing, San Diego, CA, 123-136.

Media

A. Educational Performances in Professional Voice

- 1998: *Pavarobotti: Voices of People and Machines*, The Whitaker Foundation, LaJolla, CA
- 1997: *Birth of Pavarobotti*, Adams Mark Hotel, NATS Convention, St. Louis, MO
- 1995: *Voices of People and Machines*, University of Northern Iowa, Cedar Falls, Iowa
- 1993: *Voices of People and Machines*, Voice Foundation Meeting, Warwick Hotel, Philadelphia, PA
- 1993: *Voices of People and Machines*, McCormick Auditorium, Northwestern University
- 1993: *Voices of People and Machines*, Boettcher Concert Hall, Acoustical Society of America Meeting, Denver, CO

B. Video Productions

2016: UA [University of Arizona] Chimes and Echoes produced by Arizona Public Media
<https://www.youtube.com/watch?v=eucuV-6XzNs&t=2s>

2000: Scientific Advisor/Illustrator for *The World Within Your Voice*, a video for network television produced by Denver Center Media at the Denver Center for the Performing Arts.

Scholarly Presentations

A. Conferences

Story, B.H., (December, 2016). The role of artificial speech in understanding the acoustic characteristics of spoken communication, Acoustics Education Prize Lecture, Presented at the 5th Meeting of the ASA and ASJ, 01 Dec. 2016, Session 4pEDb1, Honolulu, HI. **[Invited]**

Story, B.H., and Bunton, K. (November, 2016). Identification of stop consonants produced by an acoustically-driven model of a child-like vocal tract, Presented at the 5th Meeting of the ASA and ASJ, 30 Nov. 2016, Session 3pSC, Honolulu, HI.

Willi, M. and Story, B.H., (November, 2016). Prediction of listener perception of reduced, voice stop consonant simulations based on patterns of formant deflections, Presented at the 5th Meeting of the ASA and ASJ, 30 Nov. 2016, Session 3pSC, Honolulu, HI.

Story, B.H., and Bunton, K. (October, 2016). Speech performance density as an indicator of clear speech. Presented at the 2016 Fall Voice Conference, Scottsdale, AZ.

Story, B.H., (October, 2016). Tuning vocal tract Resonances to enhance voice quality. Presented at the 2016 Meeting of the Pan-American Voice Association, Scottsdale, AZ. **[Invited]**

Story, B.H., and Bunton, K. (March, 2016). Simulations of child-like speech as test material for speech analysis algorithms, presented at the 2016 International Conference on Vocal Fold Physiology and Biomechanics, Viña del Mar, Chile.

Lester, R., and Story, B. H., (March, 2016). Predicting Listener Perception of Simulated Laryngeal Vocal Tremor Using A Novel Measure of Pitch Modulation Strength, presented at the 2016 International Conference on Motor Speech, Newport Beach, CA.

Story, B. H., Bunton, K., and Vorperian, H., (March, 2016). Effects of vocal tract growth on gender and vowel identification based on simulated children's vowels, presented at the 2016 International Conference on Motor Speech, Newport Beach, CA.

Neely, K., Bunton, K., and Story, B. H., (March, 2016). Comparison of lip rounding by children and adults, presented at the 2016 International Conference on Motor Speech, Newport Beach, CA.

Lester, R., and Story, B. H., (May, 2015). Acoustical bases for the perception of vibrato as a model of vocal tremor, Presented at the 44th Annual Symposium of the Voice Foundation: Care of the Professional Voice. Philadelphia, PA.

Story, B.H., (May, 2015). Ken Stevens' influence on the development of paradigms for speech synthesis. Presented at 169th Meeting of the Acoustical Society of America, Pittsburgh, PA, 3aSC12, J. Acoust. Soc. Am., 137(4), 2328.

Story, B.H., and Bunton, K. (May, 2015). A spectral filtering method for tracking formants in children's speech. Presented at 169th Meeting of the Acoustical Society of America, Pittsburgh, PA, 2pSC23, J. Acoust. Soc. Am., 137(4), 2305.

Willi, M.M., and Story, B.H., (May, 2015). Acoustic modeling of the perception of place information in incomplete stops. Presented at 169th Meeting of the Acoustical Society of America, Pittsburgh, PA, 2pSC24, J. Acoust. Soc. Am., 137(4), 2305.

Story, B.H., (January, 2015). The elusive shape of a child's vocal tract , 9th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ.**[Invited]**

Willi, M.M., and Story, B.H., (January, 2015). Place and manner perception of incomplete stops , 9th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ.

Lester, R. L., Story, B. H., and Lotto, A. J. (2014). Acoustical bases for the perception of simulated laryngeal vocal tremor. Presented at 168th Meeting of the Acoustical Society of America, Indianapolis, IN, 4pSC, J. Acoust. Soc. Am.

Story, B. H. (2014). Eerie voices: Odd combinations, extremes, and irregularities. Presented at 168th Meeting of the Acoustical Society of America, Indianapolis, IN, 4pAAa10, J. Acoust. Soc. Am.

Samlan, R., and Story, B. H., (2014). Influence of left-right asymmetries on voice quality in paramedian vocal fold paralysis. Presented at The Fall Voice Conference, San Antonio, TX, October 24, 2014.

Vos, R., Angus, J., and Story, B.H. (April 2014). A new algorithm for vocal tract shape extraction from singer's waveforms, P10-1, paper 9073, presented at the 136th Audio Engineering Society Convention, Berlin, Germany, April 26-29.

Story, B.H., and Bunton, K. (April 2014). A model of children's speech production, presented at the 2014 International Conference on Vocal Fold Physiology and Biomechanics, Salt Lake City, UT.

Story, B.H., (March 2014). Acoustic sensitivity of the vocal tract as a guide to speech development, presented at the 2014 International Conference on Motor Speech, Sarasota, FL. **[Invited]**

Story, B.H., and Bunton, K. (March 2014). Vocal tract area functions for child talkers, presented at the 2014 International Conference on Motor Speech, Sarasota, FL.

Story, B.H., and Vorperian, H.K. (March 2014). Speaker-specific modeling of vocal tract shape and vowel space, presented at the 2014 International Conference on Motor Speech, Sarasota, FL. **[Invited]**

Story, B.H., Hunter, E., and Scherer, R., (December, 2013). The academic family tree of Ingo Titze. Presented at the 166th Meeting of the Acoustical Society of America, San Francisco, CA, 2aID11, J. Acoust. Soc. Am.

Story, B.H., (November, 2013). Structure, Movement, Sound, and Perception, Willard R. Zemlin Memorial Lecture, Presented at the ASHA Annual Convention, Session 1418, (Chicago, IL). **[Invited]**

Samlan, R., Story, B. H., Lotto, A., and Bunton, K. (November, 2013). The acoustic and perceptual effects of left-right vocal fold asymmetries based on computational modeling, Presented at the ASHA Annual Convention, Session 5677, (Chicago, IL).

Samlan, R., Story, B. H., Bunton, K., and Lotto, A. (November, 2013). The acoustic and perceptual effects of left-right vocal fold asymmetries in simulated vocal fold paralysis, Presented at the ASHA Annual Convention, Session 5678, (Chicago, IL).

Lester, R., and Story, B. H., (June 2013). Modulation of voice related to simulated vocal fold length change with cricothyroid and thyroarytenoid muscle activation, Presented at the 10th International Conference on Advances in Quantitative Laryngology, Cincinnati, OH.

Bunton, K., Story, B. H., and Titze, I. R., (June 2013). Estimation of vocal tract area functions in children based on measurement of lip termination area and inverse acoustic mapping, Presented at the Joint Meeting of the Acoustical Society of America, International Congress on Acoustics, and the Canadian Acoustics Association, Montreal, Quebec, 2aSC10, J. Acoust. Soc. Am.

Story, B. H., and Bunton, K., (June 2013). Production of child-like vowels with nonlinear interaction of glottal flow and vocal tract resonances, Presented at the Joint Meeting of the Acoustical Society of America, International Congress on Acoustics, and the Canadian Acoustics Association, Montreal, Quebec, 5pSC2, J. Acoust. Soc. Am.

Lester, R., and Story, B. H., (May 2013). Modulation of the voice related to tremor and vibrato, Presented at the 42nd Annual Symposium of the Voice Foundation: Care of the Professional Voice. Philadelphia, PA.

Carbonell, K.M., Story, B.H., Lester, R., and Lotto, A.J., (October, 2012). Discriminating vocal tremor source from amplitude envelope modulations, Presented at the 164th Acoustical Society Meeting, Kansas City, MO. (5aSC18) (J. Acoust. Soc. Am., 132(3), 2090).

Vitela, A.D., Lotto, A.J., and Story, B.H., (October, 2012). Talker normalization" effects elicited with no change in talker. Presented at the 164th Acoustical Society Meeting, Kansas City, MO. (2pSC9), J. Acoust. Soc. Am., 132(3), 1967.

Titze, I.R., and Story, B.H. (July, 2012). Recovering the vocal tract area function from lip area and formant frequencies, Presented at the International Conference on Vocal Fold Physiology and Biomechanics (ICVPB). Erlangen, Germany.

Monson, B.B., Story, B.H., and Lotto, A.J., (May 2012). Analysis of high-frequency energy in singing and speech, Presented at the Acoustics 2012 Hong Kong meeting of the Acoustical Society of America, 131(4), pt. 2, 3378.

Bunton, K., and Story, B.H., (March 2012). Relation of constriction location, formant transitions, and consonant identification based on VCVs simulated with a child-like model of speech production, presented at the 2012 Conference on Motor Speech, Santa Rosa, CA.

Story, B.H., and Vorperian, H.K., (March 2012). A model of vocal tract growth and acoustic characteristics of vowels, presented at the 2012 Conference on Motor Speech, Santa Rosa, CA.

Lester, R.L., and Story, B.H., (March 2012). Acoustic characteristics of respiratory-induced vocal tremor, presented at the 2012 Conference on Motor Speech, Santa Rosa, CA.

Story, B.H., (January, 2012). The amazing talking machine: Modulation of a tubular system to produce speech, 6th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ. **[Invited]**

Story, B.H., (November, 2011). Artificial speech in communications research, Presented at the ASHA Annual Convention, (San Diego, CA). **[Invited]**

Monson, B.B., Vitela, A.D., Story, B.H., and Lotto, A.J., (2011). Perceptually relevant information in energy above 5 kHz for speech and singing, Presented at the 162nd Acoustical Society Meeting, San Diego, CA. (5aSCb3).

Story, B.H., (May, 2011). An overview of acoustic research in Speech Communication, Presented at the 161st Acoustical Society Meeting, 129(4), pt. 2 of 2, 2406. **[Invited]**

Story, B.H., and Bunton, K., (May, 2011). Decomposition of vowel and consonant contributions to the time-varying vocal tract shape, Presented at the 161st Acoustical Society Meeting, 129(4), pt. 2 of 2, 2456.

Bunton, K., and Story, B.H., (May 2011). A test of formant frequency analyses with simulated child-like vowels, Presented at the 161st Acoustical Society Meeting, 129(4), pt. 2 of 2, 2626

Monson, B.B., Lotto, A.J., and Story, B.H., (May, 2011). Perception of high-frequency energy in singing and speech, Presented at the 161st Acoustical Society Meeting, 129(4), pt. 2 of 2, 2581.

Story, B.H., (March, 2011). TubeTalker: An airway modulation model of human sound production, International Workshop on Performative Speech and Singing Synthesis March 14-15, 2011, Vancouver, BC.

Story, B.H., (January, 2011). A brief history of artificial speech in communications research, 5th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ. **[Invited]**

Vitela, A.D., Story, B.H., & Lotto, A. J. (January, 2011). Extraordinary capabilities of the average spectrum. 5th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ.

Vitela, A.D., Story, B.H., and Lotto, A.J., (November, 2010). Predicting the effect of talker differences on perceived vowel category, Presented at the 160th Acoustical Society Meeting, 128(4), pt. 2, 2349, (Cancun, Mexico).

Story, B.H., (July, 2010). Sources of vocal tremor and their acoustic characteristics, International Conference on Vocal Fold Physiology and Biomechanics, (Madison, WI). **[Invited]**

Samlan, R.A., Story, B.H., and Bunton, K., (July, 2010). Physiologic, acoustic, and aerodynamic characteristics of breathy voice, International Conference on Vocal Fold Physiology and Biomechanics, (Madison, WI).

Story, B.H., and Bunton, K., (March, 2010). A method for determining vowel and consonant contributions to the time-varying vocal tract shape, Presented at the 2010 Conference on Motor Speech, Savannah, GA.

Bunton, K., and Story, B.H., (March, 2010). Modes of vocal tract articulation in healthy speakers and dysarthria: Same or different? Presented at the 2010 Conference on Motor Speech, Savannah, GA.

Story, B.H., (January, 2010). Lies, Damned Lies, and the Linear Source-Filter Theory of Speech, 4th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ. **[Invited]**

Vitela, A.D., Lotto, A.J., & Story, B.H., (January, 2010). "Mini giants and other monstrosities of vocal tract averaging." 4th Meeting of the Auditory Cognitive Neuroscience Society, Tucson, AZ.

Story, B.H., (October, 2009). Advances in simulation of sentence-level speech production with kinematic models of the vocal tract and vocal folds, Presented at the 158th Acoustical Society Meeting. **[Invited]**

Vitela, A.D., Lotto, A.J., and Story, B.H., (October, 2009). Normalization for vocal tract differences using long term average spectrum, Presented at the 158th Acoustical Society Meeting.

Samlan, R., Story, B.H., and Bunton, K., (October, 2009). Kinematic modeling and acoustic measures of breathy voice, Presented at the 158th Acoustical Society Meeting.

Story, B.H., (August, 2009). Recent developments in vocal tract modeling, Pan-European Voice Conference (PEVOC), Dresden, Germany. **[Invited]**

Story, B.H., (May, 2009). Vocal Tremor I: The sum of its parts and their means to an end, Presented jointly with Dr. Julie Barkmeier-Kraemer at the Neurology Study Group of the Combined Otolaryngology Spring Meeting, Scottsdale, AZ. **[Invited]**

Story, B.H., (May, 2009). A possible role of nonlinear source-filter interaction in simulation of childlike speech, Presented at the 157th Acoustical Society Meeting, 125(4), pt. 2, 2637, (Portland, OR). **[Invited]**

Bunton, K., and Story, B.H., (May, 2009). Identification of synthetic vowels based on time-varying vocal tract area functions, Presented at the 157th Acoustical Society Meeting, 125(4), pt. 2, 2576, (Portland, OR).

Story, B.H., and Bunton, K., (May, 2009). Relation of vocal tract constriction location to identification of voiced stop consonants, Presented at the 157th Acoustical Society Meeting, 125(4), pt. 2, 2569, (Portland, OR).

Story, B.H., (February, 2009). Simulation of speech production with kinematic models of the vocal tract and vocal folds, Presented at the International Symposium on Biomechanical and Physiological Modeling and Speech Science, JAIST, (Kanazawa, Japan), **[Invited]**

Story, B.H., (January, 2009). Acoustics of singing, Presented at the Auditory Cognitive Neuroscience Society Meeting, (Tucson, AZ). **[Invited]**

Story, B.H., (November, 2008). A model of time-dependent changes of the vocal tract shape, Presented in "Progress in Speech Science Session" at the ASHA Annual Convention, (Chicago, IL). **[Invited]**

- Story, B.H., (November, 2008). Quantal events generated by the structural and temporal variation of the vocal tract, Presented at the 156th Acoustical Society Meeting, 124, 2527, (Miami, FL). **[Invited]**
- Story, B.H., (August, 2008). Simulation of speech production with kinematic models of the vocal tract and vocal folds, International Conference on Vocal Fold Physiology and Biomechanics, (Tampere, Finland). **[Invited]**
- Story, B. H., and Bunton, K. (March, 2008). Comparison of vocal tract modes for production of vowels and consonants, Presented at the 2008 Conference on Motor Speech, Monterey, CA.
- Bunton, K., and Story, B.H. (March, 2008). Acoustic characteristics of VCV utterances in the speech of children, Presented at the 2008 Conference on Motor Speech, Monterey, CA.
- Story, B.H., (January, 2008). Sources of Variance in Speech Acoustics, Presented at the 2nd Auditory Cognitive Science Society Meeting, (Tucson, AZ). **[Invited]**
- Story, B.H., (June, 2007). Acoustically-guided vocal tract modifications for singing, Presented at the 153rd Acoustical Society Meeting, 121, 3087, (Salt Lake City, UT). **[Invited]**
- Story, B.H., (June, 2007). The acoustic consequences of time-dependent changes of the vocal tract shape, Presented at the 153rd Acoustical Society Meeting, 121, 3158, (Salt Lake City, UT). **[Invited]**
- Story, B.H., (January, 2007). Relation of Hierarchical Layers of Vocal Tract Structure and Movement to Speech Acoustics, Presented at the 1st Auditory Cognitive Science Society Meeting, (Tucson, AZ). **[Invited]**
- Story, B.H. and Bunton, K., (December, 2006). Comparison of vocal tract shaping patterns derived from articulatory fleshpoint data and MRI-based area functions, Presented at the 152nd Acoustical Society Meeting, 120, 3373, (Honolulu, HI).
- Tucker, B., and Story, B.H., (December, 2006). The relation of the temporal variation of F2 to articulator movement, Presented at the 152nd Acoustical Society Meeting, 120, 3372, (Honolulu, HI).
- Sapir, S., Spielman, J.L., Ramig, L.O., Story, B.H., and Fox, C., (September, 2006). Impact of Intensive Vocal Loudness (LSVT) on Vowel Articulation in Parkinsonian Speech: Acoustic and Perceptual Findings, Presented at the 10th Congress of the European Federation of Neurological Societies, Glasgow, UK.
- Li, K., and Story, B.H., (June 2006). Formant deflection directions of the voiced alveolar stop consonant in different vowel contexts, Presented at the 151st Acoustical Society Meeting, J. Acoust. Soc. Am., 119(5) pt. 2, 3244, (Providence, RI).
- Story, B. H., (March, 2006). Common modes of vocal tract articulation based on kinematic data, Presented at the 2006 Conference on Motor Speech, Austin, TX.
- Story, B. H., (October, 2005). Common modes of vocal tract articulation for vowels, Presented at the 150th Acoustical Society Meeting, J. Acoust. Soc. Am., 118(3) pt. 2, 2025, (Minneapolis, MN).
- Story, B. H., (August, 2005). Acoustics of the vocal tract, Presented at the International Congress of Voice Teacher 6th Conference, Sound and Nature: Celebrating the Spirit of Song, (Vancouver, BC). **[Invited]**.
- Story, B. H., (May, 2005). Acoustically-guided articulation patterns for vowel production. Presented at the 149th Acoustical Society Meeting, J. Acoust. Soc. Am., 117(4), 2619, (Vancouver, BC).
- Farinella, K., and Story, B. H., (May, 2005). Simulation and analysis of tremor in speech production. Presented at the 149th Acoustical Society Meeting, J. Acoust. Soc. Am., 117(4), 2544, (Vancouver, BC).
- Story, B. H., (November, 2004). A formant-to-area transformation based acoustic sensitivity functions, Presented at the 148th Acoustical Society Meeting, J. Acoust. Soc. Am., 116(4) pt. 2, 2631, (San Diego, CA).

Farinella, K.A, Hixon, T.J., Hoit, J.D., and Story, B.H., (March, 2004). Listener perception of respiratory induced voice tremor, 2004 Conference on Motor Speech, Albuquerque, NM.

Story, B.H., (November, 2003). Simulation of VCV syllables with a parametric area function model of the vocal tract, Presented at the 146th Acoustical Society Meeting, J. Acoust. Soc. Am., 114(4) pt. 2, 2394, (Austin, Texas).

Li, K., and Story, B.H., (November, 2003). An investigation of perceptual tolerance limits of stop constriction regions along the vocal tract. Presented at the 146th Acoustical Society Meeting, J. Acoust. Soc. Am., 114(4) pt. 2, 2337, (Austin, Texas).

Story, B.H., (August, 2003). Using imaging and modeling techniques to understand the relation between vocal tract shape to acoustic characteristics, Stockholm Musical Acoustics Conference (SMAC), Stockholm, Sweden. **[Invited]**.

Story, B.H., (December, 2002). A parametric area function model of three female vocal tracts based on orthogonal modes, Presented at the 144th Acoustical Society Meeting, J. Acoust. Soc. Am., 112(5) pt. 2, 2418, (Cancun, Mexico).

Story, B.H., (November, 2002). Understanding familial voice traits & vocal fatigue from outside to inside: Biomechanics of phonation, Collaborative session with S. Thibeault, E. Buder, J. Barkmeier, and K. Fisher, Presented at the ASHA Annual Convention, (Atlanta, GA). **[Invited]**

Story, B.H., (November, 2002). Computer science and technology: Stretching our wings toward the future (computer simulation of speech), Collaborative session with A. Holland, R. Cole, and B. MacWhinney, Presented at the ASHA Annual Convention, (Atlanta, GA). **[Invited]**

Story, B.H., (September, 2002). A comparison of acoustic impedances calculated for male and female vocal tracts, Presented at the Third International Conf. on Voice Physiology and Biomechanics, (Denver, CO).

Story, B.H., (December, 2001). A Distinctive Region Model (DRM) based on empirical vocal tract area functions, Presented at the Acoustical Society Meeting, J. Acoust. Soc. Am., 110(5) pt. 2, (Fort Lauderdale, FL).

Story, B.H., (October, 2001). Potential uses of advanced imaging techniques for the study of swallowing, Dysphagia Research Society, Albuquerque, NM, October 11, 2001. **[Invited]**

Story, B.H., (June, 2001). Speech synthesis by mapping articulator movement patterns to a shape-based area function model of the vocal tract, Presented at the Acoustical Society Meeting, J. Acoust. Soc. Am., 109(5), pt. 2, 2444, (Chicago, IL).

Story, B.H., (December, 2000). A study of compensation for a labial perturbation of the vowel /u/ using an area function model of the vocal tract, Presented at the Acoustical Society Meeting, J. Acoust. Soc. Am., 108(5) pt. 2, 2509, (Newport Beach, CA).

Spielman, J.L., Ramig, L.O., Story, B.H., and Fox, C., (November, 2000). Expansion of vowel space in Parkinson's disease following LSVT, Presented at the ASHA Annual Convention.

Story, B.H., and Titze, I.R., (March, 1999). A preliminary study of speech transformation using empirically defined articulatory modes, Presented at the Acoustical Society Meeting, J. Acoust. Soc. Am., 105(2) pt. 2, 1092, 1999 (Berlin, Germany).

Edgerton, M.E., Bless, D., Thibeault, S., Fagerholm, M., and Story, B.H., (March, 1999). Acoustic analysis of reinforced harmonics, Presented at the Acoustical Society Meeting, J. Acoust. Soc. Am., 105(2) pt. 2, 1329, 1999 (Berlin, Germany).

Story, B.H., and Titze, I.R., (March, 1999). Possible effects of vocal tract shape on vocal fold vibration, Presented at the Second International Conf. on Voice Physiology and Biomechanics, (Berlin, Germany).

Story, B.H., Titze, I.R., and Long, R., (June, 1998). Simulation of sentence-level speech based on measured vocal tract area functions, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 103, 3056 (Seattle, WA).

Long, R., Story, B.H., and Titze, I.R., (June, 1998). Vocal tract shape estimation using three noninvasive transducers, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 103, 3056 (Seattle, WA).

Druker, D.G., Titze, I.R., and Story, B.H., (June, 1998). Glottal source parameter estimation by comparison of measured signals with simulated signals, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 103, 2775 (Seattle, WA).

Wong, D., Story, B.H., Long, R.K., and Titze, I.R., (May, 1997). A speech-to-area mapping for simulation and transformation of sentence level speech, Presented at the First International Conf. on Voice Physiology and Biomechanics, (Evanston, IL).

Story, B.H., and Titze, I.R., (May, 1997). A body-cover model of the vocal folds with muscular control, Presented at the First International Conf. on Voice Physiology and Biomechanics, (Evanston, IL).

Wong, D., Lange, R., Long, R., Story, B.H., and Titze, I.R., (December, 1996). LPC-based voice transformation from adult to child, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 100(4) pt. 2, 2762, (Honolulu, HI).

Long, R., Wong, D., Lange, R., Story, B.H., and Titze, I.R., (December, 1996). Transformation from normal to twang and sob vocal qualities, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 100(4) pt. 2, 2663, (Honolulu, HI).

Berry, D. A., Titze, I. R., Story, B. H., and Herzel, H., (December, 1995). Bifurcations in excise larynx experiments, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 98(5) pt 2, 2930, (St. Louis, MO).

Alipour, F., and Story, B. H., (December, 1995). A three-dimensional solution of the wave equation in a model of the vocal tract, Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 98(5), pt 2, 2930, (St. Louis, MO).

Story, B. H., Titze, I. R., and Hoffman, E. A., (December, 1995). Vocal tract shapes and area functions from magnetic resonance imaging (MRI), Presented at the Acoustical Society Meeting, *J. Acoust. Soc. Am.*, 98(5) pt 2, 2930, (St. Louis, MO).

Story, B.H. and Titze, I.R., (October, 1993). Voice simulation with a three mass model of the vocal folds, Presented at the Acoustical Society Meeting, (Denver, CO).

Titze, I.R., Story, B.H., Luschei, E., and Hirano, M., (1992). Combined control strategies of cricothyroid and thyroarytenoid muscles and lung pressure in regulating F₀, Presented at the 1992 Speech Motor Control/Motor Disorders Conference in Boulder, CO.

B. Colloquia

Story, B. H., (April 2, 2015). Models for Synthesizing and Simulating Speech, Aerospace and Mechanical Engineering Semiar. University of Arizona.

Story, B. H., (March 10, 2014). A model for studying the relation of production and perception of children's speech, Communication Sciences Research Center Colloquium, Cincinnati Children's Hospital. **[Invited]**

Story, B.H., (March, 2011). Artificial speech in communications research, School of Information: Science, Technology, and Arts (SISTA) Colloquium Series, University of Arizona.

Story, B.H., (November, 2010). Singing: Exquisite control of a musical instrument or a speech disorder, Speech, Language, and Hearing Sciences Colloquium, University of Arizona.

Story, B.H., (October, 2009). The curious case of tiny tubetalker, Speech, Language, and Hearing Sciences Colloquium, University of Arizona.

Story, B.H., (November, 2007). Simulation of speech and singing based on a model of the time-varying vocal tract shape, Applied Mathematics Colloquia Series, University of Arizona. **[Invited]**

Story, B.H., (February, 2006). Common modes of vocal tract articulation for vowels, Speech and Hearing Sciences Colloquium, Arizona State University, **[invited]**.

Story, B.H., (January, 2001). An overview of the acoustics and biomechanics of speech, Physics Colloquium, University of Arizona. **[Invited]**

Story, B.H., (February, 2001). Volumetric imaging of the vocal tract for purposes of speech modeling, Speech and Hearing Sciences Colloquium, University of Arizona.

Story, B.H., (April, 1994). Mufflers, Mouths, and Vocal Cords, Physics Colloquium, University of Northern Iowa. **[Invited]**

Story, B.H., (February, 1994). Voice simulation with a body-cover model of the vocal folds, Speech and Hearing Sciences Colloquium, University of Iowa.

C. Seminars

Story, B. H., (January 20, 2012). What can computational models tell us about speech production, Behavioral and Brain Sciences Colloquium Series, U. Texas at Dallas. **[Invited]**.

Story, B.H., (September 29, 2009). Simulation of sentence-level speech production with kinematic models of the vocal folds and vocal tract. Biomedical/Mechanical Engineering Seminar, Purdue University. **[Invited]**.

Story, B.H., (October, 2007). A model of time-dependent changes of the vocal tract shape for simulation of speech and singing, Biomedical Engineering Seminar Series, University of Arizona. **[Invited]**

Story, B.H., (August, 2003). Physical modeling of voice and voice quality, VOQUAL03, The ISCA Research and Tutorial Workshop: "Voice Quality: functions, analysis and synthesis," Geneva, Switzerland, August 27-29. **[Invited]**.

Story, B.H., (April, 2003). Modeling of speech production based on MRI studies, Harvard-MIT Speech and Hearing Bioscience and Technology Program (SHBTP) Seminar series. **[Invited]**

Story, B.H., (January, 2002). National Association of Teachers of Singing (NATS) Winter Workshop, Pedagogy 101: Breathing and Acoustics, faculty member, Tucson, AZ. **[Invited]**

Story, B.H., (October, 2001). An Introduction to Motor Speech "Tubology," Presented at the Motor Control Group Meeting, University of Arizona, Tucson, AZ.

Story, B.H., (November, 2000). Speech modeling using geometric eigenmodes of the vocal tract, Cognitive Science Seminar, University of Arizona. **[Invited]**

Story, B.H., (November, 2000). Modeling the vocal tract: An overview of voice and speech acoustics, Biomedical Engineering Seminar Series, University of Arizona. **[Invited]**

Story, B.H., (July, 1999). Voice Seminar 1999: The what and why of voice care and development, faculty member (voice science), Logan, UT. **[Invited]**

Story, B.H., (March, 1999). 3-D Imaging of the Vocal Tract, Voice Education Seminar, Denver Center for the Performing Arts.

Story, B.H., (February, 1998). Preserving and using our voices in the communication century, Given to the Western States Communication Association Convention, Denver, CO, Presenters: Florence Blager, Ph.D., Brad Story, Ph.D., and Gary Logan, M.F.A.

Story, B.H., (May, 1995). The Larynx and the Vocal Tract: Partners in Sound, Vocal Performance and Pedagogy Institute with Richard Miller, Cedar Falls, IA.

Titze, I.R. and Story, B.H., (May, 1993). From empirical data to physiologically realistic vocal fold models, Presented at the Third Seminar on Speech Production: Models and Data, Saybrook Point Inn, Old Saybrook, CT, May 1993.

D. Symposia

Verdolini, K., Story, B., Szuminsky, N., Roth, D., Urban-Grillo, E., Steinhauer, K., Branstetter, B., and Titze, I., (2006). MRI Evidence regarding the application of voice-adapted maximum power transfer theorem to human subjects, Paper presented to the 35th Symposium on Care of the Professional Voice, Philadelphia, PA.

Lowell, S., Barkmeier-Kraemer, J., Hoit, J., and Story, B., (2006). Respiratory and laryngeal function during spontaneous speaking in teachers with a voice disorder, Paper presented to the 35th Symposium on Care of the Professional Voice, Philadelphia, PA.

Story, B.H., (2005) Physical modeling of speech and voice quality, XV Pacific Voice Conference, Pixar Studios, Emeryville, CA, 11-12 March. **[Invited]**

Story, B.H., (June, 2003). The use of imaging techniques and models to understand the production of speech and song, Paper presented to the 32nd Symposium on Care of the Professional Voice, Philadelphia, PA. **[Invited]**.

Story, B.H., (July, 1998). Physiologically-based estimate of vocal tract shape from formant frequencies, Presented at the 1998 Meeting of the National Center for Voice and Speech, Madison, WI.

Titze, I.R., Hoffman, H., and Story, B.H., (June, 1997). Biomechanical modeling of unilateral vocal fold paralysis, Presented at the 26th Annual Symposium: Care of the Professional Voice, Philadelphia, PA.

Story, B.H., (July, 1997). Vocal exercises for virtual singers, Presented at the Meeting of the National Center for Voice and Speech.

Story, B.H. and Titze, I.R., (June, 1993). Animation of vocal tract pressures and formant spectra, Presented at the 22nd Annual Symposium: Care of the Professional Voice, Philadelphia, PA.

Grants

Federal

- 2014–2019 Research Grant
National Institute on Deafness and Other Communication Disorders
R01 DC006282
Co-investigator, subaward
P.I., Hourì Vorperian
(*MRI & CT Studies of the Developing Vocal Tract*)
- 2012–2014 Research Grant
National Science Foundation
BCS-1145011
Principal Investigator
(*A Model of Vowel Production in Children*)
- 2011–2016 Research Grant
National Institute on Deafness and Other Communication Disorders
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Principal Investigator
(*An Acoustic Model of Child-like Speech*)
- 2008–2013 Research Grant
National Institute on Deafness and Other Communication Disorders
R01 DC006282
Consultant
(*MRI & CT Studies of the Developing Vocal Tract*)
- 2000–2011 Research Grant
National Institute on Deafness and Other Communication Disorders
R01-DC04789
Principal Investigator
(*Eigenmodes in Speech Dynamics* → *Quantitative Modeling of Speech*)
- 2003–2008 Research Grant
National Institute on Deafness and Other Communication Disorders
R01-DC05643
Consultant; Principal Investigator, Katherine Verdolini
(*Biophysiological mechanisms of 'heightened' speech and its efficacy*)
- 1995–2000 Research Grant
National Institute on Deafness and Other Communication Disorders
R01-DC02532
Co-Investigator; Ingo Titze, Principal Investigator
(*Simulation of Voice Qualities in Speech*)
- 1995–2000 National Research and Training Center Grant
National Institute on Deafness and Other Communication Disorders
P60 DC00976
Co-Investigator; Ingo Titze, Principal Investigator
(*National Center for Voice and Speech*)

NEWS MEDIA INTERVIEWS

Chronicle of Higher Education, "Recreating the Human Voice," by David Wheeler, pp. A8-A9, January 19, 1996.

Des Moines Register, "A Human Touch, Computer Voices Get Emotional," February 18, 1996.

Discover magazine, "Say Aah," p. 21, April, 1996.

Advance for Radiologic Science Professionals, "MR Studies Show How Sound is Produced," pp. 4-6, June 24, 1996.

Pulse of the Planet radio program, "Computer voice simulation," program 1337, November, 1996.

Voice of America News (USA), "Artificial speech mimics the real thing," November 1, 2011.
<http://www.voanews.com/content/artificial-speech-mimics-real-thing-133072213/162774.html>

Science Friday radio program, "The long quest to make machines talk," January 16, 2015.
<http://www.sciencefriday.com/segment/01/16/2015/the-long-quest-to-make-machines-talk.html>