

Sahil Luthra

Department of Psychological Sciences, University of Connecticut
406 Babbidge Road, Unit 1020, Storrs, CT 06269
sahil.luthra@uconn.edu | ph: (650) 823-9806 | sahilluthra.net

Education	Ph.D., Psychological Sciences (Language and Cognition)	2021 (Expected)
	University of Connecticut; Advisors: Jim Magnuson, Emily Myers <i>Dissertation title:</i> Neural mechanisms underlying talker-specific influences on speech perception	
	M.S., Psychological Sciences (Language and Cognition)	2019
	University of Connecticut; Advisors: Jim Magnuson, Emily Myers <i>Thesis title:</i> The influence of sentence context on phonetic recalibration	
	Graduate Certificate, Neurobiology of Language	2019
	University of Connecticut	
	B.S. with Honors, Cognitive Neuroscience	2014
	Brown University; Advisor: Sheila Blumstein <i>Thesis title:</i> Speaker information in spoken word recognition: An investigation using false memories	
Academic Employment	Postdoctoral Researcher	Starting Fall 2021
	Carnegie Mellon University; Supervisors: Lori Holt, Barbara Shinn-Cunningham, Fred Dick (University of London Birkbeck), Adam Tierney (University of London Birkbeck)	
	Research Assistant	2014-2016
	Brown University; Supervisors: Emily Myers, Sheila Blumstein	
	Research Assistant	2013
	Boston University; Supervisor: Swathi Kiran	
Awards	NSF Graduate Research Fellowship	2018-2021
	NSF Research Traineeship (Science of Learning & Art of Communication)	2018-2021
	Jorgensen Scholarship, University of Connecticut	2018-2021
	NSF IGERT Fellowship (Language Plasticity)	2016-2018
	Premium for Excellence in Cognitive Neuroscience, Brown University	2014
	Royce Fellowship, Brown University	2012
	August P. Reccord Scholarship, Brown University	2010-2014
Eagle Scout Scholarship, Frank Livermore Trust	2010-2014	
National Merit Scholarship	2010	

**Peer-
Reviewed
Publications
(Published)**

Luthra, S., Saltzman, D., Myers, E. B., & Magnuson, J. S. Listener expectations and the perceptual accommodation of talker variability: A pre-registered replication. *Attention, Perception & Psychophysics*. In press.

Luthra, S., Li, M. Y. C., You, H., Brodbeck, C., & Magnuson, J. S. (2021). Does signal reduction imply predictive coding in models of spoken word recognition? *Psychonomic Bulletin & Review*. In press.

Luthra, S., Peraza-Santiago, G., Beeson, K., Saltzman, D., Crinnion, A. M., & Magnuson, J. S. (2021). Robust lexically-mediated compensation for coarticulation: Christmash time is here again. *Cognitive Science*. In press.

Luthra, S., Mechtenberg, H., & Myers, E. B. (2021). Perceptual learning of multiple talkers requires additional exposure. *Attention, Perception, & Psychophysics*. Advance online publication.

Luthra, S. (2021). The role of the right hemisphere in processing phonetic variability between talkers. *Neurobiology of Language*, 2(1), 138-151.

Luthra, S., You, H., Rueckl, J. G., & Magnuson, J. S. (2020). Friends in low-entropy places: Orthographic neighbor effects on visual word identification differ across letter positions. *Cognitive Science*, 44(12), 1-31.

Luthra, S., Magnuson, J. S., & Myers, E. B. (2020). Boosting lexical support does not enhance lexically guided perceptual learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. Advance online publication.

Luthra, S., Correia, J. M., Kleinschmidt, D. F., Mesite, L. & Myers, E. B. Lexical information guides retuning of neural patterns in perceptual learning of speech. (2020). *Journal of Cognitive Neuroscience*, 32(10), 2001-2012.

Magnuson, J. S., You, H., **Luthra, S.**, Li, M. Y. C., Nam, H., Escabí, M., Brown, K., Allopenna, P. D., Theodore, R. M., Monto, N., & Rueckl, J. (2020). EARSHOT: A minimal neural network model of incremental human speech recognition. *Cognitive Science*, 44(4), 1-17.

Luthra, S., Fuhrmeister, P., Molfese, P. J., Guediche, S., Blumstein, S. E., & Myers, E. B. (2019). Brain-behavior relationships in incidental learning of non-native phonetic categories. *Brain & Language*, 198.

Luthra, S., Guediche, S., Blumstein, S. E., & Myers, E. B. (2019). Neural substrates of subphonemic variation and lexical competition in spoken word recognition. *Language, Cognition & Neuroscience*, 34(2), 151-169.

Luthra, S., Fox, N. P., & Blumstein, S. E. (2018). Speaker information affects false recognition of unstudied lexical-semantic associates. *Attention, Perception & Psychophysics*, *80*(4), 894-912.

Magnuson, J. S., Mirman, D., **Luthra, S.**, Strauss, T., & Harris, H. (2018). Interaction in spoken word recognition models: Feedback helps. *Frontiers in Psychology*, *9*, 1-18.

Theodore, R. M., Blumstein, S. E., & **Luthra, S.** (2015). Attention modulates specificity effects in spoken word recognition: Challenges to the time-course hypothesis. *Attention, Perception & Psychophysics*, *77*(5), 1674-1684.

**Peer-
Reviewed
Publications
(In Progress)**

Saltzman, D., **Luthra, S.**, Myers, E. B., & Magnuson, J. S. Attention, task demands, and multi-talker processing costs in speech perception. Under review.

Heffner, C. C., Fuhrmeister, P., **Luthra, S.**, Mechtenberg, H., Saltzman, D., & Myers, E. B. Reliability for perceptual flexibility in speech: Identification, learning, and adaptation. Under review.

**Conference
Presentations**

Luthra, S., Mechtenberg, H., & Myers, E. B. Perceptual learning of multiple talkers requires additional exposure. Psychonomic Society, Virtual Conference, November 2020.

Peraza-Santiago, G., Beeson, K., **Luthra, S.**, Saltzman, D., Crinnion, A. M., & Magnuson, J. S. Robust lexically-mediated compensation for coarticulation (LCfC) supports feedback in spoken word recognition. Psychonomic Society, Virtual Conference, November 2020.

Grubb, S., Dalal, P., Daniel, J., Peraza-Santiago, G., **Luthra, S.**, Saltzman, D., Xie, B., Crinnion, A.M., & Magnuson, J. S. Talkers, time, tasks, and similarity in spoken word recognition. Psychonomic Society, Virtual Conference, November 2020.

Saltzman, D., **Luthra, S.**, Myers, E. B., & Magnuson, J. S. Multi-talker processing costs in monitoring reflect task demands, not normalization. Psychonomic Society, Virtual Conference, November 2020.

Luthra, S., Steiner, R. J., Magnuson, J. S., & Myers, E. B. The influence of sentence context on lexically guided perceptual learning. Psychonomic Society, Montréal, QC, November 2019.

Luthra, S., Correia, J. M., Kleinschmidt, D. F., Mesite, L. & Myers, E. B. Lexical information guides retuning of neural patterns in perceptual learning of speech. Society for Neurobiology of Language, Helsinki, Finland, August 2019.

Magnuson, J. S., You, H. Rueckl, J., Allopenna, P. D., Li, M. Y. C., **Luthra, S.**, Steiner, R. J., Escabí, M., Brown, K., Theodore, R. M., & Monto, N. EARSHOT: Emulating Auditory Recognition of Speech by Humans Over Time. Society for Neurobiology of Language, Helsinki, Finland, August 2019.

Magnuson, J. S., You, H., Rueckl, J., Allopenna, P. D., Li, M. Y. C., **Luthra, S.**, Steiner, R. J., Escabí, M., Brown, K., Theodore, R. M., & Monto, N. EARSHOT: A minimal model of human speech recognition (HSR) that operates on real speech. Cognitive Science Society, Montréal, QC, July 2019.

Magnuson, J. S., Li, M. Y. C., **Luthra, S.**, You, H., & Steiner, R. J. Does predictive processing imply predictive coding in models of spoken word recognition? Cognitive Science Society, Montréal, QC, July 2019.

Luthra, S., You, H., & Magnuson, J. S. Orthographic neighbor effects on visual word identification differ across letter positions. Psychonomic Society, New Orleans, LA, November 2018.

Li, M. Y. C., You, H., **Luthra, S.**, Steiner, R. J., & Magnuson, J. S. Predictive processing in computational models of spoken word recognition. Psychonomic Society, New Orleans, LA, November 2018.

Luthra, S., & Magnuson, J. S. Friends in low-entropy places: Letter position influences orthographic neighbor effects in visual word identification. Cognitive Science Society, Madison, WI, July 2018.

Magnuson, J. S., Li, M. Y. C., You, H., **Luthra, S.**, & Steiner, R. J. Predictive processing in computational models of spoken word recognition. Workshop on Predictive Processing. Donostia-San Sebastián, Spain, June 2018.

Luthra, S., Fuhrmeister, P., Molfese, P. J., Guediche, S., Blumstein, S. E., & Myers, E. B. Brain-behavior relationships in implicit learning of non-native phonetic categories. Society for Neurobiology of Language. Baltimore, MD, November 2017.

Luthra, S., & Magnuson, J. S. Cumulative response probabilities: Estimating time course of lexical activation from single-point response times. Cognitive Science Society, London, UK, July 2017.

Luthra, S., Fuhrmeister, P., Guediche, S., Blumstein, S. E., & Myers, E. B. Neural correlates of task-irrelevant perceptual learning of non-native speech sounds. Psychonomic Society. Boston, MA, November 2016.

Luthra, S., Guediche, S., Blumstein, S. E., & Myers, E. B. Effects of phonetic category structure on brain activity during word recognition. Society for Neurobiology of Language. London, UK, August 2016.

Luthra, S., Fox, N. P., & Blumstein, S. E. Speaker information affects false recognition of unstudied lexical-semantic associates. Society for Neurobiology of Language. Chicago, IL, October 2015.

Myers, E. B., Theodore, R. M., & **Luthra, S.** Neural encoding of talker-specific phonetic variation. Society for Neurobiology of Language. Chicago, IL, October 2015.

Teaching Experience	<p>Instructor of Record PSYC 3500: Psychology of Language Fall 2019</p> <p>Guest Lectures PSYC 2501: Cognitive Psychology October 2017 SLHS 3247: Introduction to Phonetic Principles December 2016</p> <p>Community Presentations The Science of Language (Haynes Elementary School, MA) May 2020 Cognitive Neuroscience (Central High School, RI) February 2016</p> <p>Workshop Presentations Using fMRI for Cognitive Research (UConn “J-Term” Primers) January 2021 Data Visualization (UConn “J-Term” Primers) January 2020 Advanced Neuroimaging Techniques (UConn “J-Term” Primers) January 2019</p>
Invited Talks	<p>Spoken Language Interest Group, July 2018 Basque Centre for Cognition, Brain, & Language</p>
Outreach	<p>Editor-in-Chief, <i>Brain, Cognition, & Language Digest</i>, 2018-2019 Connecticut Institute for the Brain and Cognitive Sciences</p> <p>Team Member, Language Science for Everyone, February 2017 AAAS Family Science Days</p>
Service	<p>“J-Term” Committee for Neurobiology of Language (NBL) & 2016-present Science of Learning & Art of Communication (SLAC) programs</p> <p>Academic Committee for NBL/SLAC programs 2016-Present</p> <p>Events Committee for NBL/SLAC programs 2016-2018</p> <p>Student Organizer, Language & Cognition Brown Bag 2017-2019</p> <p>Student Organizer, NBL “Talk Shop” 2016-2017</p>
Ad Hoc Reviewer	<p><i>Attention, Perception, & Psychophysics; JASA Express Letters; Journal of Cognitive Psychology; Journal of Experimental Psychology: Learning, Memory and Cognition; Journal of Memory and Language; Journal of Neuroscience; PLOS ONE; Quarterly Journal of Experimental Psychology</i></p>
Professional Affiliations	<p>Cognitive Science Society Psychonomic Society Society for Neurobiology of Language National Public Radio “SciComms”</p>

Professional Skills

- fMRI/DTI**
AFNI/SUMA, FreeSurfer, Tracula, TORTOISE, SPM/Matlab
- TMS**
MagVenture system
- Eyetracking**
EyeLink system
- Acoustic analysis**
Praat, STRAIGHT
- Experiment programming**
Gorilla, E-Prime, JSPsych, PsychoPy, Psychtoolbox, Open Sesame
- Statistics**
R, SPSS

Languages

- English (native)
- Spanish (professional fluency)
- Hindi (intermediate skill)