Curriculum Vitae

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

2020-present	Associate Dean, Faculty Affairs	College of Science	University of Arizona
2017	Interim Associate Dean	College of Science	University of Arizona
2013-present	Professor	Dept. of Speech, Lang, & Hear. Sci.	University of Arizona
2011-2020	Associate Dept. Head	Dept. of Speech, Lang, & Hear. Sci.	University of Arizona
2017-present	Professor	Biomedical Engineering (affiliated faculty)	University of Arizona
2018-present	Professor	Applied Intercultural Arts Research (GIDP)	University of Arizona
2017-present	Professor	Second Language Acquisition (GIDP)	University of Arizona
2013-present	Professor	Cognitive Science (GIDP)	University of Arizona
2006-2013	Associate Professor	Dept. of Speech, Lang, & Hear. Sci.	University of Arizona
2000-2006	Assistant Professor	Dept. of Speech & 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

C. Honors and Awards

2018 Distinguished Alum Award, Communication Sciences and Disorders, University of Iowa
2016 Rossing Prize in Acoustics Education, Acoustical Society of America
2013 Willard R. Zemlin Memorial Lecture, ASHA - Honoree/Lecturer
2008 Galileo Circle Fellow, College of Science, University of Arizona
2008 Fellow of the Acoustical Society of America
1994 Sigma Xi, full member
1987 Received B.S. degree with Honors
1987 Outstanding Scholar Award (Physics)
1986 Sigma Pi Sigma, Physics Honor Society
1985 Kappa Mu Epsilon, Mathematics Honor Society
1983 Iowa Regents Scholarship
1983 American Bar Association Citizenship Award

D. Memberships

Acoustical Society of America (ASA)
Pan-American Vocology Association (PAVA)
Sigma Xi
National Center for Voice and Speech (NCVS) (Research Associate)

Service

A. Intramural

2021-present	Working Group on Promotion and Tenure Criteria, University of Arizona
2020-present	College of Science Committee on Diversity, Equity, and Inclusion, University of Arizona
2017-present	Co-Chair, College of Science Workplace Climate Committee, University of Arizona
2014-2020	Faculty Senator, University of Arizona
2012-2019	Academic Personnel Policy Committee (APPC), University of Arizona
2003-present	Technical Standards Advisory Committee (Ad Hoc), Dept. of Speech and Hearing Sci.
2002-2004	Master's Admissions & Policy Committee, Dept. of Speech and Hearing Sci.
2001-present	Chair of Doctoral Admissions & Policy Committee, Dept. of Speech and Hearing Sci.
2000-2001	Doctoral Admissions Committee, Dept. of Speech and Hearing Sci.
2000-2006	Curriculum Committee, Dept. of Speech and Hearing Sci.
2004-2006	Human Subjects Review Committee, Dept. of Speech and Hearing Sci.
2000-2005	Grade Appeals Committee, College of Science

B. Extramural

Editorial

2018-2021	Associate Editor, *Journal of the Acoustical Society of America - Express Letters*
2011-2014	Associate Editor, *Journal of the Acoustical Society of America*
2005-2009	Associate Editor, *Journal of the Acoustical Society of America*
1999-present	Reviewer, *Journal of Phonetics*
1998-present	Reviewer, *Speech Communication*
1997-present	Reviewer, *Journal of Sound and Vibration*
1996-present	Reviewer, *Journal of Speech, Language, and Hearing Research*
1996-present	Reviewer, *Journal of the Acoustical Society of America*
2005-present	Reviewer, *Folia Phoniatrica et Logopaedica*
2007-present	Reviewer, *IEEE Transactions on Neural Networks*
2013-present	Reviewer, *IEEE Transactions on Acoustics, Speech, and Language*

National

2022-2026	Member, Selection committee for the Rossing Prize in Acoustics Education, Acoustical Society of America
2020-present	Chair - Board of Directors, NCVS.org (National Center for Voice and Speech)
2008-present	Member, Musical Acoustics Technical Committee, Acoustical Society of America
2015-2018	Member, Books+ Committee, Acoustical Society of America
2014-2015	Scientific Reviewer, National Institutes of Health, Communication Disorders Review Committee
2012-2014	Study Section Member, National Institutes of Health, Motor Function, Speech, and Rehabilitation
2007-2008	Member, Speech Motor Control Committee, 2008 Conference on Motor Speech
2006-2010	Member, R. H. Stetson Scholarship Committee, Acoustical Society of America
2006-present	Scientific Grant Reviewer, National Institutes of Health, MFSR Study Section
2004 & 2008	Scientific Reviewer, National Institutes of Health, Communication Disorders Review Committee
2003-2004	Member, Speech Motor Control Committee, 2004 Conference on Motor Speech
2003-present	Member, Speech Technical Committee, Acoustical Society of America
2003	Member, Scientific Review Committee of the 2004 Conference on Motor Speech

1997 Session Chairman and organizer of special session on Imaging and Speech Production, SPIE Medical Imaging Conference

1996 Session Chairman and organizer of special session on Imaging and Speech Production, SPIE Medical Imaging Conference

International

2022 Member, Scientific Review Committee for 7th Physiology and Acoustics of Singing Conf.

2016 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2016 conference

2015 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2015 conference

2014 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2014 conference

2013-present Chair, International Conference on Vocal Fold Physiology and Biomechanics (ICVPB)

2011 Member, Program Committee, International Seminar on Speech Production (ISSP)

2010 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2010 conference

2007 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2007 conference

2006 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2006 conference

2003 Member, Scientific Review Committee of the Eurospeech/InterSpeech 2003 conference

2002 Area Coordinator, Intl. Conf. Spch, Lang., & Phonetics, Oct. 2002

Teaching at the University of Arizona

A. Collaborative Program Memberships

2000-2010 Motor Control Training Faculty

B. Teaching Assignments

Fall, 2019	Acoustics and Perception of Speech, SLHS 565 (graduate level)	3 units
Spring 2012-2013	Anatomy and Physiology (undergrad. level) of the Speech Mechanism, SLHS 261	4 units
Spring 2011-2015	Speech Perception, SLHS 568 (graduate level)	3 units
Fall, 2009-2019	Preclinical Speech Science, SLHS 567 (graduate level)	4 units
Fall, 2007-2016	Acoustics for the Speech and Hearing Sci., SLHS 565 (graduate level)	3 units
Fall, 2007	Acoustics for the Speech and Hearing Sci., SPH 267 (undergrad. level)	3 units
Fall, 2002-2006	Acoustics for the Speech and Hearing Sci., SPH 465/565 (formerly SPH 267)	3 units (new course)
Fall 2005	Seminal Readings in Speech, Language, and Hearing, SPH 696A	2 units (instructor)
Fall 2002	Seminal Readings in Speech, Language, and Hearing, SPH 696A	2 units (organizer)
Spring, 2001-2008	Speech Perception, SPH 468/568	3 units
Spring, 2001-2002	Hearing Science, SPH 280	3 units
Fall, 2000-2004	Instrumentation in the Speech and Hearing Sciences, SPH 460/560	2 units

C. Students Supervised

1. Ph.D. Dissertation Direction (as Chair or Co-chair)

- Stark, A., (Fall 2020-present).
- Kittleson, M., (Spring 2017). Investigation of the perceptual significance of a relative acoustic representation of speech.
- Lester, R., (Summer 2014). Modulation of the Voice Related to Tremor and Vibrato, funded by NIH F31
- Samlan, R., (Summer 2012). Kinematic modeling of asymmetric vocal fold vibration, funded by NIH F31.
- Monson, B., (Summer 2011). High-frequency energy in singing and speech, funded by NIH F31.
- Gutmann, M., (Spring 2009) The effect of frontal lobe function on proverb comprehension in Parkinson Disease.

- Li, K., (Fall 2006). Formant deflection directions of the voiced alveolar stop consonant in different vowel contexts.

2. Master's Thesis Direction (as Chair)

- Neely, Kim. (Spring 2014). M.S. Thesis co-chair
- Jolley, A., (Spring 2006). Consonant identification in VCV combinations with a simulated cochlear implant processor.
- Mathur, S. (Electrical and Computer Engineering student) (Fall 2003). Simulation of vocal tract lengthening in a digital waveguide, M.S. thesis.
- Pai, A. (Electrical and Computer Engineering student) (Spring 2003). Formant extraction from children's speech using an analysis-by-synthesis technique, M.S. thesis.
- Bencala, K. (Spring 2003). Interaction effects of vocal tract scaling (male-to-female) and fundamental frequency on vowel identification, M.S. thesis.
- Li, K. (Spring 2002), An investigation of perceptual tolerance limits of stop constriction regions along the vocal tract, M.S. thesis.

3. Ph.D., M.S., and Au.D. Committees

- Turner, Melanie. (Spring 2021). M.S. Thesis committee member.
- Broughton, Sarah. (Spring 2019). Audiology Doctoral Project committee member.
- Hafner, Florian. (Spring 2019). Ph.D. comprehensive exam committee. Dept. of Linguistics
- Park, Seongjin. (Spring 2019). Ph.D. comprehensive exam committee. Dept. of Linguistics
- Tsao, Ya-Wen. (Spring 2019). M.S. Thesis committee member.
- Carter, Jared. (Fall 2018). M.S. Thesis committee member.
- McCarron, Angelica. (Fall 2018). M.S. Thesis committee member.
- Monti, Sarah. (Fall 2018). M.S. Thesis committee member.
- Johnston, Sam. (Linguistics, Summer 2017). Ph.D. Dissertation committee.
- Taylor, Griffin. (Spring 2017). M.S. Thesis committee member.
- Mailend, Marja-Liisa. (Spring 2014, Spring 2017). Ph.D. comprehensive exam committee and dissertation committee member.
- Smith, Jason. (Spring 2016). Audiology Doctoral Project committee member.
- Sung, Jae-Hyun. (Linguistics, Summer 2015). Ph.D. dissertation committee member.
- Johnston, Sam. (Linguistics, Spring 2015). Ph.D. comprehensive exam committee member. Dept. of Linguistics
- Vitela, Antonia. (Fall 2012). Ph.D. Dissertation committee member.
- Carbonell, Kathy. (Summer 2012). Chair of Ph.D comprehensive exam committee.
- Kittleson, Megan. (Fall 2012). Ph.D. Qualifying exam committee member.
- Beltrami, Jenna. (Spring 2011). M.S. Thesis committee member.
- Vitela, Antonia (Davi) (Summer 2010). Ph.D. comprehensive exam committee.
- Kiley, Rebecca. (Spring 2011). Au.D. committee member.
- Kim, Darlyne. (Spring 2011). Au.D. committee member.
- Dale, K. (Spring 2011). Au.D. committee member.
- Whitaker, Richard. (Spring 2011). Au.D. committee member.
- Wong, A. (Spring 2011). Au.D. committee member.
- Andrews, J. (Spring 2011). Au.D. committee member.

- Ito, R. (Spring 2010). The acoustic change complex for simulated second formant consonant-to-vowel transitions. Au.D. committee member.
- Foreman, E. (Spring 2010). The relationship between vocal tract constriction location and the identification and discrimination of voiced stop consonants. Au.D. committee member.
- Whitaker, Ryan. (Spring 2010). The acoustic change complex for simulated second formant consonant-to-vowel transitions. Au.D. committee member.
- Pina, C. (Spring 2009). Real-Ear to Coupler Differences and Insertion Gain Corrections for Open-fit Hearing Aids. Au.D. committee member.
- Stevens, S. (Spring 2009). Au.D. committee member.
- Searing, E. (Spring 2009). Au.D. committee member.
- Edwards, D. (Spring 2009). Validity of Manufacturer Simulated Real Ear Gain Values for Open-Fit Hearing aids. Au.D. committee member.
- Baker, A. (Fall 2008). A biomechanical model of the human tongue for understanding speech production and other lingual behaviors, Ph.D. dissertation committee member. Department of Linguistics.
- Spaulding, K. (Spring 2008). Ph.D. dissertation committee member.
- Varrichio, S. (Spring 2007). The effects of amplitude modulation depth on ASSR and modulation detection. Au.D. committee member.
- Campbell, E. (Spring 2007). New and traditional vestibular evaluation procedures: Bithermal caloric comparison of air vs. water stimulation. Au.D. committee member.
- Richtsmeier, P., (Fall 2006). Ph.D. comprehensive exam committee. Department of Linguistics.
- Tucker, B. (Spring 2007). Ph.D. comprehensive exam committee and dissertation committee, Department of Linguistics, Spoken word recognition of the American English flap.
- Farinella-Bocian, K. (Fall 2006). Stutter-free speech following response-contingent time-out from speaking in young children who stutter. Ph.D. dissertation committee member.
- Schwaderer, N. (Spring 2006). Hyperacusis, tinnitus, loudness perception, immittance, and acoustic reflex thresholds in persons with Huntington's Disease, Au.D. thesis committee member.
- Seldner, B. (Spring 2006). Spontaneous otoacoustic emissions and suppression of transiently evoked otoacoustic emissions, Au.D. thesis committee member.
- Lowell, S. (Fall 2005). Respiratory and laryngeal function during spontaneous speaking in teachers with voice disorders, Ph.D. dissertation committee member.
- Hicks, C. (Spring 2005). Gender and "command": the Voice of Marine Corps Drill Instructors. Ph.D. dissertation committee member, Department of Linguistics.
- Cornwell, H. (Spring 2005). A quantitative analysis of speech in deaf children with late cochlear implantation. M.S. thesis committee member.
- Keintz, C. (Fall 2004). Influence of visual information on the intelligibility of dysarthric speech. Ph.D. dissertation committee member.
- Baheti, P. (Fall 2004). (Electrical and Computer Engineering student). Separation of acoustical sources in reverberant environments, M.S. thesis committee member.
- Dishlip, C. (Summer 2004). Laryngeal indications of stress-arousal in pre-term vs. full-ferm infants, M.S. thesis committee member.
- Smith, A. (Spring 2004). Effects of noise on measures of otoacoustic emissions, M.S. thesis committee member.
- Alpart, J. (Spring 2004). Are the effects of video self modeling on stuttering related to a change in efficacy, M.S. thesis committee member.

- Carmichel, E. (Summer 2003). Effects of binaural electronic hearing protectors on localization ability and response time to sounds in the horizontal plane, M.S. thesis committee member.
- Chhabra, A. (Spring 2003). Are self-reported habits a predictor of symptoms related to voice problems? M.S. thesis committee member.
- Hinkle, K. (Spring 2003). Outcome of LSVT as a treatment for vocal nodules, M.S. thesis committee member.
- Gautereaux, B. (Spring 2003). Retrospective analysis of clients fit with amplification through the Pima County Community Hearing Aid Bank between 1999 and 2001, M.S. thesis committee member.
- Earl, B. (Spring 2003). Suppression of spontaneous otoacoustic emissions with meaningful vs. non-meaningful contralateral acoustic stimuli, M.S. thesis committee member.
- Smith, A. (Spring 2002). Sound pressure level audiometry using the Madsen Aurical, M.S. thesis committee member.
- Forbes, S. (Spring 2002). A comparison of tympanometric and behavioral screening in preschool children, M.S. thesis committee member.
- Stone, S. (Spring 2002). A comparison of reflectometry and behavioral screening in preschool children, M.S. thesis committee member.
- Butler, S. (Spring 2002). A comparison of transient evoked otoacoustic emission and behavioral screening in preschool children, M.S. thesis committee member.
- Sadrzadeh, M. (Spring 2002). Weak syllable deletion: An acoustic analysis of 'article' omission, M.S. thesis committee member.
- Christian, M. (Spring 2002). Vocal hygiene as part of a high school theatre arts curriculum, M.S. thesis committee member.
- Ellison, J. (Spring 2002). Effects of interactions of hearing aid compression release time and fitting formula on speech acoustics, M.S. thesis committee member.
- Fox, C. (2002). Intensive voice treatment for children with cerebral palsy, Ph.D. dissertation committee member.
- McCues, R. (Spring 2001). Patterns of vocal fold length change relative to pitch modifications as factors associated with vocal fatigue, M.S. thesis committee member.
- Adamovich, S. (Spring 2001). Validation of personal FM system performance using real-ear measures and the hearing in noise test (HINT) in subjects with normal pure tone thresholds, M.S. thesis committee member.

4. Research Rotations

Rosemary Lester, (Summer-Fall, 2010; Spring 2011-Spring 2013)
Kathy Carbonell, (Spring 2012)
Antonia Vitela, (Fall, 2009; Spring 2010)
Robin Samlan, (Summer-Fall, 2007; Summer-Fall, 2008)
Derek Edwards (Au.D.) (Summer, 2007)
Brian Monson (2006-present)
Ben Tucker (Spring, 2006)
Lise Johnson (Biomedical Engineering) (Fall, 2003)
Kang Li (Spring, 2003)
Kim Farinella (Spring, 2003)
Soren Lowell (Fall, 2002)

5. Internships

Samuel Johnston, (Spring 2014). Internship for Human Language Technology (HLT) Program, University of Arizona, Development of a Rule-Based System for Synthesizing Speech with a Computational Model.

6. Other Research Projects

- Ethan Morgan (Spring 2020). Undergraduate honors research. Synthesis and analysis of speech.
- Charlotte Nakamura (Fall 2017). Undergraduate honors research. Computational modeling and analysis of speech.
- Alyssa Sachs (Spring 2013). Undergraduate honors research. Computational modeling of fundamental frequency control for human vocal folds.
- Jaclyn Bendroff (Fall 2012). Undergraduate research, SLHS.
- Susan Legendre (2007-2008). Undergraduate research, SLHS, Programming the Klatt formant synthesizer and noise vocoded speech.
- Megan Kittleson (2008). Undergraduate research, SLHS, Analysis of articulatory movement data and vowel space.
- Amy Lederle (2007). Graduate (Doctoral) student, SLHS, Readings in speech production.
- Dan Nelson (2002), Graduate (Doctoral) student, School of Renewable Natural Resources, Spectral analysis of audio signals recorded from deer while eating.
- Meenakshi Matai (2002), Graduate (Master's) student, Electrical and Computer Engineering, Development of an algorithm to recognize food type from acoustic recordings of deer eating.

Other teaching experience

A. Courses

Summer, 2000	Instructor	Inst. for Voice Analysis	Summer Vocology Institute, Denver Ctr. Perf. Arts
Fall, 1995	Co-instructor	Acous. and Biomech. of Speech	University of Iowa
Fall, 1993	Teaching Assistant	Acous. and Biomech. of Speech	University of Iowa
Fall, 1991	Teaching Assistant	Fund. of Lab. Instrumentation	University of Iowa
Spring, 1987	Teaching Assistant	The Physics of Sound	University of Northern Iowa

B. Ph.D. and M.S. Committees

- Wetzel, V. (December 2021). Sorbonne Université. Lumped Power-Balanced Modelling and Simulation of the Vocal Apparatus: A Fluid-Structure-Interaction Approach. Ph.D. dissertation jury member.
- Zanartu, M. (Fall 2010). Purdue University, Acoustic coupling in phonation and its effect on inverse filtering of oral airflow and neck surface acceleration. Ph.D. dissertation committee member.
- Hanrahan, K. (Spring 2005). Department of Music, Arizona State University. Second vowel formant relationship to adduction: A preliminary study. Ph.D. dissertation committee member.
- Jennifer Spielman (2000). The effects of intensive voice therapy (LSVT) on vocal and facial expressivness in idiopathic Parkinson's Disease: Preliminary data, University of Colorado, M.A. thesis committee member.
- David Druker (1999). Vocal fold kinematics of voice types: Data and modeling, University of Iowa, Ph.D. dissertation committee member.
- Phyllis Palmer (1998). Contributions to the submental surface electromyogram during swallowing, University of Iowa, Ph.D. dissertation committee member.
- Michelle Eppley (1997). The effect of nasal coupling on the perception of synthesized sung vowels, University of Iowa, M.A. thesis committee member.

B. Other Student Research Projects

(2003-2004) Vocal tract impedance calculations for clarinet playing, with Claudia Fritz, doctoral student at UNSW, School of Physics, Sydney, Australia and CNRS, LMA, Marseille, France; IRCAM, Acoustique Instrumentale, Paris, France.

Publications/Creative Works

Google Scholar Profile: https://scholar.google.com/citations?user=8-iKemMAAAAJ&hl=en

A. Refereed Journal Articles

1. Herbst, C., and Story, B. H., (2022). Computer simulation of vocal tract resonance tuning strategies with respect to fundamental frequency and voice source spectral slope in singing, J. Acoust. Soc. Am., 152(6), https://doi.org/10.1121/10.0014421.

2. Ikuma, T., Story, B., McWhorter, A. J., Adkins, L., and Kunduk, M. (2022). Harmonics-to-noise ratio estimation with deterministically time-varying harmonic model for pathological voice signals. J. Acoust. Soc. Am., 152(3), 1783-1794.

3. Meyer, D., Rusho, R.Z., Alam, W., Christensen, G.E., Howard, D.M., Atha, J., Hoffman, E.A., Story, B.H., Titze, I.R., and Lingala, S.G., (2022). High-resolution three-dimensional hybrid MRI + low dose CT vocal tract modeling: A cadaveric pilot study, J. Voice. https://doi.org/10.1016/j.jvoice.2022.09.013

4. Chuang, Y. J., Hwang, S. J., Buhr, K. A., Miller, C. A., Avey, G. D., Story, B. H., and Vorperian, H. K. (2022). Anatomic development of the upper airway during the first five years of life: A three-dimensional imaging study. PLoS ONE 17(3): e0264981. https://doi.org/10.1371journal.pone.0264981

5. Mailend, M-L., Maas, E., and Story, B.H., (2021): Apraxia of speech and the study of speech production impairments: Can we avoid further confusion? Reply to Romani (2021), Cognitive Neuropsychology, DOI: 10.1080/02643294.2021.2009790

6. Lester-Smith, R.A., Jebaily, C.G., and Story, B.H. (2021). The Effects of Remote Signal Transmission and Recording on Acoustical Measures of Simulated Essential Vocal Tremor: Considerations for Remote Treatment Research and Telepractice, J. Voice. Published online 23 October 2021.

7. Story, B. H., and Bunton, K. (2021). The relation of velopharyngeal coupling area to the identification of stop versus nasal consonants in North American English based on speech generated by acoustically-driven vocal tract modulations, J. Acoust. Soc. Am., 150(5), 3618-3630. DOI: 10.1121/10.0007223

8. Story, B. H., and Bunton, K. (2021). Identification of voiced stop consonants produced by acoustically driven vocal tract modulations. JASA Express Letters, 1(8), 085203, https://doi.org/10.1121/10.0005917

9. Echternach, M., Herbst, C.T., Köberlein, M., Story, B.H., Döllinger, M., and Gellrich, D. (2021). Are source-filter interactions detectable in classical singing during vowel glides?, J. Acoust. Soc. Am., 149(6), 4565-4578.

10. Mailend, M. L., Maas, E., Beeson, P. M., Story, B. H., and Forster, K. I. (2021). Examining speech motor planning difficulties in apraxia of speech and aphasia via the sequential production of phonetically similar words. Cognitive Neuropsychology, 38(1), 72-87. DOI: 10.1080/02643294.2020.1847059

11. Gowda, D., Kadiri, S. R., Story, B. H., and Alku, P., (2020). Time-varying quasi-closed-phase analysis for accurate formant tracking in speech signals. IEEE/ACM Trans. Aud. Sp. Lang., 28, 1901-1914, doi: 10.1109/TASLP.2020.3000037

12. Milenkovic, P. H., Wagner, M., Kent, R. D., Story, B. H., and Vorperian, H. K., (2020). Effects of sampling rate and type of anti-aliasing filter on linear-predictive estimates of formant frequencies in men, women, and children, 147(3), EL221-EL227. https://doi.org/10.1121/10.0000824

13. Bergevin, C., Narayan, C., Williams, J., Mhatre, N., Steeves, J., Bernstein, J.G.W., and Story, B. H., (2020). Overtone focusing in biphonic Tuvan throat singing. eLife, 9, e50476. https://doi.org/10.7554/eLife.50476

14. Story, B. H., and Bunton, K., (2019). A model of speech production based on the acoustic relativity of the vocal tract, J. Acoust. Soc. Am., 146(4), 2522-2528.

15. Mailend, M.L., Maas, E., Story, B. H., Forster, K., and Beeson, P., (2019). Speech motor planning in the context of phonetically similar words: Evidence from apraxia of speech and aphasia. Neuropsychologia, 127, 171-184.

16. Alku, P., Murtola, T., Malinen, J., Kuortti, J., Story, B. H., Airaksinen, M., Salmi, M., Vilkman, E., Geneid, A., (2019). OPENGLOT - An open environment for the evaluation of glottal inverse filtering, Speech Comm., 107, 38-47. https://doi.org/10.1016/j.specom.2019.01.005

17. Narendra, N. P., Airaksinen, M., Story, B., and Alku, P. (2019). Estimation of the glottal source from coded telephone speech using deep neural networks. Speech Communication, 106, 95-104.

18. Mokhtari, P., Story, B., Alku, P., and Ando, H. (2018). Estimation of the glottal flow from speech pressure signals: Evaluation of three variants of iterative adaptive inverse filtering using computational physical modelling of voice production. Speech Communication, 104, 24-38.

19. Story, B. H., Vorperian, H., Bunton, K., and Durtschi, R., (2018). An age-dependent vocal tract model for males and females based on anatomic measurements, J. Acoust. Soc. Am., 143(5), 3079-3102. https://doi.org/10.1121/1.5038264

20. Story, B. H., and Bunton, K., (2017). Vowel space density as an indicator of speech performance, J. Acoust. Soc. Am. Exp. Let. (JASA-EL), 141(5), EL458-EL464. [http://dx.doi.org/10.1121/1.4983342].

21. 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.

22. Samlan, R., and Story, B. H., (2017). Influence of left-right vocal fold asymmetries on voice quality in simulated paramedian vocal fold paralysis, J. Spch. Lang. Hear. Res., 60, 306-321, [doi:10.1044/2016_JSLHR-S-16-0076]

23. 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.

24. Bunton, K., and Story, B. H. (2016). Arizona Child Acoustic Database Repository. Folia Phoniatrica et Logopaedica, 68(3), 107-111.

25. 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.

26. 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]

27. 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

28. 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]

29. 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

30. 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.

31. 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.

32. 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.

33. 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.

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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. Bunton, K., Story, B. H., & Titze, I. (2013, June). Estimation of vocal tract area functions in children based on measurement of lip termination area and inverse acoustic mapping. In Proceedings of Meetings on Acoustics ICA2013 (Vol. 19, No. 1, p. 060054). ASA.

5. Story, B. H., & Bunton, K. (2013, June). Production of child-like vowels with nonlinear interaction of glottal flow and vocal tract resonances. In Proceedings of Meetings on Acoustics ICA2013 (Vol. 19, No. 1, p. 060303). ASA.

6. 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.

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9. 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.

10. 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**].

11. 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**].

12. 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**].

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14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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.

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21. 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.

22. 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.

23. 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.

24. 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, Autrans, France, pp. 215-220.

25. 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.

26. 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.

27. 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., (2019). History of speech synthesis. *The Routledge Handbook of Phonetics*, W. Katz & P. Assmann, Eds., 9-33. DOI: 10.4324/9780429056253-2

2. 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

3. 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.

4. 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.

D. Books

1. Hoit, J. D., Weismer, G., and Story, B. H., (2021). *Foundations of Speech and Hearing - Anatomy and Physiology*, 2nd Edition, Plural Publishing.

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

1. Story, B. H., and Bunton, K. (2022). Intelligibility of synthetic words generated by transformation of a sequence of discrete acoustic events into modulation of the vocal tract shape, Presented at the 183rd Meeting of the Acoustical Society of America, JASA, 152, A173; https://doi.org/10.1121/10.0015931

2. Story, B. H., and Bunton, K. (2020). Articulation and identification of voiced stop consonants produced by acoustically driven vocal tract modulations, Presented at the 179th Meeting of the Acoustical Society of America, JASA, 148, 2655; https://doi.org/10.1121/1.5147390

3. Story, B. H., (2020). Recent advances in voice production modeling. International Conference on Voice Physiology and Biomechanics (ICVPB). Grenoble, France (virtual). Keynote address: https://icvpb2020.sciencesconf.org/resource/page/id/1. [**Invited**]

4. Story, B. H., and Bunton, K., (2020). The relation of nasal coupling area to the perception of stop versus nasal consonants. Motor Speech Conference, Feb. 20-23, 2020, Santa Barbara, CA.

5. Bergevin, C., Narayan, C., Williams, J., Mhatre, N., Steeves, J., and Story, B. H., (2019). Overtone Focusing in Tuvan Throat Singing, PS 790, Presented at the 2019 ARO Midwinter Meeting, Baltimore, MD.

6. Story, B. H., and Bunton, K., (July 2018). Speech performance density as a measure of long-term speaking characteristics, Presented at the 11th International Conference on Voice Physiology and Biomechanics, Michigan State University, Lansing, MI.

7. Story, B. H., (May, 2018). Acoustic communication by vocal tract modulation. Presented at the 175th Meeting of the Acoustical Society of America, JASA, 143 (3), 1787. [**Invited**]

8. Story, B. H., Bunton, K., and Diamond, R., (May, 2018). Changes in vowel space characteristics during speech development based on longitudinal of measurements of formant frequencies. Presented at the 175th Meeting of the Acoustical Society of America, JASA, 143 (3), 1971.

9. Kruse, D., Mugmon, M., and Story, B.H., (March, 2018). "Soundscape: The UA's remarkable chimes and echoes," Society for Ethnomusicology, Rocky Mountain Scholars Conference, Tucson, AZ.

10. Story, B.H., Bunton, K., and Vorperian, H.K., (February, 2018). Intelligibility of monosyllabic words produced by an acoustically-driven model of the vocal tract. Presented at the 2018 International Conference on Motor Speech, Savannah, GA.

11. Story, B.H., and Bunton, K. (December, 2017). The relation of auditory perceptual ratings of nasality to nasal port area in connected speech, Presented at the Meeting of the Acoustical Society of America, New Orleans, LA, JASA, 142(4), 2551.

12. Story, B.H., (December, 2017). Stories of speech science, Presented at the Meeting of the Acoustical Society of America, New Orleans, LA, JASA, 142(4), 2616. [**Invited**]

13. 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**]

14. 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.

15. 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.

16. 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.

17. 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**]

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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**]

27. 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.

28. Monson, B.B., Lotto, A.J., and Story, B.H., (2014). Speech spectral intensity discrimination at frequencies above 6 kHz. Presented at 168th Meeting of the Acoustical Society of America, Indianapolis, IN, J. Acoust. Soc. Am., 136, 2307.

29. 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.

30. 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.

31. Samlan, R., and Story, B. H., (October 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.

32. 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.

33. 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.

34. 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**]

35. 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.

36. 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**]

37. 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.

38. 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**]

39. 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).

40. 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).

41. 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.

42. 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.

43. 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.

44. 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.

45. 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).

46. 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.

47. 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.

48. 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.

49. 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.

50. 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.

51. 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.

52. 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**]

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

54. 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).

55. 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**]

56. 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.

57. 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

58. 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.

59. 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.

60. 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**]

61. 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.

62. 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).

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

64. 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).

65. 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.

66. 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.

67. 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**]

68. 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.

69. 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**]

70. 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.

71. 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.

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

73. 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 Neurolaryngology Study Group of the Combined Otolaryngology Spring Meeting, Scottsdale, AZ. [**Invited**]

74. 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**]

75. 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).

76. 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).

77. 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**]

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

79. 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**]

80. 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**]

81. 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**]

82. 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.

83. 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.

84. Story, B.H., (January, 2008). Sources of Variance in Speech Acoustics, Presented at the 2nd Auditory Cognitive Science Society Meeting, (Tucson, AZ). [**Invited**]

85. 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**]

86. 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**]

87. 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**]

88. 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).

89. 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).

90. 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.

91. 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).

92. 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.

93. 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).

94. 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**].

95. 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).

96. 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).

97. 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).

98. 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.

99. 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).

100. 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**].

101. 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).

102. 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**]

103. 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**]

104. 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).

105. 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).

106. 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**]

107. 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).

108. 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).

109. 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.

110. 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).

111. 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).

112. 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).

113. 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).

114. 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).

115. 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).

116. 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).

117. 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).

118. 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).

119. 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).

120. 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).

121. 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).

122. 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).

123. 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).

124. 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

1. Story, B. H., (October 12, 2022). Modeling speech production as a communication system. University of Pittsburgh Research Round Table (RRT). [**Invited**]

2. Story, B. H., (November 5, 2021). Transformation of discrete phonetic segments into speech based on the acoustic relativity of the vocal tract, Cognitive Science Colloquium, University of Arizona. [**Invited**]

3. Story, B. H., (March 17, 2017). Acoustically-guided planning of vocal tract movement for production of connected speech, Linguistics and Communication Science and Disorders Colloquium, University of Alberta. [**Invited**]

4. Story, B. H., (April 2, 2015). Models for Synthesizing and Simulating Speech, Aerospace and Mechanical Engineering Seminar. University of Arizona. [**Invited**]

5. 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**]

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

7. 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.

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

9. 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**]

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

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

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

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

14. 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

1. 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**].

2. 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**].

3. 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**]

4. 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**].

5. 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**]

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

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

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

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

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

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

12. 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.

13. 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.

14. 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

1. Herbst, C., and Story, B.H., (June, 2022). Simulation of vocal tract resonance tuning strategies with respect to fundamental frequency and voice source spectral slope, Paper presented to the 51st Anniversary Symposium on Care of the Professional Voice, Session - Voice Pedagogy C, Philadelphia, PA.

2. Story, B. H., (May, 2021). ASHA CSD Science Teaching Symposium. "Plenary 1 - Innovative Teaching and Learning Strategies and Tools: Translating technical information". A virtual presentation with J. Friberg, M. C. Schuele, and S. Dhar.

3. Story, B. H., (May, 2021). ASHA CSD Science Teaching Symposium. "Plenary 2 - Engaging Students as Active Learners: Small but significant changes". A virtual presentation with J. Friberg, M. C. Schuele, and S. Dhar.

4. Story, B. H., (May, 2021). ASHA CSD Science Teaching Symposium. "Plenary 3 - Formative Assessment of Teaching and Learning: Low vs. high stakes assessment". A virtual presentation with J. Friberg, M. C. Schuele, and S. Dhar.

5. Story, B. H., (April, 2019). Mechanisms of speech production, Presented at the 11th Annual Interdisciplinary Integration Symposium "Airway Oscillation: An Interdisciplinary Approach to the Production of Voice, Airflow, and Resonance Frequency Breathing,", Postural Restoration Institute, Lincoln, NE. [**Invited**]

6. Story, B. H., (July 2017). Acoustic communication by airway modulation. Presented at the 4th International Symposium on Acoustic Communication by Animals, Omaha, NE. [**Invited**]

7. 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.

8. 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.

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

10. 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**].

11. 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.

12. 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.

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

14. 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.

E. Guest Classroom Lectures

Story, B. H., (September 2021). Source-filter theory of sound production, presented to SLHS 207.

Story, B. H., (February 2022). Source-filter theory of sound production, presented to SLHS 263 The World of Sound.

Story, B. H., (February 2021). Source-filter theory of sound production and speech synthesis, presented to SLHS 263 The World of Sound.

Story, B. H., (April, 2016). The Role of Speech Synthesis in the Science of Communication, presented to SPH 270 Scientific Thinking.

Story, B. H., (April, 2013). Sound and science, presented to SPH 270 Scientific Thinking.

Story, B. H., (October, 2011). Cochlear implants, presented to SPH Pediatric Communication Disorders.

Story, B. H., (April, 2011). Models of human sound production, presented to SPH 270 Scientific Thinking.

Story, B. H., (April, 2011). Speech synthesis, presented to LING 532.

Story, B. H., (January, 2011). Cochlear implants, presented to SPH Pediatric Communication Disorders.

Story, B. H. (August, 2010). Mechanisms of phonation, presented to SPH 574.

Story, B. H. (September, 2010). Control of fundamental frequency and intensity, presented to SPH 574.

Story, B. H. (November, 2010). Biological foundations of hearing I and II, presented to SPH 207.

Story, B. H. (September, 2010). Mechanisms of human sound production, presented to SPH 207.

Story, B. H., (April 2010). Cochlear implants, presented to SPH Pediatric Communication Disorders.

Story, B. H., (November, 2009). Models of human sound production, presented to SPH 270.

Story, B. H. (January, 2009). Mechanisms of human sound production, presented to SPH 207.

Story, B. H. (January, 2008). Mechanisms of human sound production, presented to SPH 207.

Story, B. H. (September, 2007). Mechanisms of human sound production, presented to SPH 207.

Story, B. H. (April, 2007). Acoustic sensitivity of the vocal tract, presented to SPH 367.

Story, B. H. (January, 2007). Mechanisms of human sound production, presented to SPH 207.

Story, B. H. (September, 2006). Mechanisms of human sound production, presented to SPH 207.

Story, B. H. (April, 2005). Physiology and mechanics of phonation, presented to SPH 261 (Speech Anatomy and Physiology), three lectures.

Story, B. H. (April, 2005). Auditory masking, presented to SPH 280 (Hearing Science), two lectures.

Story, B. H. (November, 2005). Common modes of vocal tract articulation for vowels, presented to BME (Biomedical Eng.) 496c/595c.

Story, B. H. (October, 2004). Using imaging and modeling techniques to understand the relation between vocal tract shape and acoustic characteristics, presented to BME (Biomedical Eng.) 496c/595c.

Story, B. H., (April & November, 2004). Introduction to hearing, presented to SPH 207.

Story, B. H. (January & April, 2004). Acoustics and auditory masking, presented to SPH 280 (Hearing Science), three lectures.

Story, B.H., (April, 2002). Introduction to the science of singing, presented to Vocal Pedagogy Course, Dept. of Music, University of Arizona.

Story, B.H., (November, 2001 & 2002). Speech acoustics, presented to Experimental Phonetics Course, Dept. of Speech and Hearing Sciences, University of Arizona.

Story, B.H., (November, 1998). Acoustics of speech, presented to Linguistic Phonetics, University of Colorado.

Story, B.H., (June, 1998). Research in speech science, presented to Sci. Meth. in Spch., Lang., & Hear., University of Colorado.

Story, B.H., (February, 1998). An overview of voice and speech, presented to Human Communication Course, University of Colorado.

F. Community Lectures

Story, B. H., (2020). Who knew? The Mysterious 1877 Talking Machine!, presented to the Tucson Hard-Science Science Fiction Writers Group, Dec. 5, 2020.

Story, B. H., (2017). Resonance: A seminar on Music and Health, presented on April 29, 2017 at the University of Arizona. Sponsored by the Fred Fox School of Music and the Department of Speech, Language, and Hearing Sciences.

Story, B.H., (2015). The physics of speech, Tucson Area Physics Teachers, presented on October 3, 2015 at the University of Arizona.

Story, B.H., (2012). The amazing talking machine: How humans produce sound for communication, Science Cafe lecture series, University of Arizona, College of Science, presented on April 26, 2012 at Saddlebrooke, Mountain View Country Club.

Story, B.H., (2002). What do mufflers have in common with speech? Presented to the Downtown Kiwanis Club, Tucson, AZ, July 23, 2002.

Grants

University

2020 Galileo Circle Fellows Grant
Galileo Circle, University of Arizona - College of Science
P. I. Brad Story
(*The relation of speech production and perception to the acoustic relativity of the vocal tract*)
$10,000

Federal

2019–2024 Research Grant
National Institute on Deafness and Other Communication Disorders
R01 DC017998
Co-investigator, subaward $350,000 (to be awarded)
P.I., Ingo Titze, University of Utah
(*Voice Source and Airway Interation in Normal and Hyperfunctional Speech*)

2014–2019 Research Grant
National Institute on Deafness and Other Communication Disorders
R01 DC006282
Co-investigator, subaward
P.I., Houri 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
R01-DC011275
Principal Investigator
(*An Acoustic Model of Child-like Speech*)

2008–2013 Research Grant
National Institute on Deafness and Other Communication Disorders
R01 DC006282
Consultant
P.I., Houri Vorperian
(*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* $\longrightarrow$ *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*)

Patents

U.S. Patent 11,403,961 B2, "Public Speaking Trainer with 3-D Simulation and Real-Time Feedback," Inventors: Gupta, A., Makhiboroda, Y., and Story, B. H.

Consulting

(1997-1998) Advisor for development of realistic sounds for the movie "Godzilla," with Martin Lopez, Sound Effects Editor.

(1998-1999) Acoustic modeling of a parrot vocal tract, with Irene Pepperberg and Dianne Patterson, University of Arizona.

Board Memberships - Nonprofit corporations

(2020-present) NCVS.org. Chairman of the Board

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

- Arizona Science, KUAT-FM, Episode 123: From car mufflers to human voice tracts. March 2, 2018 https://radio.azpm.org/p/radio-azscience/2018/3/1/125000-episode-120-from-car-mufflers-to-human-voice-tracts/
- BYUradio (SiriusXM 143). Top of Mind with Julie Rose. Interview on Tuvan throat singing. March 24, 2020.
- KJZZ (Phoenix public radio) interview on Tuvan throat singing: https://science.kjzz.org/content/1506046/university-arizona-researchers-discover-how-tuvan-throat-singing-works. March 27, 2020.

Media interviews based on "Laurel vs Yanny" meme of May 2018

- https://www.popsci.com/yanny-laurel-scientific-evidence
- https://qz.com/1278905/yanny-or-laurel-a-team-of-scientists-weighs-in-on-the-viral-audio-clip/
- https://news.nationalgeographic.com/2018/05/yanny-laurel-hear-sound-audio-explained-science-spd/
- https://www.cnn.com/2018/05/15/health/yanny-laurel-audio-social-media-trnd/index.html
- https://www.vox.com/2018/5/16/17358774/yanny-laurel-explained
- https://www.cnet.com/news/yanny-laurel-leaves-scientists-as-mystified-as-we-are/
- https://cheddar.com/videos/yanny-vs-laurel
- https://www.npr.org/sections/thetwo-way/2018/05/16/611701171/yanny-or-laurel-why-people-hear-different-things-in-that-viral-clip
- https://www.today.com/popculture/viral-laurel-yanny-clip-voice-actor-settles-debate-t129600
- https://qz.com/1278905/yanny-or-laurel-a-team-of-scientists-weighs-in-on-the-viral-audio-clip/
- https://www.theguardian.com/technology/2018/may/16/yanny-or-laurel-sound-illusion-sets-off-ear-splitting-arguments
- https://www.politifact.com/truth-o-meter/article/2018/may/16/laurel-or-yanny-fact-checkers-guide/
- https://finance.yahoo.com/news/yanny-laurel-solved-check-waveforms-211357406.html
- http://www.kvoa.com/story/38209513/is-it-laurel-or-yanny-kvoa-talks-with-local-audiology-experts
- Live radio interview on May 17, 2018 at 4:20 pm, Station KSRO in the Bay Area