CURRICULUM VITAE
University of Pittsburgh
School of Health and Rehabilitation Sciences

SHORT BIOGRAPHICAL

Name: Bharath Chandrasekaran

Business Address: School of Health and Rehabilitation Sciences
6035 Forbes Tower
Pittsburgh, PA 15260
Business Phone: (412) 383-6540

Email: b.chandra@pitt.edu

EDUCATION AND TRAINING

UNDERGRADUATE:

Dates Attended	*Institution*	*Degree Received and Year*	*Major Subject*
1998-2002	Sri Ramachandra University, Chennai	BS, 2002	Speech, Language, and Hearing Sciences

GRADUATE:

Dates Attended	*Institution*	*Degree Received and Year*	*Major Subject*
2002-2004	Purdue University	MS, 2004	Speech Science
2004-2008	Purdue University	PhD, 2008	Integrative Neuroscience

POSTGRADUATE:

Dates Attended	*Institution*	*Degree Received and Year*	*Major Subject*
2008-2010	Northwestern University	Postdoctoral Fellow	Auditory Neuroscience

APPOINTMENTS AND POSITIONS

Years Inclusive	*Name and Location of Institution*	*Rank/Title*
2010-2015	Department of Communication Sciences and Disorders The University of Texas at Austin	Assistant Professor
2011-2015	Department of Psychology The University of Texas at Austin	Assistant Professor (by courtesy)
2012-2015	Department of Linguistics The University of Texas at Austin	Assistant Professor (by courtesy)
2015-2018	Department of Communication Sciences and Disorders The University of Texas at Austin	Associate Professor
2015-2018	Department of Psychology The University of Texas at Austin	Associate Professor (by courtesy)

2015-2018	Department of Linguistics The University of Texas at Austin	Associate Professor (by courtesy)
2018-present	Department of Communication Science and Disorders University of Pittsburgh	Professor and Vice Chair for Research
2018-present	Department of Psychology University of Pittsburgh	Professor (by courtesy)
2018-present	Center for the Neural Bases of Cognition, University of Pittsburgh/Carnegie Mellon University	Member

MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

Organization

- Member, Journals Board (Liaisons with the Vice President for Science and Research), American Speech-Language Hearing Association
- American Speech-Language Hearing Association
- Society for Neurobiology of Language
- Acoustical Society of America
- The Psychonomic Society
- Association for Research in Otolaryngology
- Cognitive Neuroscience Society

HONORS

Title of Award	***Year***
Asai Thambi Award for Outstanding Academic Performance (98-99), Sri Ramachandra Medical College and Research Institute, Chennai, India	1999
Asai Thambi Award for Outstanding Academic Performance (99-00), Sri Ramachandra Medical College and Research Institute, Chennai, India	2000
Young Scientist Award (Audiology), Indian Speech and Hearing Association Conference, Mumbai	2001
Best Paper in Learning and Disabilities, Indian Speech and Hearing Association Conference, Mumbai	2001
Best student paper, Madras Regional Chapter of Acoustic Society of America, National Symposium on Acoustics, Vellore	2001
Asai Thambi Award for Outstanding Academic Performance (00-01), Sri Ramachandra Medical College and Research Institute, Chennai, India	2001
Fredrick N. Andrews Fellowship, Purdue University	2002
Student Travel Award, American Speech-Language-Hearing Association	2004
Research in Higher Education Mentorship Award, American Speech-Language-Hearing Association	2004
Runner-up, Burton D. Morgan Entrepreneurial Competition, Purdue University	2006
Dissertation Research Grant, Purdue Research Foundation, Purdue University	2006
Graduate Student Award for Outstanding Teaching, Purdue University	2007
New Century Scholars Program Doctoral Scholarship, American Speech-Language Hearing Foundation	2007
Graduate Student Award for Outstanding Teaching, Purdue University	2008
Dean's Fellowship, College of Communication, The University of Texas at Austin	2013
Regents' Outstanding Teaching Award, The University of Texas Systems, $20,000. *Awarded to faculty members at The University of Texas System's eight academic and six health institutions who have demonstrated* ***extraordinary classroom performance and innovation in undergraduate instruction****, the Regents' Outstanding Teaching Awards are the Board of Regents' highest honor.*	2015

Editor's award for the most meritorious article appearing in the *Journal of Speech, Language, and Hearing Research* (Hearing). 2015
An article selected for an Editor's Award is the one that the Editor and Associate Editor feel meets the highest quality standards in research design, presentation, and impact for a given year.

Early Career Award, The Psychonomics Society. 2016
Awarded to researchers who have made significant contributions to scientific psychology early in their careers.

Graduate School Mentoring Fellowship, The University of Texas at Austin 2016
Awarded to faculty members at The University of Texas at Austin to aid in recruiting outstanding new graduate students that add to the diversity of the campus

Early Career Award, The Society for the Neurobiology of Language 2018
Awarded to honor researchers whose high quality of scientific work and academic citizenship exemplify the ideals of the Society.

RESEARCH HIGHLIGHTS

- Cumulative, continuous research funding of **>$ 10 million**. Over 90% of this funding is from federal grant agencies including the National Institutes of Health (NIH), National Science Foundation (NSF), and the Defense Advanced Research Project Agency (DARPA). Current research is supported by NIH grants, National Science Foundation, and Edith Trees Foundation.

- Productivity and citation impact: Published **88 peer-reviewed articles** in journals with broad appeal (e.g., *Nature Reviews Neuroscience*, *Neuron*, *Current Biology*, *Nature Communications*, *Journal of Neuroscience, Cerebral Cortex, Cortex, Journal of Neural Engineering, and Journal of Cognitive Neuroscience*) and subject-specific journals (*Journal of Acoustical Society of America*, *Journal of Speech, Language, and Hearing Research, Psychonomic Bulletin and Review*). Publications represent diverse fields of research (Neuroscience: 47%, Communication Sciences and Disorders & Otolaryngology: 25%, Psychology and Linguistics: 25%, Engineering and Mathematical Sciences: 3%). My H-index is 38, and I have an i-10 index of 63. My highest cited article has received more than 1100 citations (Kraus and Chandrasekaran, *Nature Reviews Neuroscience*, 2010)

- Awarded the Society for Neurobiology of Language (SNL) Early Career Award (2018), which honors researchers' high quality of scientific work and academic citizenship exemplify the ideals of the society.

- Awarded the Psychonomics Society Early Career Award (2016). This award annually honors the distinguished research accomplishments of early career members and fellows of the society.

- Awarded the Editor's Award (*Journal of Speech, Language, and Hearing Research- Hearing*) in 2015. The Editor's Award is presented annually by the American Speech-Language Hearing Association (ASHA) for a single article that the editor-in-chief and editors feel meets the highest quality standards in research design, presentation, and impact for a given year.

- Research featured in a variety of national and international print and media of broad readership such as *Scientific American, Nature News, BBC News, U.S. News, The Washington Post, The Verge,* and *The Telegraph.*

- Delivered lectures/seminars/workshops at more than **45 academic institutions, 16 of which are International**. This includes a keynote address inaugurating an interdisciplinary Ph.D.

program in Linguistics at University of Lisbon, Portugal and the prestigious 21st Annual Jack Matthews-Herbert Rubin Lecture at the University of Pittsburgh.

PUBLICATIONS (Refereed articles only)

* indicates first author is (or was) a graduate student, or post-doctoral research associate in my lab

1. Huber, J. E., **Chandrasekaran, B.**, Wolstencroft, J. J. Changes to respiratory mechanisms during speech as a result of different cues to increase loudness. J Appl Physiol. 2005 Jun; 98(6): 2177-2184. PubMed PMID: 15705723.
2. Huber, J. E., **Chandrasekaran, B.** Effects of increasing sound pressure level on lip and jaw movement parameters and consistency in young adults. J Speech Lang Hear Res. 2006 Dec; 49(6): 1368-1379. PubMed PMID: 17197502.
3. Kemmerer, D., **Chandrasekaran, B.**, Tranel, D. A case of impaired verbalization but preserved gesticulation of motion events. Cogn Neuropsychol. 2007 Feb; 24(1): 70-114. PubMed PMID: 18386190.
4. **Chandrasekaran, B.**, Krishnan, A., Gandour, J. T. Mismatch negativity to pitch contours is influenced by language experience. Brain Res. 2007 Jan 12; 1128(1): 148-156. PubMed PMID: 17125749.
5. **Chandrasekaran, B.**, Gandour, J. T., Krishnan, A. Neuroplasticity in the processing of pitch dimensions: A multidimensional scaling analysis of the mismatch negativity. Restor Neurol Neurosci. 2007; 25(3-4): 195-210. PubMed PMID: 17942999.
6. **Chandrasekaran, B.**, Krishnan, A., Gandour, J. T. Experience-dependent neural plasticity is sensitive to shape of pitch contours. Neuroreport. 2007 Dec 3; 18(18), 1963-1967. PubMed PMID: 18007195.
7. Wong, P.C.M., Perrachione, T.K., Gunasekera, G., **Chandrasekaran, B.** Communication disorders in speakers of tone languages: Etiological bases and clinical considerations. Semin Speech Lang. 2009 Aug; 30(3): 162-173. PubMed PMID: 19711234.
8. **Chandrasekaran, B.**, Krishnan, A., Gandour, J. T. Sensory processing of linguistic pitch as reflected by the mismatch negativity. Ear Hear. 2009 Oct; 30(5): 552-558. PubMed PMID: 19546808.
9. **Chandrasekaran, B.**, Krishnan, A., Gandour, J. T. Relative influence of musical and linguistic experience on early cortical processing of pitch contours. Brain Lang. 2009 Jan; 108(1): 1-9. PubMed PMID: 18343493.
10. **Chandrasekaran, B.,** Hornickel, J. M., Skoe, E., Nicol, T., Kraus, N. Context- dependent encoding in the human auditory brainstem relates to hearing speech in noise: Implications for developmental dyslexia. Neuron. 2009 Nov 12; 64(3): 311-319. PubMed PMID: 19914180.
11. Anderson, S., Skoe, E., **Chandrasekaran, B.**, Zecker, S., Kraus, N. Brainstem correlates of speech-in-noise perception in children. Hearing Res. 2010 Dec 1; 270(1-2): 151-157. PubMed PMID: 20708671.
12. Anderson, S., **Chandrasekaran, B.**, Yi, H., Kraus, N. Cortical-evoked potentials reflect speech-in-noise perception in children. Eur J Neurosci. 2010 Oct; 32(8): 1407-1413. PubMed PMID: 20950282.
13. **Chandrasekaran, B.,** Kraus, N. The scalp-recorded brainstem response to speech: Neural origins and plasticity. Psychophysiology. 2010 Mar 1; 47(2): 236-246. PubMed PMID: 19824950.
14. Anderson, S., Skoe, E., **Chandrasekaran, B.**, Kraus, N. Neural timing is linked to speech perception in noise. J Neurosci. 2010 Apr 7; 30(14): 4922-4926. PubMed PMID: 20371812.
15. **Chandrasekaran, B.**, Kraus, N. Music, noise-exclusion, and learning. Music Perception. 2010; 27(4), 297-306.
16. **Chandrasekaran, B.**, Sampath, P.D., Wong P.C.M. Individual variability in cue-weighting and lexical tone learning. J Acoust Soc Am. 2010 Jul; 128(1): 456-465. PubMed PMID: 20649239.
17. Kraus, N., **Chandrasekaran, B.** Music training for the development of auditory skills. Nat Rev Neurosci. 2010 Aug; 11(8): 599-605. PubMed PMID: 20648064.
18. Hornickel, J., **Chandrasekaran, B.**, Zecker, S., Kraus, N. Auditory brainstem measures predict reading and speech-in-noise perception in school-aged children. Behav Brain Res. 2011 Jan 20; 216(2): 597-605. PubMed PMID: 20826187.

19. Wong, F. C. K., **Chandrasekaran, B.**, Garibaldi, K., & Wong, P. C. M. (2011). White matter anisotropy in the ventral language pathway predicts sound-to-word learning success. J Neurosci. 2011 Jun 15; 31(24), 8780-8785. PubMed PMID: 21677162.
20. **Chandrasekaran, B.**, Chan H.D., Wong, P.C.M. Neural processing of what and who information during spoken language processing. J Cogn Neurosci. 2011 Oct; 23(10): 2690-2700. PubMed PMID: 21268667.
21. *Van Engen, K., **Chandrasekaran, B.**, Smiljanic, R. Effects of speech clarity on recognition memory for spoken sentences. PloS One. 2012; 7(9): e43753. doi:10.1371/journal.pone.0043753. PubMed PMID: 22970141.
22. Wong, P. C. M., **Chandrasekaran, B.**, Zheng, J. The derived allele of ASPM is associated with lexical tone perception. PloS One. 2012; 7(4): e34243. doi:10.1371/journal.pone.0034243. PubMed PMID: 22529908.
23. **Chandrasekaran, B.**, Kraus, N., Wong, P.C.M. Human inferior colliculus activity relates to individual differences in language learning. J Neurophysiol. 2012 Mar; 107(5): 1325-1336. PubMed PMID: 22131377.
24. Ress, D., **Chandrasekaran, B**. Tonotopic organization in the depth of human inferior colliculus. Front Hum Neurosci. 2013 Sep 19; 7: 586. doi:10.3389/fnhum.2013.00586. PubMed PMID: 24065909.
25. *Yi, H., Phelps, J. E. B., Smiljanic, R., **Chandrasekaran, B.** Reduced efficiency of audiovisual integration for nonnative speech. J Acoust Soc Am. 2013 Nov; 134(5): EL387-EL393. PubMed PMID: 24181980.
26. Maddox, W. T., **Chandrasekaran, B.**, Smayda, K., Yi, H. G. Dual systems of speech category learning across the lifespan. Psycho Aging. 2013 Dec; 28(4): 1042-1056. PubMed PMID: 24364408.
27. Skoe, E., **Chandrasekaran, B.**, Spitzer, E. R., Wong, P. C. M., Kraus, N. Human brainstem plasticity: the interaction of stimulus probability and auditory learning. Neurobiol Learn Mem. 2014 Mar; 109: 82-93. PubMed PMID: 24291573.
28. Gilbert, R. C., **Chandrasekaran, B.**, Smiljanic, R. Recognition memory in noise for speech of varying intelligibility. J Acoust Soc Am. 2014 Jan; 135(1): 389-399. PubMed PMID: 24437779.
29. Maddox, W. T. **Chandrasekaran, B.** Tests of a dual-systems model of speech category learning. Biling (Camb Engl). 2014 Oct 1; 17(4): 709-728. PubMed PMID: 25264426.
30. Skoe, E., **Chandrasekaran, B.** The layering of auditory experiences in driving experience-dependent subcortical plasticity. Hear Res. 2014 May; 311: 36-48. PubMed PMID: 24445149.
31. **Chandrasekaran, B.**, Skoe, E., Kraus, N. An integrative model of subcortical auditory plasticity. Brain Topogr. 2014 Jul; 27(4): 539-552. PubMed PMID: 24150692.
32. **Chandrasekaran, B.**, Yi, H., Maddox, W. T. Dual-learning systems during speech category learning. Psychon Bull Rev. 2014 Apr; 21(2): 488-495. PubMed PMID: 24002965.
33. Maddox, W. T., **Chandrasekaran, B.**, Smayda, K., Koslov, S., Yi, H. G., Beevers, C. G. Elevated depressive symptoms enhance reflexive but not reflective auditory category learning. Cortex. 2014 Sep; 58: 186-198. PubMed PMID: 25041936.
34. *Yi, H., Smiljanic, R., **Chandrasekaran, B.** The neural processing of foreign-accented speech and its relationship to listener bias. Front Hum Neurosci. 2014 Oct 8; 8:768. doi:10.3389/fnhum.2014.00768. PubMed PMID: 25339883.
35. **Chandrasekaran, B.,** Koslov, S., Maddox, W. T. Toward a dual-learning systems model of speech category learning. Front Psychol. 2014 Jul 31; 5(825): 1-17. PubMed PMID: 25132827.
36. *Van Engen, K., Phelps, J. B., Smiljanic, R., **Chandrasekaran, B.** Enhancing speech intelligibility: Interactions among context, modality, speech style, and masker. J Speech Lang Hear Res. 2014 Oct; 57(5): 1908-1918. PubMed PMID: 24687206.
37. *Xie, Z., Yi, H., **Chandrasekaran, B.** Nonnative audiovisual speech perception in noise: Dissociable effects of the speaker and listener. PLoS ONE. 2014 Dec 4; 9(12): e114439. PubMed PMID: 25474650.

38. *Xie, Z., Maddox, W. T., Knopik, V. S., McGeary, J. E., **Chandrasekaran, B.** Dopamine receptor D4 (DRD4) gene modulates the influence of informational masking on speech recognition. Neuropsychologia. 2015 Jan; 67: 121-131. PubMed PMID: 25497692.
39. **Chandrasekaran, B.,** Van Engen, K., Xie, Z., Beevers, C. G., Maddox, W. T. Influence of depressive symptoms on speech perception in adverse listening conditions. Cogn Emot. 2015; 29 (5), 900-909. PubMed PMID: 25090306.
40. *Smayda, K., **Chandrasekaran, B.**, Maddox, W. T. Enhanced cognitive and perceptual processing: A computational basis for the musician advantage in speech learning. Front Psychol. 2015 May 21; 6: 682. doi: 10.3398/fpsyg.2015.00682. PubMed PMID: 26052304.
41. *Xie, Z., Maddox, W. T., McGeary, J. E., **Chandrasekaran, B.** The C957T polymorphism in the dopamine receptor D2 (DRD2) gene modulates domain-general category learning. J Neurophysiol. 2015 May 1; 113(9): 3281-3290. PubMed PMID: 25761979.
42. **Chandrasekaran, B.,** Yi, H., Blanco, N., McGeary, J. E., Maddox, W. T. Enhanced procedural learning of speech sound categories in a genetic variant of FOXP2. J Neurosci. 2015 May 20; 35(20): 7808-7812. PubMed PMID: 25995468.
43. Francis, A.L., MacPherson, M.K., **Chandrasekaran, B.**, Alvar, A.M. Autonomic nervous system responses during perception of masked speech may reflect constructs other than subjective listening effort. Front Psychol. 2016; 7. doi: 10.3389/fpsyg.2016.00263.
44. *Reetzke, R., Maddox, W. T., **Chandrasekaran, B.** The Role of Age and Executive Function in Auditory Category Learning. J Exp Child Psychol. 2016 Feb; 142: 48-65. PubMed PMID: 26491987.
45. Deng, Z., **Chandrasekaran, B.**, Wang, S., Wong, P.C.M. Resting-state low-frequency fluctuations reflect individual differences in spoken language learning. Cortex. 2016 Mar; 76: 63-78. PubMed PMID: 26866283.
46. *Smayda, K.E., Van Engen, K.J., Maddox, W.T., **Chandrasekaran, B.** Audio-Visual and Meaningful Semantic Context Enhancements in Older and Younger Adults. PLoS ONE. 2016 Mar 31; 11(3): e0152773. PubMed PMID: 27031343.
47. **Chandrasekaran, B.,** Yi, H., Smayda, K., Maddox, W. T. Effect of explicit dimension instruction on speech category learning. Atten Percept Psychophys. 2016 Feb; 78(2): 566-582. PubMed PMID: 26542400.
48. *Reetzke, R., Lam, B.P.W., Xie, Z., Sheng, L., **Chandrasekaran, B.** Effect of Simultaneous Bilingualism on Speech Intelligibility across Different Masker Types, Modalities, and Signal-to-Noise Ratios in School-Age Children. PLoS ONE. 2016 Dec 9; 11(12): e0168048. doi: 10.1371/journal.pone.0168048. PubMed PMID: 27936212.
49. *Yi, H., **Chandrasekaran, B.** Auditory categories with separable decision boundaries are learned faster with full feedback than minimal feedback. J Acoust Soc Am. 2016 Aug; 140(2): 1332-1335. PubMed PMID: 27586759.
50. *Yi, H., Maddox, W.T., Mumford, J.A., **Chandrasekaran, B.** The role of corticostriatal systems in speech category learning. Cereb Cortex. 2016 Apr; 26(4): 1409-1420. PubMed PMID: 25331600.
51. *Van Engen, K. J., Xie, Z., **Chandrasekaran, B.** Audiovisual sentence recognition not predicted by susceptibility to the McGurk effect. Atten Percept Psychophys. 2017 Feb; 79(2): 396-403. PubMed PMID: 27921268.
52. Lau, J.C.Y., Wong, P., **Chandrasekaran, B.** Context-dependent plasticity in the subcortical encoding of linguistic pitch patterns. J Neurophysiol. 2017 Feb 1; 117(2): 594-603. PubMed PMID: 27832606.
53. *Lam, B.P.W., Xie, Z., Tessmer, R., **Chandrasekaran, B.** The Downside of Greater Lexical Influences: Selectively Poorer Speech Perception in Noise. J Speech Lang Hear Res. 2017 Jun 10; 60(6): 1662-1673. doi: 10.1044/2017_JSLHR-H-16-0133. PubMed PMID: 28586824.
54. *Xie, Z.^, *Reetzke, R.^, **Chandrasekaran, B.** Stability and plasticity in neural encoding of linguistically-relevant pitch patterns. J Neurophysiol. 2017 Mar 1; 117: 1407-1422. PubMed PMID: 28077662. (^ co-first authors)

55. *Yi, H., Xie, Z., Reetzke, R., Dimakis, A.G., **Chandrasekaran, B.** Vowel decoding from single-trial speech-evoked electrophysiological responses: A feature-based machine learning approach. Brain Behav. 2017 Apr 26; 7(6): e00665. PubMed PMID: 28638700.
56. *Llanos, F., Xie, Z., **Chandrasekaran, B.** Hidden Markov Modeling of Frequency-Following Responses to Mandarin Lexical Tones. J Neurosci Methods. 2017 Nov 1; 291: 101-112. PubMed PMID: 28807860.
57. *Smayda, K. E., Worthy, D. A., **Chandrasekaran, B.** Better late than never (or early): Music training in late childhood is associated with enhanced decision-making. Psychol Music. 2017; 46(5): 734-748.
58. *Feng, G., Gan, Z., Wang, S., Wong, P., **Chandrasekaran, B.** Task-General and Acoustic-Invariant Neural Representation of Speech Categories in the Human Brain. Cereb Cortex. 2018 Sep 1; 28(9): 3241-3254. PubMed PMID: 28968658.
59. Deng, Z., **Chandrasekaran, B**., Wang, S., Wong, P. C. Training-induced brain activation and functional connectivity differentiate multi-talker and single-talker speech training. Neurobiol Learn Mem. 2018 May; 151: 1-9. PubMed PMID: 29535043.
60. *Xie, Z., Reetzke, R., **Chandrasekaran, B**. Taking Attention Away from the Auditory Modality: Context-dependent Effects on Early Sensory Encoding of Speech. Neurosci. 2018 Aug 1; 384: 64-75. PubMed PMID: 29802881.
61. *Reetzke, R., Xie, Z., Llanos, F., **Chandrasekaran, B.** Tracing the Trajectory of Sensory Plasticity across Different Stages of Speech Learning in Adulthood. Curr Biol. 2018 May 7; 28(9): 1419-1427. PubMed PMID: 29681473.
62. Lau, J., Wong, P., **Chandrasekaran, B.** Interactive effects of linguistic abstraction and stimulus statistics in the online modulation of neural speech encoding. Atten Percept Psychophys. 2019 May; 81(4): 1-14. PubMed PMID: 30565097.
63. *Feng, G., Yi, H., **Chandrasekaran**, B. The Role of the Human Auditory Corticostriatal Network in Speech Learning, Cereb Cortex. 2019 Sep 13; 29(10): 4077–4089. PubMed PMID: 30533158.
64. *Xie, Z., Reetzke, R., **Chandrasekaran, B.** Machine learning approaches to analyze speech-evoked neurophysiological responses. J Speech Lang Hear Res. 2019 Mar 25; 62(3): 587-601. PubMed PMID: 30950746.
65. Paulon, G., Reetzke, R., **Chandrasekaran, B**., Sarkar, A. Functional Logistic Mixed Effects Models for Learning Curves from Longitudinal Binary Data. J Speech Lang Hear Res. 2019 Mar 25; 62(3): 543-553. PubMed PMID: 30950747.
66. *Zinszer, B. D., Riggs, M., Reetzke, R., **Chandrasekaran, B.** Error patterns of native and non-native listeners' perception of speech in noise. J Acoust Soc Am. 2019 Feb; 145(2): EL129-EL135. PubMed PMID: 30823795.
67. *Llanos, F., Xie, Z., **Chandrasekaran, B.** Biometric identification of listener identity from frequency following responses to speech. J Neural Eng. 2019 Jul 23; 16(5): 056004. PubMed PMID: 31039552.
68. *Yi, H., Smiljanic, R., **Chandrasekaran, B**. The Effect of Talker and Listener Depressive Symptoms on Speech Intelligibility. J Speech Lang Hear Res. 2019 Nov 18; 139(4): 2047-2047. PubMed PMID: 31738862.
69. *Xie, Z., Zinszer, B. D., Riggs, M., Beevers, C. G., **Chandrasekaran, B.** Impact of depression on speech perception in noise. PLoS ONE. 2019 Aug 15; 14(8): e0220928. PubMed PMID: 31415624.
70. Coffey, E. B., Nicol, T., White-Schwoch, T., **Chandrasekaran, B**., Krizman, J., Skoe, E., Zatorre, R. J., & Kraus, N. Evolving perspectives on the sources of the frequency-following response. Nat Commun. 2019 Nov 6; 10(1): 1-10. PubMed PMID: 31695046.
71. Paulon, G., Llanos, F., **Chandrasekaran, B**., & Sarkar, A. (2020). Bayesian Semiparametric Longitudinal Drift-Diffusion Mixed Models for Tone Learning in Adults. *Journal of the American Statistical Association*, 1-14.
72. * Llanos, F., McHaney, J. R., Schuerman, W. L., Han, G. Y., Leonard, M. K., & **Chandrasekaran, B**. (2020). Non-invasive peripheral nerve stimulation selectively enhances speech category learning in adults. *npj Science of Learning*, *5*(1), 1-11.

73. Dial, H. R., Gnanateja, G. N., Tessmer, R. S., Gorno-Tempini, M. L., **Chandrasekaran, B**., & Henry, M. L. (2020). Cortical tracking of the speech envelope in logopenic variant primary progressive aphasia. *Frontiers in Human Neuroscience*.
74. McHaney, J. R., Gnanateja, G. N., Smayda, K. E., Zinszer, B. D., & **Chandrasekaran, B**. (2021). Cortical tracking of speech in delta band relates to individual differences in speech in noise comprehension in older adults. Ear and Hearing, 42(2), 343-354.
75. Feng, G., Gan, Z., Llanos, F., Meng, D., Wang, S., Wong, P. C., & **Chandrasekaran, B.** (2021). A distributed dynamic brain network mediates linguistic tone representation and categorization. *NeuroImage*, *224*, 117410.
76. Reetzke, R., Gnanateja, G. N., & **Chandrasekaran, B**. (2021). Neural tracking of the speech envelope is differentially modulated by attention and language experience. *Brain and Language*, *213*, 104891.
77. Roark, C. L., Paulon, G., Sarkar, A., & Chandrasekaran, B. (2021). Comparing perceptual category learning across modalities in the same individuals. *Psychonomic Bulletin & Review.* https://doi.org/10.3758/s13423-021-01878-0
78. Feng, G., Li, Y., Hsu, S. M., Wong, P., Chou, T. L., & **Chandrasekaran, B**. (2021). Emerging native-similar neural representations underlie non-native speech category learning success. *Neurobiology of Language*, 1-82. https://doi.org/10.1162/nol_a_00035
79. Roark, C. L., Smayda, K. E., & **Chandrasekaran, B.** (2021). Auditory and visual category learning in musicians and nonmusicians. *Journal of Experimental Psychology: General*. Advance online publication. https://doi.org/10.1037/xge0001088
80. Llanos, F., German, J. S., Gnanateja, G. N., & Chandrasekaran, B. (2021). The neural processing of pitch accents in continuous speech. Neuropsychologia, 158, 107883.
81. Devaraju, D. S., Kemp, A., Eddins, D. A., Shrivastav, R., **Chandrasekaran, B**., & Hampton Wray, A. (2021). Effects of Task Demands on Neural Correlates of Acoustic and Semantic Processing in Challenging Listening Conditions. *Journal of Speech, Language, and Hearing Research*, 64(9), 3697-3706.
82. Urbin, M. A., Lafe, C. W., Simpson, T. W., Wittenberg, G. F., **Chandrasekaran, B**., & Weber, D. J. (2021). Electrical stimulation of the external ear acutely activates noradrenergic mechanisms in humans. *Brain Stimulation*, 14(4), 990-1001.
83. *Yi, H., **Chandrasekaran, B.**, Nourski, K.V., Rhone, A.E., Schuerman W.L., Howard M.A., Chang, E.F., & Leonard, M.L. (in press) Learning non-native speech sounds changes local encoding in the adult human cortex". *Proceedings of the National Academy of Sciences*.
84. Gnanateja, G. N., Rupp, K., Remick, M., Llanos, F., Pernia, M., Sadagopan, S., Teichert, T., Abel, T., **Chandrasekaran, B.** (2021). Frequency-Following Responses to Speech Sounds Are Highly Conserved across Species and Contain Cortical Contributions. *ENeuro*. https://doi.org/10.1523/ENEURO.0451-21.2021
85. Feng, G., Gan, Z., Yi, H. G., Ell, S. W., Roark, C. L., Wang, S., Wong, P. C. M., **Chandrasekaran, B.** (2021). Neural dynamics underlying the acquisition of distinct auditory category structures. *NeuroImage*. https://doi.org/10.1016/j.neuroimage.2021.118565
86. Schuerman, W. L., **Chandrasekaran, B**., & Leonard, M. K. (2022). Arousal States as a Key Source of Variability in Speech Perception and Learning. Languages, 7(1), 19.
87. Caras, M. L., Happel, M. F. K., **Chandrasekaran, B**., Ripollés, P., Keesom, S. M., Hurley, L. M., Remage-Healey, L., Holt, L. L., Wright, B. A. (In Press). Non-sensory influences on auditory learning and plasticity. *Journal of the Association for Research in Otolaryngology*
88. Sitek, K. R., Calabrese, E., Johnson, G. A., Ghosh, S. S., **Chandrasekaran, B**. (In Press). Structural connectivity of human inferior colliculus subdivisions using in vivo and post-mortem diffusion MRI tractography. *Frontiers in Neuroscience.*
89. Llanos, F., Zhao, C. T., Kuhl, P. K., Chandrasekaran, B. (accepted). The emergence of idiosyncratic patterns in the frequency-following response during the first year of life. *JASA Express Letters*.

90. Teichert, T., Gnanateja, G. N., Sadagopan, S., Chandrasekaran, B. (accepted). A linear superposition model of envelope and frequency following responses may help identify generators based on latency. *Neurobiology of Language*.

91. de la Chapelle, A., Savard, M., Restani, R., Ghaemmaghami, P., Thillou, N., Zardoui, K., Chandrasekaran, B., Coffey, E. B. J. (accepted). Sleep affects higher-level categorization of speech sounds, but not frequency encoding. *Cortex*.

92. Zinszer, B. D., Yuan, Q., Zhang, Z., Chandrasekaran, B., & Guo, T. (accepted). Continuous speech tracking in bilinguals reflects adaptation to both language and noise. *Brain and Language*.

Book Chapters (peer-reviewed)

1. **Chandrasekaran, B.,** Gandour, J.T., & Krishnan, A. (2009). Neuroplasticity in the preattentive processing of linguistic pitch: Evidence from cross---language and cross---domain studies. *Festschrift in linguistics, applied linguistics, language and literature in honor of Prof. Udom Warotamasikkhadit* (pp. 68-86). Bangkok: Saha Thammik.
2. **Chandrasekaran, B.**, & Kraus, N. (2012). Biological factors contributing to reading ability: Subcortical auditory function. In Benasich, A. and Fitch, R. (Eds.), *Developmental dyslexia: Early precursors, neurobiological markers and biological substrates*. (pp. 83-98). Baltimore, MD: Brookes.
3. **Chandrasekaran, B.**, Xie, Z., & Reetzke, R. (2016). Chapter 6. Music training and neural processing of speech: a critical review of the literature In A. Agwuele & A. Lotto (Eds.), Essays in Speech Processes: Language Production and Perception. Sheffield: Equinox Publishing.
4. Reetzke, R., Xie, Z., & **Chandrasekaran, B.** (2017). Neurobiology of Literacy and Reading Disorders. The *Frequency-following Response: A Window into Human Communication*. Springer Handbook of Auditory Research. Fay R, Popper A, eds. Springer Science+Business Media, Berlin, Germany
5. **Chandrasekaran, B**., Tessmer, R., & Gnanateja, G. N. (in press). Subcortical processing of speech sounds. In Holt., L., Peelle, J., Fay, R.R., & Popper, A.N. (Eds.) Springer Handbook of Auditory Research. Springer, NY

Proceedings (peer-reviewed)

1. **Chandrasekaran, B.**, Verma, N. K. Effects of jaw movement and probe insertion depth on external ear resonance measurements. J Acoust Soc India. 2001; 29(1), 454-460.
2. Wong, F.C.K., **Chandrasekaran, B.**, Garibaldi, K., Wong, P.C.M. Acquisition of foreign phonetic contrasts mediated by white matter connectivity. Proceedings of the 17th International Congress of Phonetic Sciences. 2011 Aug; Hong Kong.
3. **Chandrasekaran, B.**, Wong, P. C. M. Neural processing of linguistic pitch contours: individual variability and experience-dependent plasticity. Proceedings of the 17th International Congress of Phonetic Sciences. 2011 Aug; Hong Kong.
4. Smiljanic, R., Sheft, S., **Chandrasekaran, B.**, Shafiro, V. Effect of speech clarity on perception of interrupted meaningful and anomalous sentences. Proceedings of Meetings on Acoustics. 2013; 19.
5. Smiljanic, R., **Chandrasekaran, B**. Processing speech of varying intelligibility. Proceedings of Meetings on Acoustics. 2013; 19: 060102.
6. Sheft, S., Smayda, K., Shafiro, V., Maddox, W. T., & **Chandrasekaran, B.** Effect of musical training on static and dynamic measures of spectral-pattern discrimination. Proceedings of Meetings on Acoustics. 2013; 19: 050025.
7. Liu, C., **Chandrasekaran, B.** Effects of phonological training on tone perception for English listeners. Proceedings of Meetings on Acoustics. 2013; 19: 060057.
8. Asteris A. Kyrillidis A. G. Dimakis H. Yi, **Chandrasekaran, B.** Stay on path: PCA along graph paths M. International Conference on Machine Learning (ICML), Lille, France, 2015.

9. Tessmer, R., & **Chandrasekaran, B.** (2016). Stability and plasticity in the neural representation of linguistic pitch patterns. Proc. Tonal Aspects of Languages. 2016; 1-5.
10. Sakthi, M., Tewfik, A., & **Chandrasekaran, B.** Native language and stimuli signal prediction from EEG. In ICASSP 2019-2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). 2019 May; 3902-3906. IEEE.
11. Roark, C. L. & **Chandrasekaran, B.** Auditory, visual, and speech category learning in the same individuals. Conference proceedings paper presented at Cognitive Science Society. 2020 July.
12. Roark, C. L. & **Chandrasekaran, B.** Individual Variability in Strategies and Learning Outcomes in Auditory Category Learning. Conference proceedings paper selected for Cognitive Science Society. 2021 July.

Invited Talks and Lectures

1. **Chandrasekaran, B.** (2006). *Mismatch negativity: clinical utility*, Presentation, Department of Speech, Language, and Hearing Sciences, Sri Ramachandra Medical College, Chennai
2. **Chandrasekaran, B.** (2006). *Experience-dependent plasticity in the processing of linguistically relevant pitch*, Presentation Department of Psychology, University of Lancaster, Lancaster
3. **Chandrasekaran, B.** (2008). *The auditory brainstem response to speech: Neural origins and plasticity*, Presentation, Language and Cognition Colloquium Series, Northwestern University, Evanston
4. **Chandrasekaran, B.** (2010). *Current Perspectives on the Neural Bases of Speech Perception*, Presentation, The Indian Speech Hearing Association Conference, Bengaluru
5. **Chandrasekaran, B.** (2010). *Individual differences and experience-dependent plasticity in the neural processing of linguistic pitch*, Plenary talk, Workshop on Prosody, Leiden
6. **Chandrasekaran, B.** (2011). *Neural processing of linguistic pitch contours: Individual variability and experience-dependent plasticity*, Plenary talk at Psycholinguistics of Tone Conference, Hong Kong
7. **Chandrasekaran, B.** (2011). *Auditory midbrain plasticity to linguistic pitch patterns*, Presentation, Nanyang Technological Institute, Singapore
8. **Chandrasekaran, B.** (2011). *Human auditory brainstem encoding of speech*. Presentation at the Cog-Neuro Consolider Seminar Series, Barcelona
9. **Chandrasekaran, B.** (2011). *Human auditory brainstem encoding of speech*. Presentation at the Center for Language Sciences Talk Series, Penn State University, State College
10. **Chandrasekaran, B.** (2012). *Human auditory midbrain plasticity to speech*, Presentation, Neurobiology Lecture Series, University of Texas at San Antonio
11. **Chandrasekaran, B.** (2012). *Individual variability and neural plasticity in speech sound learning*, Keynote address, inauguration of the PhD program in neurolinguistics, University of Lisbon, Portugal
12. **Chandrasekaran, B.** (2013). *Dissociable category learning systems in musicians*, Cognitive Science Seminar Series, University of Memphis, Memphis
13. **Chandrasekaran, B.** (2014). *Human auditory midbrain plasticity to speech*, Presentation, Neurobiology Lecture Series, University of Texas at San Antonio
14. **Chandrasekaran, B.** (2014). *Genetic influences on dual processing modes of auditory category learning*, Presentation, Chinese University of Hong Kong, Hong Kong
15. **Chandrasekaran, B.** (2014). *Tuning the brain: effects of music training on audition*, Presentation, Department of Speech and Hearing Science, Arizona State University
16. **Chandrasekaran, B.** (2014). *Corticocortical contributions to speech category learning*, Presentation, Stanford Cognitive & Systems Neuroscience Laboratory, Stanford University, Palo Alto
17. **Chandrasekaran, B.** (2015). *Enhanced procedural learning of speech sound categories in a genetic variant of FOXP2* Auditory Cognitive Neuroscience Society Conference, University of Arizona, Tucson
18. **Chandrasekaran, B.** (2015). *Corticocortical learning systems in audition*, Presentation, Neurobiology Lecture Series, University of Texas at San Antonio
19. **Chandrasekaran, B.** (2015). *Experience-dependent plasticity in the processing of speech signals*, Presentation, Mechanical Engineering Department, The University of Texas at Austin, Austin

20. **Chandrasekaran, B.** (2015). *Experience-dependent plasticity in speech perception*, Presentation, Clinically Applied Rehabilitation Engineering (CARE) initiative, The University of Texas at Austin, Austin
21. **Chandrasekaran, B.** (2015). *Language Learning as an Adult: Perspectives from Neuroscience*, Presentation, College of Liberal Arts Family Weekend, The University of Texas at Austin, Austin
22. **Chandrasekaran, B.** (2016). *Listening and learning in individuals with elevated depressive symptoms*, Presentation, Seton Grand Rounds in Psychiatry, Austin
23. **Chandrasekaran, B.** (2016). *IC what you are saying: midbrain decoding of speech sounds*, Presentation, Auditory Cognitive Neuroscience Society Conference, University of Arizona, Tucson
24. **Chandrasekaran, B.** (2016). *Dual-learning systems in speech perception*, Haskins Laboratories, New Haven
25. **Chandrasekaran, B.** (2016). *Plasticity in the human auditory midbrain: A machine learning approach*, University of Connecticut, Storrs
26. **Chandrasekaran, B.** (2016). *Midbrain plasticity to speech signals: Effect of Language Experience*, Plenary talk at the 5th International Symposium on Tonal Aspects of Language, Buffalo
27. **Chandrasekaran, B.** (2016). *Neurobiological constraints on speech learning: Individual differences and plasticity*, Presentation, Workshop on Cognition and Neuroscience, Nanyang Technological University, Singapore
28. **Chandrasekaran, B.** (2016). *Neurobiological constraints on speech learning: Individual differences and plasticity*, Presentation, technical session on Second Language Speech Learning and Education, Acoustical Society of America/Acoustical Society of Japan joint meeting, Honolulu
29. **Chandrasekaran, B.** (2017). *Stability and Plasticity in the neural representation of speech categories*, Presentation, Auditory Cognitive Neuroscience Society Conference, University of Florida, Gainesville
30. **Chandrasekaran, B.** (2017). *Methods in the measurement of the frequency-following response*, Presentation, Laboratoire Parole et Langage, Aix en Provence
31. **Chandrasekaran, B.** (2017). *Neural systems in auditory and speech categorization*, Presentation, Max PIanck Institute for Human Cognitive and Brain Sciences, Leipzig
32. **Chandrasekaran, B.** (2017). *Editorial workshop: Publishing in ASHA journals, Sri Ramachandra University, Chennai*
33. **Chandrasekaran, B.** (2017). *Editorial workshop: Publishing in ASHA journals, Dr. S. R. Chandrasekhar Institute of Speech and Hearing, Bengaluru*
34. **Chandrasekaran, B.** (2019). *Neurophysiology of Speech Perception*. CEU presented at the Pennsylvania Speech-Language Hearing Association Conference, Lancaster, PA
35. **Chandrasekaran, B.** (2019). *Cognitive-sensory influences on early auditory processing of behaviorally relevant signals*, Presentation, SONARS Auditory group, Pittsburgh PA
36. **Chandrasekaran, B.** (2019). *Neuroscience of Speech Perception*. (Presentation) 21st Annual Jack Matthews-Herbert Rubin Lecture, Pittsburgh PA
37. **Chandrasekaran, B.** (2019). *How can measuring the neural response to sound help plan treatment and outcome measures in the future*. (CEU Presentation) First Friday Audiology Seminar Series, Pittsburgh PA
38. **Chandrasekaran, B.** (2020). *Non-invasive electrophysiological response to speech: experience-dependent plasticity and clinical implications*. (CEU Presentation), Otolaryngology Grand Rounds, Pittsburgh PA.
39. **Chandrasekaran, B.** (2020). *Hidden Hearing Loss and Processing Speech-in-Noise: What Audiologists Need to Know and Practice Now*. (CEU Presentation), AAA 2020 + HearTECH Expo, New Orleans, LA. (Conference canceled).
40. **Chandrasekaran, B.** (2021). Neural Systems Underlying Sound-to-Rule and Sound-to-Reward Learning of Auditory Categories, Presentation, Association for Research in Otolaryngology 44th Annual Midwinter Meeting (Virtual).
41. **Chandrasekaran, B.** (2021). *Hidden Hearing Loss and Processing Speech-in-Noise: What Audiologists Need to Know and Practice Now*. (CEU Presentation), AAA 2021.

42. Chandrasekaran, B. (2022). Speech-in-Noise: Etiological Basis and Clinical Considerations. Talk presented at the American Auditory Society Meeting, Scottsdale, AZ

Conference: Organized Symposiums/Workshops

1. **Chandrasekaran, B.** (2012). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
2. **Chandrasekaran, B.** (2013). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
3. **Chandrasekaran, B.** & Abrams, D. (2013, February) *Short-term and long-term brainstem plasticity.* Young Investigator Symposium, Annual Meeting of the Association for Research in Otolaryngology, Baltimore
4. **Chandrasekaran, B.**, and Smiljanic R. (2013, July). *Variability in speech intelligibility: Behavioral and neural perspectives*. Meeting of the Acoustical Society of America, Montreal
5. **Chandrasekaran, B.** (2014). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
6. **Chandrasekaran, B.** (2015). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
7. **Chandrasekaran, B.** (2016). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
8. **Chandrasekaran, B.** (2016, October) *Bilingual Mind, Brain & Child Development symposium*. Meeting organized at The University of Texas at Austin. Role: Discussant
9. **Chandrasekaran, B.** (2016, October) *Second Language Acquisition Symposium: Advances in Behavioral and Neural Research*. Meeting organized by the SoundBrain Lab at The University of Texas at Austin. Role: Organizer
10. **Chandrasekaran, B.** (2017). *Research Blitz in Communication Sciences and Disorders*, The University of Texas at Austin, Texas. Role: Organizer
11. **Chandrasekaran, B.** (2017, February) *Multimodal neuroimaging with fNRIS and EEG*. Hands-on training organized by the SoundBrain Lab at The University of Texas at Austin. Role: Organizer
12. **Chandrasekaran, B.** (2017, February) *Introduction to fNIRS workshop*. Hands-on training *offered by NIRx* at The University of Texas at Austin. Role: Organizer
13. **Chandrasekaran, B., & Holt, L.** (2019, September) *Special session on auditory plasticity* at the 23rd International Congress on Acoustics, Aachen, Germany. Role: Co-Organizer

Conference: Posters and Podium Presentations

1. **Chandrasekaran, B.** & Huber, J. E. (2004, November). *Young adults' respiratory patterns and speech variability in noise*. Podium presentation at the American Speech-Language-Hearing Association Conference, Philadelphia.
2. **Chandrasekaran, B.,** Kemmerer, D., & Tranel, D. (2005, April). *A case of impaired verbalization but preserved gesticulation of motion events: Investigating the language-specific representation of space from a neuropsychological perspective.* Poster presented at the Cognitive Neuroscience Society Annual Conference, San Francisco.
3. **Chandrasekaran, B.,** Krishnan, A., Swaminathan, J., & Gandour, J. T. (2006, February). *Language-dependent preattentive pitch processing in young adults.* Podium presentation at the Annual Meeting of the Association for Research in Otolaryngology, Baltimore.
4. **Chandrasekaran, B.,** Krishnan, A., & Gandour, J. T. (2006, April). *Language experience modulates preattentive pitch processing: A cross-language study.* Poster presented at the 4th Conference on Mismatch Negativity (MMN) and its Clinical and Scientific Applications, Cambridge, U.K.
5. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2007, April). *Cross-language differences in preattentive processing of pitch dimensions as revealed by multidimensional scaling analysis of the*

mismatch negativity. Poster presented at the Cognitive Neuroscience Society Annual Meeting, New York.

6. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2007, June). *Neuroplasticity in the processing of pitch dimensions: A multidimensional scaling analysis of the mismatch negativity*. Poster presented at the Organization for Human Brain Mapping Conference, Chicago.
7. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2008, February). *Influence of musical and linguistic experience on early cortical processing of pitch contours.* Poster presented at the Annual Meeting of the Association for Research in Otolaryngology, Phoenix.
8. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2008, June). *Tuning in to tone: Experience-dependent plasticity in the early cortical processing of linguistic pitch contours.* Poster presented at the Neurosciences and Music - III Disorders and Plasticity Conference, Montreal.
9. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2008, February). *Influence of musical and linguistic experience on early cortical processing of pitch contours.* Podium presentation at the Annual Meeting of the Association for Research in Otolaryngology, Baltimore.
10. **Chandrasekaran, B.,** Gandour, J. T., & Krishnan, A. (2009, June). *Neural integration of lexical and indexical information in spoken language processing*. Poster presented at the Organization for Human Brain Mapping Conference, San Francisco.
11. **Chandrasekaran, B.,** Hornickel, J., Skoe, E., Nicol, T., & Kraus, N (2009, June). *Context-dependent encoding in the human auditory brainstem.* Poster presented at the Neurobiology of Language Conference, Chicago.
12. **Chandrasekaran, B.,** Garibaldi, K., Novis, S & Wong, P.C.M., (2010, July). *Cortical and Subcortical contributions to Complex Auditory Learning*. Poster presented at the Organization for Human Brain Mapping Conference, Barcelona.
13. Wong, F.C.K**., Chandrasekaran, B.,** Garibaldi, K., & Wong, P. C. M. (2011, August). *Acquisition of foreign phonetic contrasts mediated by white matter connectivity.* The 17th International Congress of Phonetic Sciences, Hong Kong.
14. **Chandrasekaran, B.,** Kraus, N., & Wong, P. C. M. (2011, November) *Human inferior colliculus response to pitch patterns predicts auditory learning success.* Neurobiology of Language Conference, Annapolis MD.
15. **Chandrasekaran, B.**, Skoe, E., Wong, P. C. M., & Kraus, N. (2011, November*) Human brainstem plasticity to linguistic pitch patterns: Distinct effects of auditory context and training.* Neurobiology of Language Conference, Annapolis MD.
16. **Chandrasekaran, B.,** Koslov, S., Luther, E. & Ress, D., (2012, April). *High-resolution imaging reveals tonotopic organization in human auditory midbrain.* Poster presented at the Cognitive Neuroscience Society Meeting, Chicago.
17. Beitz, J. & **Chandrasekaran, B.** (2012, April). "*Tone Category Learning in Children and Adults*." Poster presented at the Longhorn Research Bazaar, University of Texas at Austin, Austin, TX.
18. Gilbert, R., Van Engen, K., **Chandrasekaran, B.,** & Smiljanic, R. (2012, April). *Effects of speech clarity on recognition memory for spoken sentences in quiet and in noise*. Poster presented at the Graduate Research Showcase, UT.
19. Van Engen, K. & **Chandrasekaran, B** (2012, October). *Sentence recognition as a function of the number of talkers in competing multi-talker babble.* Poster presented at 164th Meeting of the Acoustical Society of America, Kansas City, MO.
20. Gilbert, R., Van Engen, K., Smiljanic, R., & **Chandrasekaran, B,** (2012, October). *Recognition memory in noise for speech of varying intelligibility.* Poster presented at 164th Meeting of the Acoustical Society of America, Kansas City, MO.
21. Yi, H., **Chandrasekaran, B.**, & Maddox, W. T. (2012, October). *Optimized speech sound category training bootstraps foreign word learning.* Poster presented at 164th Meeting of the Acoustical Society of America, Kansas City, MO.

22. **Chandrasekaran, B.,** Yi, H., & Maddox, W. T. (2012, October). *Delayed feedback disrupts optimal strategies during foreign speech sound learning.* Poster presented at the 164th Meeting of the Acoustical Society of America, Kansas City, MO.
23. Beitz, J., Van Engen, K., Smiljanic, R. & **Chandrasekaran, B.** (2012, October). *Effects of visual cue enhancement on speech intelligibility for clear and conversational speech in noise*. Poster presented at the Acoustical Society of America Biannual Conference: Speech Perception Poster Session, Kansas City, MO.
24. Yi, H., Smiljanic, R., & **Chandrasekaran, B.** (2013, January). *Natural variations in speech intelligibility: An fMRI study.* Poster presented at the Institute for Neuroscience 17th Annual Symposium, Austin, TX.
25. Smayda, K., **Chandrasekaran, B.**, Yi, H.G., & Maddox, W.T. (2013, February). *Reflexive- and reflective-system learning of auditory categories across the lifespan.* Poster presented at the Dallas Aging and Cognition Conference, Dallas, TX.
26. **Chandrasekaran, B.** (2013, January). *Optimizing auditory category learning: Incorporating a dual process model of visual category learning in the auditory domain*. Podium presentation at the Auditory Cognitive Neuroscience Society Conference, Tucson.
27. **Chandrasekaran, B.** (2013, February). *Human brainstem plasticity: Effects of auditory context and training.* Podium presentation at the Annual Meeting of the Association for Research in Otolaryngology, Baltimore.
28. Yi, H., Smiljanic, R., & **Chandrasekaran, B.** (2013, June). *Natural variations in speech intelligibility: An fMRI study.* 19th Annual Meeting of the Organization for Human Brain Mapping: Seattle, WA.
29. Smayda, K., **Chandrasekaran, B.**, Yi, H., & Maddox, W.T. (2013, October). *Dual Systems of artificial and natural tone categorization across the lifespan*. Poster presented at the Aging and Speech Communication Conference, Bloomington, IN.
30. Gilbert, R., Victor, N., **Chandrasekaran, B.**, and Smiljanic, R. (2013, November). *Intelligibility of speaking styles elicited by various instructions.* Poster session presented at the 166th meeting of the Acoustical Society of America, San Francisco, CA.
31. Tessmer, R., Tsao, N., Reetzke, R., **Chandrasekaran, B.**, & Sheng, L. (2014, April). *Audiovisual integration and speech perception in bilingual speakers.* Poster presented at the Undergraduate Research Forum, Austin, TX.
32. Xie, Z., Maddox, W. T., Knopik, V. S., McGeary, J. E., & **Chandrasekaran, B.** (2014, October). *Individual differences in speech perception in noise: A neurocognitive genetic study.* Poster presented at the 168th Meeting of the Acoustical Society of America, Indianapolis, IN.
33. **Chandrasekaran, B.,** Yi, H., & Maddox, W. T. (2014, August). *Corticostriatal contributions to feedback-dependent speech category learning.* Poster presented at the Society for Neurobiology of Language Conference, Amsterdam, Netherlands.
34. Yi, H., Maddox W. T., Mumford, J. A., & **Chandrasekaran, B.** (2014, November). *The role of corticostriatal learning systems in speech categorization.* Poster session presented at the meeting of the Psychonomic Society, Long Beach, CA.
35. Yi, H., Maddox, W. T., Knopik, V. S., McGeary, J. E., & **Chandrasekaran, B.** (2014, October). *Genetic variation in catechol-O-methyl transferase (COMT) activity impacts speech category learning*. Poster session presented at the meeting of the Acoustical Society of America, Indianapolis, IL.
36. Smayda, K., Rao, G., **Chandrasekaran, B.,** & Maddox, W. T. (2014, November). *Explicit attention to pitch direction enhances Mandarin tone learning.* Poster presented at the Psychonomics Annual Meeting, Long Beach, CA.
37. Smith, L., Glick, A., Reetzke, R., **Chandrasekaran, B.**, & Maddox, W. T. (April 2015). Auditory category learning across learning across development. Poster presented at the Undergraduate Research Forum and the Longhorn Research Bazaar.
38. Tsao, N., Tessmer, R., Reetzke, R., **Chandrasekaran, B.**, & Maddox, W. T. (April 2015). The development of auditory category learning: A computational modeling approach. Poster presented at the Longhorn Research Bazaar, Austin, TX.

39. Reetzke, R., Maddox, W. T., & **Chandrasekaran, B.** (May 2015). The role of age and executive function in auditory category learning. Poster presented at the 169th Meeting of the Acoustical Society of America, Pittsburgh, PA.
40. Xie, Z., Maddox, W. T., & **Chandrasekaran, B.** (May 2015). Elevated depressive symptoms associate with an emotion-general deficit in speech perception at a cocktail party. Poster presented at the 169th Meeting of the Acoustical Society of America, Pittsburgh, PA.
41. Xie, Z., & **Chandrasekaran, B.** (May 2015). Intra-subject variability in frequency-following responses and cortical event-related responses to Mandarin tones. Talk presented at the 169th Meeting of the Acoustical Society of America, Pittsburgh, PA.
42. Koslov, S., Blanco, N. J., Maddox, W. T., & **Chandrasekaran, B.** (July 2015). Using real-time computational modeling to individually optimize tone category learning. Poster presented at the Annual Meeting of the Cognitive Science Society, Pasadena, CA.
43. Asteris, M., Kyrillidis, A., Dimakis, A., Yi, H., & **Chandrasekaran, B.** (July 2015). Stay on path: PCA along graph paths. Podium presentation at the 32nd International Conference on Machine Learning, Lille, France.
44. Yi, H., Xie, Z., Reetzke, R., & **Chandrasekaran, B.** (October 2015). Corticollicular influences on subcortical encoding of speech sounds. Poster presented at the 7th Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.
45. Yi, H. Koslov, S. R., Maddox, W. T., & **Chandrasekaran, B.** (October 2015). Corticostriatal white matter connectivity predicts speech category learning success. Poster presented at the 7th Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.
46. Yi, H. Koslov, S. R., Maddox, W. T., & **Chandrasekaran, B.** (February 2016). Mapping the auditory corticostriatal pathway in humans using diffusion tensor imaging. Poster presented at the Association for Research in Otolaryngology 2016 Midwinter Meeting, San Diego, CA.
47. **Chandrasekaran, B.**, Xie, Z., Yi, H., & Reetzke, R. (February 2016). Midbrain-based decoding of vowel and speaker information in humans. Poster presented at the Association for Research in Otolaryngology 2016 Midwinter Meeting, San Diego, CA.
48. Reetzke, R., Xie, Z., Yi, H., Maddox, W. T., Dimakis, A. G., & **Chandrasekaran, B.** (February 2016). Dynamics of short-term experience-dependent plasticity in human subcortical auditory function. Podium presentation at the Association for Research in Otolaryngology 2016 Midwinter Meeting, San Diego, CA.
49. Xie, Z., Reetzke, R., Yi, H., Maddox, W. T., Dimakis, A. G., & **Chandrasekaran, B.** (February 2016). Subcortical decoding of stimulus, group experience, and individuality. Poster presented at the Association for Research in Otolaryngology 2016 Midwinter Meeting, San Diego, CA.
50. Han, Y. C., Koslov, S., Maddox, W. T., & **Chandrasekaran, B.** (April 2016). Motivation and Speech Category Learning: A Dual-Learning System Approach. Poster presented at the Cognitive Neuroscience Society Annual Meeting, New York, NY.
51. Yi, H. G., Tessmer, R., & **Chandrasekaran, B.** (May 2016). Optimizing Lexical Learning through Manipulation of Phonological Training Environment. Poster presented at the 171st Meeting of the Acoustical Society of America, Salt Lake City, UT.
52. Tessmer, R., Atagi, E., Bent, T., & **Chandrasekaran, B.** (May 2016). Categorization training for non-native accented word recognition. Poster presented at the 171st Meeting of the Acoustical Society of America, Salt Lake City, UT.
53. **Chandrasekaran, B.**, Reetzke, R., Yi, H. G., Roeder, J., Xie, Z., & Maddox, W. T. (May 2016). Experience-dependent plasticity in the neural weighting of pitch dimensions: A machine learning approach. Poster presented at the 171st Meeting of the Acoustical Society of America, Salt Lake City, UT.
54. Smayda, K., Worthy, D. A., & **Chandrasekaran, B.** (July 2016). Better late than never (or early): Late music lessons confer advantages in decision-making. Presented at the 14th International Conference for Music Perception and Cognition, San Francisco, CA.

55. Smayda, K. E., Feng, G., Cooper, J., & **Chandrasekaran, B.** (January 2017). Music Training for the Enhancement of Speech-In-Noise Processing in Older Adults. Poster presented at the Dallas Aging and Cognition Conference, Dallas, TX.
56. Xie, Z., & **Chandrasekaran, B.** (February 2017). Taking attention away from the auditory modality: subcortical representation of speech signals during inattentional deafness. Poster presented at the Association for Research in Otolaryngology 2017 Midwinter Meeting, Baltimore, MD.
57. Reetzke, R., Xie, Z., & **Chandrasekaran, B.** (February 2017). Effects of Language Experience and Long-term Training on the Neural Weighting and Categorical Perception of Pitch Dimensions. Podium presentation at the Association for Research in Otolaryngology 2017 Midwinter Meeting, Baltimore, MD.
58. Smayda, K., & **Chandrasekaran, B.** (May 2017). Music Training for the Enhancement of Speech-In-Noise Processing in Older Adults. Presented at the annual University of Texas at Austin Leadership Luncheon, Austin, TX.
59. Llanos, F., Xie, Z., & **Chandrasekaran, B.** (June 2017). Decoding linguistically-relevant pitch patterns from frequency-following responses using hidden Markov models. Poster presented at the 173rd Meeting of the Acoustical Society of America, Boston, MA.
60. Feng, G., Yi, H. G., & **Chandrasekaran, B.** (September 2017). Corticostriatal circuitry associated with speech representational plasticity in the superior temporal gyrus. Poster presented at the 6th International Conference on Auditory Cortex, Banff, Alberta, Canada.
61. Yi, H. G., Feng, G., Leonard, M. K., Wang, S., Wong, P. C. M., & **Chandrasekaran, B.** (September 2017). Corticostriatal learning systems in auditory categorization. Poster presented at the 6th International Conference on Auditory Cortex, Banff, Alberta, Canada.
62. Reetzke, R., Xie, Z., & **Chandrasekaran, B.** (September 2017). Effects of selective attention and language experience on cortical entrainment to continuous speech. Poster presented at the 6th International Conference on Auditory Cortex, Banff, Alberta, Canada.
63. Reetzke, R., & **Chandrasekaran, B.** (November 2017). Music Training Enhances Speech-in-Speech Perception in Adolescents. Poster presented at the 80th annual ASHA Convention, Los Angeles, CA.
64. Llanos, F. & **Chandrasekaran, B.** (February 2018). Machine learning decoding of listener identity from frequency following responses. Poster presented at the 41st Annual Midwinter Meeting of the Association for Research in Otolaryngology, San Diego, CA.
65. Llanos, F., Reetzke, R., Sakthi, M., & **Chandrasekaran, B.** (February 2018). Neurofeedback mediated modulation of the frequency following response. Poster presented at the 41st Annual Midwinter Meeting of the Association for Research in Otolaryngology, San Diego, CA.
66. McHaney, J. R., Zinszer, B. D., Smayda, K. E., **Chandrasekaran, B**. (March 2018). Effect of listening environment on cortical entrainment to continuous speech in older adults. Poster presented at the Cognitive Neuroscience Society 25th Annual Meeting, Boston, MA.
67. Xie, Z., & **Chandrasekaran, B.** (June 2018). Dividing attention to the visual modality impairs the processing of continuous speech. Poster to be presented at the 24th Annual Meeting of the Organization for Human Brain Mapping, Singapore.
68. Zinszer, B. D., Haye, T. A, Athey, A., & **Chandrasekaran, B**. (June 2018). Quality of frequency-following response to speech sounds linked with left prefrontal hemodynamic activity using fNIRS+EEG. Talk to be presented at the 2nd International Neuroergonomics Conference, Philadelphia, PA.
69. Zinszer, B. D., Haye, T. A, Athey, A., & **Chandrasekaran, B.** (August 2018). Lexical tone classification in frontal and posterior regions using fNIRS. Poster presented at the 10th Annual Meeting of the Society for the Neurobiology of Language, Québec City, Québec, Canada.
70. Yi, H. G., Leonard, M. K., **Chandrasekaran, B.,** Nourski, K. V., Howard III, M. A., & Chang, E. F. (August 2018). Learning novel speech sounds reorganizes acoustic representations in the human superior temporal gyrus. Slide presentation at the 10th Annual Meeting of the Society for the Neurobiology of Language, Québec City, Québec, Canada.

71. Llanos, F., McHaney, J. R., Leonard, M. K., Schuerman, W. L., Yi, H. G., & **Chandrasekaran, B.** (August 2018). Transcutaneous vagus nerve stimulation enhances non-native speech categorization. Poster presented at the 10th Annual Meeting of the Society for the Neurobiology of Language, Québec City, Québec, Canada.
72. Dial, H. R., Zinszer, B. D., **Chandrasekaran, B.,** & Henry, M. L. (August 2018). Cortical entrainment of continuous speech envelope is preserved in non-fluent PPA. Poster presented at the 10th Annual Meeting of the Society for the Neurobiology of Language, Québec City, Québec, Canada.
73. Dial, H. R., Zinszer, B. D., **Chandrasekaran, B.,** & Henry, M. L. (October 2018). Neural encoding of phonetic features relates to phonological processing in PPA. Poster presented at the 56th Annual Meeting of the Academy of Aphasia, Montreal, Canada.
74. Tessmer, R., Xie, Z., & **Chandrasekaran, B.** (November 2018). Pupil dilation as an index of non-native speech category learning. Poster presented at the 59th meeting of the Psychonomic Society, New Orleans, LA.
75. Lam, B. P. W., & **Chandrasekaran, B.** (November 2018). Elevated susceptibility to auditory illusions when performance pressure is high. Poster presented at the 81st Annual ASHA Convention, Boston, MA.
76. McHaney, J. R., Zinszer, B. D., Smayda, K. E., Xie, Z., & **Chandrasekaran, B**. (December 2018). Cortical entrainment to the speech envelope relates to speech comprehension in older adults under adverse listening conditions. Poster presented at the 12th Annual Aging Institute Research Day, Pittsburgh, PA.
77. Llanos, F., Reetzke, R., & **Chandrasekaran, B.** (May 2019). Proactive neural processing of native and non-native speech. Podium presentation to be presented at the 177th Meeting of the Acoustical Society of America, Louisville, KY.
78. Xie, Z., & **Chandrasekaran, B.** (January 2020). Taking Attention Away from the Auditory Modality: Behavioral and Electrophysiological Effects on Continuous Speech Processing. Podium presentation at the 43rd Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Jose, California.
79. Gnanateja, G.N., & **Chandrasekaran, B.** (January 2020). Context-Dependent Auditory Processing in Individuals with Tinnitus. Poster presentation at the 43rd Annual MidWinter Meeting of the Association for Research in Otolarynogology, San Jose, California.
80. Zinszer, B. D., Yuan, Q., Zhang, Z., **Chandrasekaran, B**. & Guo**,** T., (April 2020). Acoustic entrainment of speech supports comprehension under moderate noise but degrades under more severe adversity. Poster presentation at the 2020 Cognitive Neuroscience Society Annual meeting, Boston, MA.
81. Rupp, K., Llanos, F., Abel, T., & **Chandrasekaran, B.** (April 2020). Heschl's gyrus encoding of abstract context-invariant speech cues in natural speech perception. Poster presentation at the 2020 Cognitive Neuroscience Society Annual meeting, Boston, MA.
82. Hampton Wray, A., Lescht, E., Devaraju, D. S., McKenzie, M., Gnanateja, G. N., & **Chandrasekaran, B.** (November 2020). Neurophysiological Indices of Selective Auditory Attention in Children who Stutter. Poster accepted to 83rd Annual ASHA Convention, San Diego, CA. (Convention canceled)
83. Gnanateja, G. N., Rupp, K., Llanos, F., Remick, M., Teichert, T., Sadagopan, S., Abel, T., & **Chandrasekaran, B.** (October, 2020). Frequency-Following Response Generation and Modulation : Response Properties of Cortical FFRs to Speech Signals. In Advances and Perspective in Auditory Neuroscience (APAN), Virtual Meeting, October 22-23rd 2020.
84. Zhao, T., Llanos, F., Kuhl, P.K., & **Chandrasekaran, B.** (2020). Neural pitch tracking of nonnative lexical tones in 7 and 11-month-old infants. Poster to be presented at the 179th Meeting of The Acoustical Society of America, Virtual. December 7-11.
85. Dial, H., Gnanateja, N., Tessmer, R., **Chandrasekaran, B**., & Henry, M. (2020). Cortical tracking of the speech envelope in logopenic variant primary progressive aphasia. 58th Annual Academy of Aphasia Meeting. Virtual conference.

86. Dial, H., Gnanateja, N., Tessmer, R., **Chandrasekaran, B.,** & Henry, M. (2020). Cortical tracking of the speech envelope in semantic and logopenic variant primary progressive aphasia. Clinical Aphasiology Conference, Kohala Coast, HI. (Conference canceled).
87. Pettet, M., Llanos, F., Kuhl, P.K., **Chandrasekaran, B**., & Zhao, T., (2020). Identication of listener identity from frequency following responses in 7 and 11-month-old infants. Poster to be presented a The 179th Meeting of the Acoustical Society of America, Virtual. December 7-11.
88. Llanos, F., German, J. S., Gnanateja, G. N., & **Chandrasekaran, B**. (2020) Dynamic encoding of English pitch accents in EEG responses to continuous speech. Poster presented at The Society for the Neurobiology of Language Annual Meeting, Virtual. October 21-24.
89. Teichert, T., Sadagopan, S., Abel, T., Gnanateja, G. N., & **Chandrasekaran, B**. (2020). Frequency-following response generation and modulation: a deconvolution method to estimate FFR-generating linear kernels. In Advances and Perspective in Auditory Neuroscience (APAN), Virtual Meeting, October 22-23rd 2020.
90. **Chandrasekaran, B**., Gnanateja, G. N., Rupp, K., Llanos, F., Remick, M., Teichert, T., Sadagopan, S., & Abel, T., (2020). Frequency-Following Response Generation and Modulation: Representational Similarity Analysis for Cross-Species and Cross-level Characterization. In Advances and Perspective in Auditory Neuroscience (APAN), Virtual Meeting, October 22-23rd 2020.
91. Sadagopan, S., Kar, M., Pernia, M., Gnanateja, G. N., **Chandrasekaran, B.**, Teichert, T., & Abel, T. (2020). Frequency-following response generation and modulation: FFR modulation by arousal and stimulus context. In Advances and Perspective in Auditory Neuroscience (APAN), Virtual Meeting, October 22-23rd 2020.
92. Devaraju, D. S., **Chandrasekaran, B.,** Kemp, A., Eddins, E., Shrivastav, R., & Hampton Wray, A. (November 2020). Listening effort modulates neural tracking of acoustic cues in speech. Poster accepted to 83rd Annual ASHA Convention, San Diego, CA. (Convention canceled)
93. Roark, C. L., Reetzke, R., Llanos, F., McHaney, J. R., & **Chandrasekaran, B.** (December 2020). Learning Mandarin tone categories with natural speech and a non-speech homologue. Poster presentation at the 179th Meeting of the Acoustical Society of America. (Conference canceled)
94. Roark, C. L., Paulon, G., Sarkar, S., & **Chandrasekaran, B**. (2021). Decision processes during rule-based and information-integration category learning in the same individuals. Talk presented at the Annual Meeting for the Psychonomic Society, Virtual, November 4–7, 2021.
95. Sitek, K.R., **Chandrasekaran, B**. (2021). Structural connectivity of human inferior colliculus subdivisions using in vivo and post mortem diffusion MRI tractography. Slide Slam presented at the Annual Meeting of the Society for the Neurobiology of Language, Virtual, October 5–8, 2021.
96. Gnanateja, G. N., Zink, M. E., Kar, M., Pernia, M., Sadagopan, S., and **Chandrasekaran, B**. (2022). Arousal States Modulate Frequency Following Responses Across Humans and Guinea Pigs. In 45th Association for Research in Otolaryngology (ARO) Mid-Winter meeting, Virtual Meeting, February 5-9th 2022.
97. Gnanateja, G. N., Xie, Z., and **Chandrasekaran, B**. (2022). Attention Effects on Neural Encoding of Temporal Envelope and Periodicity in Continuous Speech. In 45th Association for Research in Otolaryngology (ARO) Mid-Winter meeting, Virtual Meeting, February 5-9th 2022.
98. Gnanateja, G. N., Rupp, K., Llanos, F., Abel, T.J., and **Chandrasekaran, B**. (2022). Cortical Encoding of Discrete Prosodic Features in Continuous Speech. In 45th Association for Research in Otolaryngology (ARO) Mid-Winter meeting, Virtual Meeting, February 5-9th 2022.
99. Gnanateja, G. N., Quigley, T., Mehraei, G., Larsen, E., Whitton, J., **Chandrasekaran, B**., Parthasarathy, B. (2022). Middle Ear Muscle Reflexes Are Potential Biomarkers of Peripheral Neural Dysfunction in Individuals With Chronic Tinnitus. In 45th Association for Research in Otolaryngology (ARO) Mid-Winter meeting, Virtual Meeting, February 5-9th 2022.
100. Dial, H., Gnanateja, G. N., Pugalenthi, L., Tessmer, R., Henry, M., **Chandrasekaran, B.**, Li, J.J. (2022). Cortical Tracking of Semantic Dissimilarity for Features Derived Using Static and

Contextualized Embeddings in Primary Progressive Aphasia. In 45th Association for Research in Otolaryngology (ARO) Mid-Winter meeting, Virtual Meeting, February 5-9th 2022.

Media Coverage

1. **Chandrasekaran, B.** (2002). Detection of Autism delayed in India. *ADVANCE for Speech-Language Pathologists and Audiologists, 11,* 18
2. **Chandrasekaran, B.** (2005). The role of the respiratory system in loudness changes to speech. *Asian Indian Caucus Newsletter.*
3. The Post and Courier. (2009). Dyslexic children face difficulty focusing [Press release]. Retrieved from http://www.postandcourier.com/article/20091113/ARCHIVES/311139992
4. The Telegraph. (2009). Dyslexics find it hard to filter out background noises [Press release]. Retrieved from http://www.telegraph.co.uk/education/educationnews/6544673/Dyslexics-find-it-hard-to-filter-out-background-noises.html
5. WebMD. (2009). Study unravels mystery of dyslexia [Press release]. Retrieved from http://www.webmd.com/children/news/20091111/study-unravels-mystery-of-dyslexia
6. Northwestern University. (2009). New brain findings on dyslexic children [Press release]. Retrieved from http://www.northwestern.edu/newscenter/stories/2009/11/dyslexia.html
7. BBC News. (2009). Noise 'worse for dyslexic pupils' [Press release]. Retrieved from http://news.bbc.co.uk/2/hi/health/8355262.stm
8. U.S. News & World Report. (2009). Dyslexia may make it tough to tune out school noise [Press release]. Retrieved from http://health.usnews.com/health-news/managing-your-healthcare/policy/articles/2009/11/11/dyslexia-may-make-it-tough-to-tune-out-school-noise
9. The Globe and Mail. (2009). SickKids program adds lawyers to family support teams [Press release]. Retrieved from http://v1.theglobeandmail.com/servlet/story/GAM.20091113.LDOSES13ART1629/TPStory/TPComment
10. Thaindian News. (2009). How noise affects nervous system's ability to transcribe sounds key to reading skills [Press release]. Retrieved from http://www.thaindian.com/newsportal/health/how-noise-affects-nervous-systems-ability-to-transcribe-sounds-key-to-reading-skills_100217780.html
11. EurekAlert! (2009). New brain findings on dyslexic children [Press release]. Retrieved from http://www.eurekalert.org/pub_releases/2009-11/nu-nbf110309.php
12. Neuroscience News. (2010). Neuroscience of music: How music enhances learning through neuroplasticity [Press release]. Retrieved from http://neurosciencenews.com/neuroscience-music-enchances-learning-neuroplasticity/
13. Science Daily. (2009). New brain findings on dyslexic children: Good readers learn from repeating auditory signals, poor readers do not [Press release]. Retrieved from http://www.sciencedaily.com/releases/2009/11/091111123600.htm
14. Scientific American. (2010). Hearing the music, honing the mind [Press release]. Retrieved from http://www.scientificamerican.com/article/hearing-the-music-honing/
15. Nature. (2010). Why music is good for you [Press release]. Retrieved from http://www.nature.com/news/2010/100720/full/news.2010.362.html
16. Austin Family Magazine. (2010). More than melody, benefits of a musical education [Press release]. Retrieved from http://www.austinfamily.com/more-than-melody-benefits-of-a-musical-education/
17. The Huffington Post. (2010). How learning music can enhance kids' brain development [Press release]. Retrieved from http://www.huffingtonpost.com/christine-carter-phd/music-for-the-people_b_721262.html
18. Psychology Today. (2010). Music for the people [Press release]. Retrieved from http://www.psychologytoday.com/blog/raising-happiness/201009/music-the-people
19. The Telegraph. (2010). Learn music, get smart [Press release]. Retrieved from http://www.telegraphindia.com/1100726/jsp/knowhow/story_12724464.jsp
20. The World & UT. (2013). Scholar researches connection between how we think and what we hear [Feature]. Retrieved from https://world.utexas.edu/features/bharath

21. Moody College of Communication. (2014). Training the brain [Feature]. Retrieved from http://moody.utexas.edu/features/training-brain
22. Technology.org (2015). Genetic Variation Essential in Language Learning during Adulthood [Press release]. Retrieved from http://www.technology.org/2015/06/08/genetic-variation-essential-in-language-learning-during-adulthood/
23. UT News. (2015). Foreign language learning in adults associated with genetic variation [Press release]. Retrieved from http://news.utexas.edu/2015/06/04/genetic-variation-associated-with-learning-a-foreign-speech
24. The Telegraph (2015). Can genes predict foreign language learning skills? [Press release]. Retrieved from http://www.telegraph.co.uk/education/educationopinion/11695356/Can-genes-predict-foreign-language-learning-skills.html
25. KMFA Stories. (2015). Music and the Aging Brain: New Research at UT-Austin Tests Cognitive Benefits of Music in Older Adults. [Press release]. Retrieved from http://www.kmfa.org/pages/746-music-and-the-aging-brain-new-research-at-ut-austin-tests-cognitive-benefits-of-music-in-older-adults
26. KMFA. (2017). The Benefits of Learning to Play Music, Even As We Get Older. [radio interview]. Retrieved from http://www.kmfa.org/episodes/2342-the-benefits-of-learning-to-play-music-even-as-we-get-older
27. The Daily Texan. (2017). Later musical training linked to improved decision-making skills [Press release]. Retrieved from http://www.dailytexanonline.com/2017/09/29/later-musical-training-linked-to-improved-decision-making-skills
28. CNet. (2018). Yanny or Laurel: Science doesn't quite know why you hear one or the other. [press release]. Retrieved from https://www.cnet.com/news/yanny-laurel-audio-hearing-science-behind-why/
29. ABC News. (2018). 'Yanny' versus 'laurel': An expert weighs in on the debate. [press release]. Retrieved from https://abcnews.go.com/US/yanny-versus-laurel-expert-weighs-debate/story?id=55189477
30. The Verge. (2018). Yanny or Laurel? The science behind the audio version of The Dress. [press release]. Retrieved from https://www.theverge.com/2018/5/15/17358136/yanny-laurel-the-dress-audio-illusion-frequency-sound-perception
31. KVUE News. (2018). UT researchers test Yanny vs. Laurel in sound lab. [press release]. Retrieved from https://www.kvue.com/article/news/local/ut-researchers-test-yanny-vs-laurel-in-sound-lab/269-552793306
32. The Washington Post. (2018). Trending: Yanny or Laurel? Internet argues over mysterious audio clip. [press release]. Retrieved from https://www.washingtonpost.com/express/wp/2018/05/15/trending-yanny-or-laurel-internet-argues-over-mysterious-audio-clip/?noredirect=on&utm_term=.27d048c7e4d3
33. USA Today. (2018). Laurel or Yanny? Experts tell us why 'The Dress' for ears is driving us crazy. [press release]. Retrieved from https://www.usatoday.com/story/tech/talkingtech/2018/05/16/yanny-laurel-audio-experts-blue-black-dress-explain/614622002/
34. FACETS. (2019). Team-Based Science at its best. [press release]. Retrieved from https://issuu.com/pittshrs/docs/facets_spring_19_pdf/28
35. Pittsburgh Post Gazette. (2020). Pantone wants you to see, taste and hear Classic Blue. [press release]. Retrieved from https://www.post-gazette.com/life/fashion/2020/01/13/Pantone-Classic-Blue-color-of-the-year-2020-multi-sensory-sound/stories/202001130003
36. Science Daily. (2020). Non-invasive nerve stimulation boosts learning of foreign language sounds. [press release]. Retrieved from Non-invasive nerve stimulation boosts learning of foreign language sounds -- ScienceDaily
37. Psychology Today. (2020). Can Vagus Nerve Stimulation Improve How We Learn? [press release]. Retrieved from Can Vagus Nerve Stimulation Improve How We Learn? | Psychology Today
38. Inverse (2020). Scientists discover brain hack that improves language abilities by 13% Scientists discover brain hack for language learning (inverse.com)

Podcasts

1. **Chandrasekaran, B.** (Speaker). (2012, April 19). *Neuroscientists talk shop* [Audio podcast]. Retrieved from http://snrp.utsa.edu/Podcast/Podcast.html
2. Patel, A. (Speaker). **Chandrasekaran, B.** (Speaker). (2013, September 19). *Neuroscientists talk shop* [Audio podcast]. Retrieved from http://snrp.utsa.edu/Podcast/Podcast.html

PROFESSIONAL ACTIVITIES

TEACHING:

Courses

Neuroscience of Communication (Graduate), Introduction to the neuroscience of communication (Undergraduate), Language and the Brain (Undergraduate); Fundamentals of Speech Science (Undergraduate); Neuroscience of Speech Perception (Ph.D. seminar); Research Methods in Communication Sciences and Disorders (graduate); Speech perception: theory and clinical aspects (graduate); Individual differences in speech, language, and hearing (Ph.D. seminar); Animal Physiology (undergraduate). PhD pro-seminar (Ph.D. seminar); Grant Writing and Professional Development (Ph.D. Seminar)

Course Sections

Principles of Cognitive Neuroscience (Auditory and speech perception); Principles of Neuroscience II (Auditory brainstem); Topics in Second Language Acquisition (Individual differences in second language acquisition, neuroscience of second language acquisition); Fundamentals of cognition (Fundamentals of Language); Neurolinguistics (Cognitive neuroscience methods); Introduction to cognitive science (Speech perception); Advanced phonetics (Neural correlates of intelligible speech); Auditory evoked potentials (Auditory late cortical potentials); Language and the brain (Gesture and speech production); Anatomy and Physiology for speech and hearing (Inner ear anatomy and physiology); Neural systems (Auditory physiology).

Postdoctoral Fellows/Research Associates: *Supervisor*

Name	***Year***	***Status***
Kristin Van-Engen	2010-12	Postdoctoral Fellow. Currently Assistant Professor, Washington University at St. Louis.
Gangyi Feng	2016-17	Postdoctoral Fellow. Currently Research Assistant Professor, Chinese University of Hong Kong.
Benjamin Zinszer	2017-18	Research associate. Currently Visiting Assistant Professor, Swathmore College.
Fernando Llanos	2016-20	Currently Assistant Professor, University of Texas at Austin.
Heather Dial	2018-	Postdoctoral Fellow (NRSA F32 recipient, Role: Co-sponsor). Will be transitioning to faculty position (Univ of Houston) in 2021
Nike Gnanateja	2019-	Postdoctoral Fellow
Casey Roark	2019-	Postdoctoral Fellow (NRSA F32 recipient, Role: Co-sponsor)
Kevin Sitek	2020-	Postdoctoral Fellow

Ph.D. Dissertation Committee: *Chair*

Name	***Year***	***Status/Noteworthy awards/fellowships***
Han-Gyol Yi	2017	Currently postdoctoral fellow (PIs Edward Chang, Matthew Leonard, UCSF). Recipient of the Harrington fellowship, UT Austin's most prestigious graduate fellowship
Rachel Reetzke	2018	Currently Assistant Professor (Johns Hopkins University)
Zilong Xie	2018	Currently Assistant Professor (University of Kansas Medical Center)
Kirsten Smayda	2018	Currently a data scientist at Pear Therapeutics, Inc. Recipient of NIH F31 fellowship, Helmreich Endowed Presidential Fellowship.
Pak Wing Lam	2018	Currently Assistant Professor, University of North Texas. Awarded Doctoral Scholarship from Council of Academic Programs in Communication Sciences and Disorders, and the Donna Russell Fox Scholarship from the Texas Speech-Language Hearing Association
Jessica Younger	2018	Co-supervised with James Booth, Ph.D. Currently postdoctoral Scholar, Neurology UCSF Weill Institute for Neurosciences. Awarded continuing fellowship at UT Austin. Recipient of NSF student award in STEM education
Christina Dastolfo-Hromack	2019-	Co-supervised with Susan Shaiman, Ph.D. In progress. Awarded NRSA F31 proposal.
Jacie McHaney	2019-	In progress. Awarded a two-year fellowship via NIH Institutional T32 training grant on Auditory and Vestibular Neuroscience. Awarded diversity-focused NRSA F31.

Ph.D. Dissertation Committee: *Member*

Name	***Year***	***Topic/Noteworthy awards/fellowships***
Kristin Stewart	2014	Aural perception in uni and multi-sensory advertising (UT Austin)
Marissa Gorlick	2014	The effects of emotion on dissociable learning systems across the lifespan (UT Austin)
Rachel Gilbert	2014	Environment- and listener-oriented speaking style adaptations across the lifespan (UT Austin)
Jessica Cooper	2016	Attenuating Reflexive And Reflective Decision Making Deficits Through Targeted Training (UT Austin)
Cindy Blanco	2016	Cross-language speech perception in context: Advantages for recent language-learners and variation across language-specific acoustic cues (UT Austin)

Lauren Kreeger	2018	Neurochemical Identification of functional circuits in the inferior colliculus (UT Austin)
Justin Dainer-Best	2018	Identifying and Modifying Negative Self-Referent Cognition in Individuals with Depressive Symptoms (UT Austin)
Mengchao Zhang	2020	The effect of prolonged non-traumatic noise exposure on unvoiced speech recognition (Pitt)
Stephanie Grasso	2020	Recipient of NIH F31 fellowship (UT Austin)
Yina Quique	2020	Entrainment mechanisms and individual predictors for scripted-sentence learning in aphasia (Pitt)
Brett Welch	In progress	TBA (Pitt)
Erica Lescht	In progress	TBA (Pitt)
Emily Goldberg	In progress	TBA (Pitt)
Giorgio Paulon	In progress	TBA (UT Austin)
Jingjing Fan	In progress	TBA (UT Austin)
Shitong Liu	In progress	TBA (Pitt)

Master's Thesis Committee: *Chair*

Name	***Year***	***Topic***
Daniel Rigney	2014	Pilot study of evidence-based practice of adults with aphasia through crowdsourcing
Rachel Reetzke	2014	Age-related changes in the use of audiovisual cues during speech perception
Yi, Han-Gyol	2014	Visual influences on non-native speech perception
Rachel Tessmer	2016	Optimizing Lexical Training Using a Dual-Learning Systems Approach
Louisa Suiting	2016	Experience-dependent plasticity in speech-in-noise processing

Master's Thesis Committee: *Member*

Name	***Year***	***Topic***

Caroline Benning	2013	Post-stroke aphasia rehabilitation: A review of the history and findings for constraint-induced therapy
Jessica Bauman	2015	Alterations in Resting-State Functional Connectivity in Primary Progressive Aphasia
Alexandra Estrella	2015	Vowel perception in noise for Spanish-English bilingual listeners
Meghan Ahern	2019	Using Data from Comprehension and Production to Test Competing Theories in Sentence Impairments in Individuals with Aphasia
Katie McGovern	2020	Acoustic Intensity and Inhalatory Kinematics in Patients with Parkinson's Disease
Jennifer Gates	2020	The Ability of Persons with Parkinson's Disease to Manipulate Vocal Intensity and Articulatory Precision in an Intra-Operative Setting

Undergraduate Honors Thesis: *Chair*

Name	***Year***	***Topic***
Seth Koslov	2012	Pitch, spatial ability, and auditory learning (Plan II Honors thesis)
Kathryn Curry	2015	Impact of bilingualism on speech perception in noise
Yuan Catherine Han	2016	Regulatory Fit Effects in Speech Category Learning.
Elise LeBovdige	2018	Non-native Tone Production: A Brain-Behavior Relationship?
Megan McKenzie	2020	Atypical Cortical Tracking of the Speech Envelope in Children Who Stutter: A Potential Contributor Towards Phonological Processing Differences

Faculty mentorship

Name	***Year***	***Role***
Maya Henry, Ph.D.	2015	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)
Julia Campbell, Ph.D.	2016	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)
Liberty Hamilton, Ph.D.	2017	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)
Amanda Hampton Wray, Ph.D.	2019-	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)

Leah Helou, Ph.D.	2019-	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)
Will Evans, Ph.D.	2019-	Assistant Professor in Communication Sciences and Disorders, UT Austin (my role: faculty mentor)
Taylor Abel, MD	2020-	Assistant Professor, University of Pittsburgh Neurosurgery K23 (NS120291-01) Neocortical Mechanisms of Voice Recognition in Adolescence, pending council review (Role: co-mentor)

RESEARCH:

Current Grant Support: *Extramural*

Current and Pending Research Support

Funding Source	Federal ID	Title	PI	Start/End Dates	Amount
NIH-NIDCD	2R01DC013315-07	Cortical contributions to frequency-following response generation and modulation	Chandrasekaran (Lead PI) Co-PIs Teichert, Sadagopan, Abel	04/01/21-03/31/26	$2,952,122
NSF	1953712	Novel Statistical Frameworks for Local Interference in Sensory and Decisional Neural Processes	Chandrasekaran Co-PI Sarkar	06/01/20-05/31/23	$600,000
NIH-NIDCD	R01 DC013315A1	Neural Systems in Auditory and Speech Categorization	Chandrasekaran	07/01/17-06/30/22	$2,773,940
PNC Charitable Trust	Foundation grant	Assessing Communication Disorders Across the Lifespan Using Neuroimaging Technology	Chandrasekaran Co-PI Snyderman	07/01/20-06/30/22	$500,000
UPitt CTSI	Pitt CTSI	Decision strategies in speech perception in aging	Chandrasekaran	12/01/21-11/30/22	$25,000
NIH-NIDCD	R01 DC019904	Neural processing of speech signals in children who stutter	Role: Co-I	03/09/2022-03/09/2027	$3,061,155
NIH-NIDCD	R21DC018882	Effects of Age-related Cochlear Synaptopathy on Speech-in-noise Intelligibility: A Cross-species Approach	Role: Co-I	03/01/22-02/28/25	$569,953
NIH-NIDCD	R21DC018408	Modifying spatial maps to improve localization	Role: Co-I	07/01/20-06/30/22	$416,029
NIH-NIDCD	Pending	Interactions Between Brain States and	Role: Co-I	07/01/21-06/30/26	$808,405

Grant Support: *Completed*

Funding Source	***Title***	***Role***	***Start/End Dates***	***Amount***
Moody College of Communication	Faculty Summer Research Award	*PI*	*2011*	*Summer salary*
UT Austin: Longhorn Innovataion Fund	CLARITY-Technology for enhancing oral communication	*Co-PI*	*2011-2013*	*$100,000*
Moody College of Communication	Grant Preparation Award	*PI*	*2012*	*$5,000*
UT Austin	Research Grant Award	*PI*	*2013*	*$7,000*
Moody College of Communication	Grant Preparation Award	*PI*	*2013*	*$5,000*
UT Austin	Summer Research Award	*PI*	*2014*	*Summer salary*
UT Austin: Office of Vice President for Research	Multimodal Neuroimaging Initiative	*PI*	*2016*	*$175,000*
Defense Advanced Research Projects Agency	N66001-4008-17-2-4008: Targeted Neuroplasticity Training	*PI*	*07/17-03/20*	*$1,003,234*
Research Grants Council (Hong Kong)	Role of genetic variation on the neural processing of speech signals	*Collaborator*	*08/14-07/19*	*HK$ 670,389*
National Institute for Deafness and Communication Disorders	1R01DC013315A1: *Online Modulation for Auditory Brainstem Responses to Speech (NCE)*	*PI*	*04/14-03/21*	*$2,449,482*
National Institute for Deafness and Communication Disorders	1R01DC013315-05S1: Supplement to Online Modulation of Auditory and Brainstem Responses to Speech (NCE)	*PI*	*09/18-03/21*	*$380,233*

Grant Support: *Training*

Grant Number	Years Inclusive	Grant Title	Source	Annual Direct Costs
2T32DA018926	2011	(co-PIs: Harris, R.A & Harris, K.M., Role: Preceptor) Pre-Doctoral Training in Interdisciplinary Neuroscience	National Institute on Drug Abuse	N/A
N/A	2012	(PI: Dadabhoy, A., Role: Mentor) Optimizing second language learning through manipulation of trial-by-trial feedback.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2012	(PI: Evens, S., Role: Mentor) Quantifying the benefits of visual cues on native and non-native speech perception in varying noise levels.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2012	(PI: Curry, K., Role: Mentor) Maximizing Second Language Learning through Trial-By- Trial Feedback.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2013	(PI: Tessmer, R., Role: Mentor) Optimizing Auditory Training for Second Language Learning.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2015	(PI: Barlow, W., Role: Mentor) Neurobiological impact of music experience in adolescence.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2015	(PI: Glick, A., Role: Mentor) Effect of age on reflexive auditory learning.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2015	(PI: Smith, L., Role: Mentor) Categorization training for non-native accented word recognition.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
N/A	2016	(PI: Han, Y., Role: Mentor) Emotion Effects on Speech Category Learning.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000

N/A	2017	(PI: LeBovidge, E., Role: Mentor) Cross-language differences in the encoding of vowel formant cues.	Undergraduate Research Fellowship, The University of Texas at Austin	$1000
F31AG052308-02	2017-19	(PI: Smayda, K., Role: Mentor) Training for the Enhancement of Speech-In-Noise Processing Ability in Older Adults	NIH	$80,000
N/A	2019	(co-PI: Chandrasekaran) BrainCure: Brain and Communication Undergraduate Research Experience	Office of the Provost, University of Pittsburgh	$15,000
3T32DC011499-06S106S1	2019-21	(PIs: Kandler, Yates, Role: Preceptor) Training in Auditory and Vestibular Neuroscience	NIH	n/a
F32DC016812	2019-21	(PI: Dial, H., Role: Co-sponsor) Investigating neural signatures of rehabilitation in primary progressive aphasia	NIH	$170,094
F32DC018979-01	2020-22	(PI: Roark, C., Role: Mentor) Shared and specific mechanisms of auditory and visual category learning	NIH	$129,480

Grant Support: *Equipment*

Grant Number	Years Inclusive	Grant Title	Source	Annual Direct Costs
N/A	2017	(Co-PIs: Llanos, F., Henry, M., Hamilton, L, & Chandrasekaran, B.) Tital XP GPU Grant	NVIDIA Corporation	$3600

OTHER RESEARCH RELATED ACTIVITIES

Editorial:

Title	*Year*
Guest Associate Editor, *Journal of Speech, Language, and Hearing Research (Hearing)*	2014
Associate Editor, *Journal of Speech, Language, and Hearing Research (Speech)*	2015-16
Editor, *Journal of Speech, Language, and Hearing Research (Speech)*	2016-18
Editor-in-Chief, *Journal of Speech, Language, and Hearing Research (Speech)*	2019-
Member, American Speech-Language and Hearing (ASHA) Journals Board: Liaisons with the Vice President for Science and Research, ASHA to provide oversight and management of ASHA journals	2019-

Journal Reviewer:

Journal	*Year*
Brain Research	2006

Brain and Language	2006
Journal of Experimental Psychology	2006
Cognition	2007
Brain and Language	2007
Journal of Cognitive Neuroscience	2008
Brain	2008
Cerebral Cortex	2008
Journal of Acoustical Society of America	2008
Brain and Language	2008
Journal of Neuroscience	2009
American Journal of Audiology	2009
European Journal of Neuroscience	2009
Cortex	2009
Proceedings in the National Academy of Sciences, USA	2009
PLOS ONE	2010
Hearing Research	2010
Brain and Language	2010
Neuron	2010
Human Brain Mapping	2011
Hearing Research	2011
Applied Psycholinguistics	2011
Ear and Hearing	2011
Cerebral Cortex	2011
Journal of Cognitive Neuroscience	2011
Proceedings in the National Academy of Sciences, USA	2012
Journal of Cognitive Neuroscience	2012
Ear and Hearing	2012
Neuropsychologia	2012
Human Brain Mapping	2012
Journal of Experimental Psychology: Learning, Memory, and Cognition	2012
Ear and Hearing	2013
Applied Psycholinguistics	2013
Perspectives on Hearing and Hearing Disorders: Research and Diagnostics	2013
Journal of Speech, Language, and Hearing Sciences	2014
Journal of the Acoustical Society of America	2014
Journal of Neurolinguistics	2014
Speech and Communication	2014
Journal of Neuroscience	2015
PLOS One	2015
Cortex	2015
Cognition	2015
Journal of Experimental Psychology: Human Perception and Performance	2015
Journal of Experimental Child Psychology	2015

Journal of Neurolinguistics	2015
Psychophysiology	2016
Applied Psycholinguistics	2016
Journal of Neuroscience	2017
Current Biology	2017
Attention, Perception, and Psychophysics	2018
Proceedings of the National Academy of Sciences	2018
E-life	2019
Journal of Acoustical Society of America	2020
Current Biology	2020

Grant Reviewer (Charter member)

Charter member, National Institutes of Health, Language and Communication (LCOM), Center for Scientific Review (CSR).	2020-24

Grant Reviewer (Ad-hoc):

National Science Foundation (Cognitive Neuroscience)	2009
National Science Foundation (Linguistics)	2010
National Science Foundation (Linguistics)	2011
Research Grants Council (RGC) of Hong Kong	2011
Research Grants Council (RGC) of Hong Kong	2011
National Science Foundation (Linguistics)	2012
National Science Foundation (Cognition, Action, Perception)	2013
Rehabilitation Research and Development Scientific Merit Review Board	2014
Canada Research Chairs	2015
NIH Language & Communication Panel (June)	2016
American Speech-Language and Hearing Association Audiology/Hearing Science Travel Award (ARTA)	2016
Undergraduate Research Funds (URF), The University of Texas at Austin	2016
NIH Language & Communication Panel (November)	2017
Clinical Research Grant, American Speech-Language and Hearing Association	2017
New Century Scholars Research Grant, American Speech-Language and Hearing Association	2017
NIH Autism Centers of Excellence (ACE) Network Panel ZRG1 BBBP-L (52)	2017
	2017
Students Preparing for Academic Research Careers (SPARC) Award	2017
Special emphasis panel for NIH RFA-AG-18-017: Central Neural Mechanisms of Age-Related Hearing Loss (R01), , ZAG1 ZIJ-G M2, 2018	2018
Misophonia Research Fund	2020

External Examiner: Tenure and Promotion

Tsing Hua University	2017

University of Memphis	2018
Boston University	2019
Temple University	2019
Birkbeck College, University of London	2020
Vanderbilt University	2021
University of Arizona	2022

RESEARCH INTERESTS

My program of research examines the neurobiological computations that underlie learning and plasticity in speech and language processing using an interdisciplinary, computational, and lifespan approach. The long-term goal of my research program is to create neurobiologically-informed and personalized rehabilitation approaches that reduce inter-individual differences in treatment outcomes. My current research is geared towards developing a mechanistic understanding of learning and neural plasticity related to speech, language, and hearing, and ascertain neurocognitive sources of individual differences in learning and plasticity.

INVITED SEMINARS AND LECTURESHIPS

Title	***Year***
Experience-dependent plasticity in the processing of linguistically relevant pitch, Department of Psychology, University of Lancaster, Lancaster	2006
Mismatch negativity: clinical utility, Department of Speech, Language, and Hearing Sciences, Sri Ramachandra Medical College, Chennai	2006
The auditory brainstem response to speech: Neural origins and plasticity, Language and Cognition Colloquium Series, Northwestern University, Evanston	2008
Individual differences and experience-dependent plasticity in the neural processing of linguistic pitch, plenary talk at the Workshop on Prosody, Leiden, Netherlands	2010
Current Perspectives on the Neural Bases of Speech Perception, Invited talk at The Indian Speech Hearing Association Conference, Bengaluru	2010
Human auditory midbrain plasticity to speech, Invited talk at the Center for Language Sciences, Penn State University, State College	2011
Human auditory brainstem encoding of speech. Invited talk at the Cog-Neuro Consolider Seminar Series, Barcelona	2011
Auditory midbrain plasticity to linguistic pitch patterns. Nanyang Technological Institute, Singapore	2011
Neural processing of linguistic pitch contours: Individual variability and experience-dependent plasticity, plenary talk at The Psycholinguistic Representation of Tone conference, Hong Kong	2011
Individual variability and neural plasticity in speech sound learning, Keynote address at the inauguration of the PhD program in neurolinguistics, University of Lisbon, Portugal	2012
High-resolution imaging of human midbrain function, Invited talk at the Neurobiology Lecture Series, University of Texas at San Antonio	2012
Dissociable category learning systems in musicians, Cognitive Science Seminar Series, University of Memphis, Memphis	2013

Corticostrital contributions to speech category learning, Invited talk at the Stanford Cognitive & Systems Neuroscience Laboratory, Stanford University, Palo Alto	2014
Tuning the brain: effects if music training on audition, Department of Speech and Hearing Science, Arizona State University	2014
Genetic influences on dual processing modes of auditory category learning, Chinese University of Hong Kong, Hong Kong	2014
Experience-dependent plasticity in speech perception, Invited talk at Clinically Applied Rehabilitation Engineering (CARE) initiative, The University of Texas at Austin, Austin	2015
Experience-dependent plasticity in the processing of speech signals, Invited talk at Texas Acoustics, Mechanical Engineering Department, The University of Texas at Austin, Austin	2015
Corticostriatal learning systems in audition, Invited talk at the Neurobiology Lecture Series. The University of Texas at San Antonio, San Antonio	2015
Enhanced procedural learning of speech sound categories in a genetic variant of FOXP2. Auditory Cognitive Neuroscience Society Conference, University of Arizona, Tucson	2015
Neurobiological constraints on speech learning: Individual differences and plasticity, Invited talk at the technical session on Second Language Speech Learning and Education, Acoustical Society of America/Acoustical Society of Japan joint meeting, Honolulu	2016
Neurobiological constraints on speech learning: Individual differences and plasticity, Workshop on Cognition and Neuroscience, Nanyang Technological University, Singapore	2016
Midbrain plasticity to speech signals: Effect of Language Experience, Plenary talk at the 5th International Symposium on Tonal Aspects of Language, Buffalo	2016
Dual-learning systems in speech perception, Haskins Laboratories, New Haven	2016
IC what you are saying: midbrain decoding of speech sounds, Invited talk at the Auditory Cognitive Neuroscience Society Conference, University of Arizona, Tucson	2016
Listening and learning in individuals with elevated depressive symptoms, Invited talk at Seton Grand Rounds in Psychiatry, Austin	2016
Language Learning as an Adult: Perspectives from Neuroscience, Invited talk for College of Liberal Arts Family Weekend, The University of Texas at Austin, Austin	2016
Corticostriatal learning systems in auditory and speech categorization, Callier Center, University of Texas at Dallas, Dallas	2017
Neurobiological constraints on speech learning, All India Institute of Speech and Hearing, Mysuru	2017
Editorial workshop: Publishing in ASHA journals, All India Institute of Speech and Hearing, Mysuru	2017
Editorial workshop: Publishing in ASHA journals, Dr. S. R. Chandrasekhar Institute of Speech And Hearing, Bengaluru	2017
Editorial workshop: Publishing in ASHA journals, Sri Ramachandra University, Chennai	2017
Neural systems in auditory and speech categorization. Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig	2017

Methods in the measurement of the frequency-following response, Laboratoire Parole et Langage, Aix en Provence — 2017

Stability and Plasticity in the neural representation of speech categories, Auditory Cognitive Neuroscience Society Conference, University of Florida, Gainesville — 2017

Corticostriatal learning systems in speech categorization — 2018
Society for the Neurobiology of Language Conference, Quebec City, Canada

Neural systems underlying speech categorization, Diehl-a-Palooza: A celebration of the career of Randy Diehl, The University of Texas at Austin, Austin — 2018

Cognitive-sensory influences on the subcortical representation of speech signals, Hearing Research Center (HRC) Seminar Series, Boston University, Boston — 2018

The 'when', 'where', and 'how' of speech category representation in the human brain, Auditory Cognitive Neuroscience Society meeting, Tampa — 2018

Neurophysiology of Speech Perception, Four-part CEU — 2019
Pennsylvania Speech-Language Hearing Association, Lancaster, PA

Corticostriatal Systems in Speech Category Learning, — 2019
Cognitive Science of Learning and Development (CSLD), Vanderbilt University, Nashville

Neurobiological Constraints and Individual differences in Speech Learning, — 2019
Duolingo Colloquium Series, Duolingo, Pittsburgh

Transcutaneous Vagus Nerve Stimulation Enhances Speech Learning — 2019
Auditory Cognitive Neuroscience Society meeting, University of Florida, Gainesville

Neuroscience of Communication — 2019
The 21st Annual Jack Matthews-Herbert Rubin Lecture, University of Pittsburgh, Pittsburgh

Non-invasive Electrophysiological Response to Speech: Clinical Implications — 2020
Otolaryngology Grand Rounds, University of Pittsburgh, Pittsburgh

RESEARCH LEADERSHIP

University of Pittsburgh

As the Vice Chair for Research (VCR) I direct the CSD Office for Research that houses two research-dedicated staff personnel. In my role as VCR, I have four primary objectives: 1) Enhance research funding and academic scholarship, 2) increase research training, mentorship, and communication, and 3) manage and grow departmental research infrastructure to accommodate the enhanced research needs, and 4) foster partnerships and collaborations with other research units. Within the context of these objectives, I lead efforts by the Office for Research in the following research-related service activities:

- Assist faculty members in their pursuit of external funding for scholarship
- Conduct monthly informational and training meetings for research faculty and provide mentorship for early-stage investigators, postdoctoral scholars, and graduate student members in CSD
- Develop and coordinate a department-level pre-review mechanism to ensure the strongest possible proposals are submitted for review
- Manage pre-award and post-award research processes
- Provide targeted guidance in finding and communicating funding opportunities, track research activities, processes, and infrastructure with a goal of implementing improvements, if needed, manage and plan research resources.
- Work with other research units across the school of health and rehabilitation sciences, University of Pittsburgh, UPMC, and the larger Pittsburgh research community to develop strategic research partnerships, and identify and cultivate interdisciplinary, collaborative research and training opportunities.

In 2018, I established a vision for the University of Pittsburgh CSD Research with an ambitious 5-year plan benchmarked on the #1 US News ranked program in the field of Speech-Language Pathology (SLP). I highlight some significant achievements in our progress towards the shared vision:

- Increase in departmental research funding: Since 2019, new awards total **$15,519,435** , representing an unprecedented growth from **~$800,000** in 2018.
- Increase in number and diversity of research funding: Since 2019 we received **27 federally-funded research awards** and one non-federal contract (<5 total in 2018). Currently **85% of our research faculty** receive research support from federal grants and non-federal contracts (<20% in 2018). We have also increased the diversity of our grant's portfolio. We now host grants (prime or sub-contract) from a broad range of federal agencies including the National Institutes of Health (NIH), National Science Foundation, Defense and Advanced Research Agency, National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), and Patient-Centered Outcomes Research Institute with focus ranging from pre-clinical science to patient-oriented intervention research.
- **Increase in full-time research-dedicated personnel** (e.g., research coordinators, postdoctoral scholars, research staff) to 15 in 2022 (from one in 2018).
- **Increase in training-related fellowships**: Significant growth in external funding for predoctoral students and postdoctoral associates since 2019, totaling $469,301. This includes NIH pre-doctoral (F31) and post-doctoral (F32) fellowships as well as predoctoral fellowships on T32s (Training in Auditory and Vestibular Neuroscience, T32DC011499 (PIs: Kandler, Yates) and (Predoctoral Training Program in Behavioral Brain Research, T32GM081760 (PIs: Fiez, Holt) and the NIH-funded Clinical and Translational Science Institute TL1 award (TL1TR001858). Department's first Career Development award, totaling $702,270 (NoA pending) across five years.
- **Intradisciplinary initiatives**: I founded and co-direct the Brain and Auditory Sciences Research Initiative (BASRI) (co-PIs Catherine Palmer, Ph.D., Christopher Brown, Ph.D., Amanda Hampton Wray, Ph.D., Jason Bohland, Ph.D., and Susan Shaiman, Ph.D.). BASRI is a unique, shared, state-of-the-art research facility within CSD and SHRS that brings together multiple federally-funded labs conducting basic and clinical research on the neurosciences of communication. This one-of-a-kind ~2000 square feet mixed-use facility that aims to drive trans-disciplinary and inter-disciplinary research innovations by facilitating collaborations across labs. BASRI serves as an incubator for bold new ideas focused on the neuroscience of human communication and optimally positions the individual labs towards large-scale collaborative institutional/center-level grants. A similar initiative in the Voice and Swallowing Area (PIs: Bernard Rousseau, Ph.D., Leah Helou, Ph.D., and James Coyle, Ph.D.) is underway and a third cluster in Neurogenic Language/Cognitive Communication Disorders is envisioned.
- **Interdisciplinary partnerships:** Since 2018 we have increased our collaborations with other departments in SHRS including the Departments of Occupational Therapy and Physical Therapy. These newly funded collaborations have been spearheaded by CSD PIs and have been actively supported by the Office for Research, CSD (pre-award and post-award processes). BASRI PIs (Chandrasekaran, Palmer) and the new Statistics and Data core within SHRS will partner to support recruitment, assessment, characterization, and data curation for a NIH Clinical Research Center Grant (P50) application on the neurophysiology of Tinnitus. This P50 was scored on the first round and will be resubmitted in October 2020 (Co-PIs Thanos Tzonopolous, Vice Chair for Research in Otolaryngology, Lori Holt, Professor, Carnegie Mellon University) as a multi-disciplinary (Otolaryngology, Psychology, CSD, Neuroscience) initiative. Our goal is to leverage these partnerships and build towards a CSD Clinical Research and Translational Center that assists clinical and translational researchers on federally-funded grants with clinical trials.
- **Fostering community partnerships:** Pittsburgh has long been a hub auditory neuroscience, exemplified by the Pittsburgh Hearing Research Center (PHRC), based within the Department of Otolaryngology. The PHRC also includes members from different Medical School, School of Health and Rehabilitation Sciences, and Arts and Sciences Departments of University of Pittsburgh, as well as faculty from Carnegie Mellon University. In 2018, Lori Holt, Ph.D., (Professor, Department of Psychology, CMU), Barbara Shinn-Cunningham, Ph.D., (Professor and Director, Neuroscience Institute, CMU) and I established the human audition-focused Pittsburgh Cognitive Auditory Neuroscience (PCAN) group that hosts a monthly talk series ("Ear2Brain") sponsored by the Center for Neural Bases of Cognition. We are

currently funded by NIH (R13DC018243) to host the Symposium on Cognitive and Auditory Neuroscience (SCAN), to be hosted in Pittsburgh, PA in July 2021 and 2022, as a joint venture between Carnegie Mellon University (CMU) and University of Pittsburgh (Pitt). As a biennial meeting, SCAN aims to become the premiere intellectual and professional venue for current research in the emerging field of human cognitive auditory neuroscience. SCAN will incorporate elements typical to academic conferences (research talks, posters) as well as novel ideas that promote "blue sky" thinking in this rapidly evolving field. SCAN will assiduously and innovatively work towards inclusivity and creating an atmosphere that encourages intellectual and professional engagement from women, underrepresented minorities, and individuals with disabilities. Another critical aim of the SCAN is to foster industry-academic partnerships with an eye towards translation of basic research and fostering career opportunities for trainees. In 2019 we began formalizing a research partnership with the DePaul School for Hearing and Speech in Pittsburgh. Leveraging monthly meetings with the DePaul school, we are laying the foundation for a strategic public-private partnership will include continuing education and professional development opportunities for faculty and staff, a school site open for Pitt CSD-led field research with the pre-school, summer camps (with research data collection opportunities) for pre-school and school age students with Pitt CSD serving as an academic partner.

- **Sustaining interdisciplinary and community partnerships via Institutional and Center Grants**: I was nominated to represent School of Health and Rehabilitation and participate in a 11-week "Big Proposal Boot Camp" research development series organized by the Senior Vice-Chancellor for Research, University of Pittsburgh in Spring 2019. This Boot Camp focused on understanding the preparatory steps necessary to pull together large-scale proposals and the skills necessary to successfully manage these awards. A goal in the next year is to submit an Institutional Training Grant (T32) (Co-PIs Rousseau, Dickey, Chandrasekaran) for predoctoral and postdoctoral fellowships leveraging the unique strengths of Pitt CSD in the context of the larger community.

SERVICE

University of Pittsburgh

- Member, Research Restart for Schools of Health Sciences: Dental Medicine, 2020
- Health and Rehabilitation Sciences, Pharmacy, Nursing, Public Health
- Center for Neural Bases of Cognition McClelland Prize Submission Review, 2019

University of Texas at Austin

- Panelist, Panel on promotion and tenure for Assistant Professors, New faculty orientation, UT Austin, 2017
- Reviewer, Imaging Research Center Pilot Grants, 2016-18

Department (Communication Science and Disorder)

Vice-Chair for Research (20% effort) 2018-
Role: Oversee the management (pre-award, post-award) and direction of the Office for Research (Communication Science and Disorders) with the goals of increasing external funding and scholarship, enhancing training, mentorship, and research communication, managing and enhancing department infrastructure, and foster greater collaborations amongst related research units

Search Committee Chair, Assistant/Associate Professor in Speech-Language Pathology/Sciences 2018-19
Role: Successfully managed the search and eventual recruitment of a candidate who joined as CSD faculty in 2019

Search Committee Chair, Assistant/Associate Professor in Audiology/Hearing Sciences 2018-19
Role: Successfully managed the search and eventual recruitment of a candidate who will join as CSD faculty in 2020

Search Committee Chair, Research Administrator 2018-19
Role: Successfully managed the search and eventual recruitment of a candidate who joined CSD as a research administrator in 2019

Interim Director of the PhD program in Communication Science and Disorders 2019-20
Role: Provided interim direction of the PhD program over the Fall Semester.

Member, Graduate Admissions Committee 2018-

Search Committee Member, Director of the MA/MS SLP Program 2021

Search Committee Member, Undergraduate Program Director 2021

Search Committee Member, Assistant/Associate Professor, Appointment Stream (AuD) 2021

Search Committee Chair, Assistant/Associate Professor in Audiology/Hearing Sciences 2021-22
Role: Successfully managed the search and eventual recruitment of a candidate who will join as CSD faculty in 2022

Search Committee Chair, Associate/Full Professor and Director of the PhD program 2021-22
Role: Successfully managed the search and eventual recruitment of a candidate who will join as CSD faculty in 2022

University of Texas at Austin

Member, Faculty Search Committee, Communication Sciences and Disorders 2011

Member, Speech-Language Pathology Graduate Admissions Committee, 2011-18

Member, Faculty Search Committee, Department of Communication Sciences and Disorders 2012

Member, Faculty Search Committee, Department of Linguistics 2012

Member, Undergraduate Curricular Revision Committee 2014

Director, PhD program in Communication Sciences and Disorders 2014-17

Chair, Doctoral Studies Committee in Communication Sciences and Disorders 2014-17

Chair, Doctoral Program Curricular Revision 2015

Member, Program Coordinator II Search Committee 2015

Member, Search Committee for Lecturer, Department of Communication Sciences and Disorders 2017

Member, Search Committee for Chair of the Department of Communication Sciences and Disorders 2017

College/School

University of Pittsburgh

Member, Technology and Innovation Group, School of Health and Rehabilitation Sciences 2019-

Member, Space committee, School of Health and Rehabilitation Sciences 2019-

Chair, Research Restart Committee, School of Health and Rehabilitation Sciences 2020

Member, Research Restart Retreat, School of Health and Rehabilitation Sciences 2020

Chair, SHRS Research Restart Committee 2020

Member, Center on Access, Transportation, Assistive, and Prosthetic/Orthotic and Health Technologies Forming Committee 2021

Member, SHRS Research Administrators and Faculty Designees Committee 2020-

Member, SHRS Research Retreat Organizing Committee 2020-

University of Texas at Austin

Member, Internationalization Committee	2013-2015
Member, Faculty Research Committee	2013-2015
Member, Faculty Research Committee	2015-present
Member, Ad-hoc Workgroup on Advancing Research: to explore ways that the Moody college can strengthen and strategically expand extramural research and supporting infrastructure, College of Communication	2015-2018
Additional charge: Recommendations regarding research related space and infrastructure	
Member, Principal Investigators Committee	2016-2018
Member, Global Engagement Committee	2016-2018

University

University of Pittsburgh

Center for Neural Bases of Cognition McClelland Prize Submission Review	2019
Member, Health Science Research Restart Committee	2020
Member, University Council on Graduate Studies	2021-

University of Texas at Austin

Chair, Search Committee for Associate Vice President for Research (Research Support and Compliance)	2017
Panelist, Panel on promotion and tenure for Assistant Professors, New faculty orientation, UT Austin	2017
Co-director, Multimodal neuroimaging initiative	2017
Reviewer, Undergraduate Research Fellowship, The University of Texas at Austin	2017
Member, Pilot Research Grant Committee, Imaging Research Center, The University of Texas at Austin	2016-2018