



Elaine Xu, Ph.D.

Contact information.

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American Speech-Language and Hearing Association (ASHA) Certificate of Clinical Competence (CCC)

Type: Audiology (CCC-A)

Number 14413406

California Professional License

Type AUD

Number 3847

California Teaching Credentials

Not applicable

Additional Professional Licensure(s) and Credentials

Not applicable

Education

B.A.	Shanghai Jiao Tong University	2015 English
M.A.	Shanghai Jiao Tong University	2018 Linguistics
Ph.D.	The University of Texas at Austin	2023 Communication Sciences and Disorders

Major areas of research interests

Bimodal speech perception or simulated bimodal hearing in listeners who use cochlear implants and hearing aids using behavioral and neurophysiological methods, Aging effect on speech perception in adverse listening conditions in older adults.

Publications and papers completed.

Journals (Peer-reviewed):

Xu, C., & Liu, C. (2023). Auditory Models for Formant Frequency Discrimination of Vowel Sounds. *Information*, 14(8), 429. <https://doi.org/10.3390/info14080429>

Xu, C., Cheng, F. Y., Medina, S., Eng, E., Gifford, R., & Smith, S. (2023). Objective discrimination of bimodal speech using frequency following responses. *Hearing Research*, 437, 108853. <https://doi.org/10.1016/j.heares.2023.108853>

Cheng, F. Y., Xu, C., Gold, L., and Smith, S. B. (2021). Rapid enhancement of subcortical neural responses to sine-wave speech. *Frontiers in Neuroscience*, 15. <https://doi.org/10.3389/fnins.2021.747303>

Liu, C., Xu, C., Wang, Y., Xu, L., Zhang, H., and Yang, X. (2021). Aging effects on Mandarin Chinese vowel and tone identification in six-talker babble. *American Journal of Audiology*, 30(3), 616-630. https://doi.org/10.1044/2021_AJA-20-00139

Wang Y., Yang X., Ding, H., Xu, C., and Liu, C. (2021). Aging effects on categorical perception of Mandarin lexical tones in noise. *Journal of Speech, Language, and Hearing Research*, 64(4), 1376-1389. https://doi.org/10.1044/2020_JSLHR-20-00509

Xu, C., Yang, X., Wang, Y., Zhang, H., Ding, H., and Liu, C. (2018). Informational masking of six-talker babble on Mandarin Chinese vowel and tone identification: Comparison between native Chinese and Korean listeners. *Studies of Psychology and Behavior*, 16(1), 22-30. [in Chinese].

Wang Y., Yang X., Zhang, H., Xu, L., Xu, C., and Liu, C. (2017). Aging effect on categorical perception of Mandarin tones 2 and 3 and thresholds of pitch contour discrimination. *American Journal of Audiology*, 26(1), 18-26. https://doi.org/10.1044/2016_AJA-16-0020

ang X., Wang Y., Xu, L., Zhang, H., Xu, C., and Liu, C. (2015). Aging effect on Mandarin Chinese vowel and tone identification. *Journal of the*

Acoustical Society of America, 138(4), EL411-EL416. <https://doi.org/10.1121/1.4933234>

Conference Proceedings (Peer-reviewed):

Xu, C., Cheng, F. Y., Eng, E., Medina, S., and Smith, S. (2023). Frequency following responses to simulated bimodal speech: Acoustic bandwidth effects. *Proceedings of Meetings on Acoustics*, 45(1). <https://doi.org/10.1121/2.0001703>

Xu, C., Ding, H., and Liu, C. (2017). Mandarin speech recognition in babble for Chinese- and Korean-native listeners. *Proceedings of 46th International Congress and Exposition on Noise Control Engineering (Internoise 2017)*, 4669-4674.

Presentations completed.

Mandikal Vasuki, P. R., Xu, C., Levy, S., Merks, I., Fitz, K., and Dundas, D. (Apr. 2023). Streaming in a Café: What Directly Drives Speech Intelligibility? Podium presentation at American Academy of Audiology (AAA) 2023, Seattle, WA.

Eng, E., Xu, C., Medina, S., Cheng, F. Y., Gifford, R. and Smith, S. (Dec. 2022). Objective discrimination of bimodal speech using the frequency following response: A machine learning approach. Podium presentation at the 183rd Meeting of the Acoustical Society of America, Nashville, TN.

Mandikal Vasuki, P. R., Xu, C., Levy, S., Merks, I., Fitz, K., and Dundas, D. (Aug. 2022). What a difference an aid makes - explaining speech intelligibility differences during streaming. Poster presentation at the 2022 International Hearing Aid Research Conference (IHCON), Tahoe City, CA.

Cheng, F. Y., Xu, C., Gold, L., and Smith, S. B. (Feb. 2022). Auditory perceptual shifts from non-speech to speech enhance subcortical auditory processing. Podium presentation at the 2022 MidWinter Meeting of the Association for Research in Otolaryngology (ARO), San Jose, CA.

Xu, C., Cheng, F. Y., Medina, S., and Smith, S. B. (Nov. 2021). Acoustic bandwidth effects on envelope following responses to simulated bimodal hearing. Podium presentation at the 181st Meeting of the Acoustical Society of America.

Cheng, F. Y., Xu, C., Goodall, H., Ornelas, M., Gold, L., and Smith, S. B. (Nov. 2021). Attention effects on cortical neural processing in spatial listening. Poster presentation at the 181st Meeting of the Acoustical Society of America.

Xu, C., Ding, H., Wang, Y., and Liu, C. (Nov. 2019). The effect of aging on Mandarin speech recognition in multi-talker babble. Poster presentation at 2019 Aging and Speech Communication Research Conference, Tampa, FL.

Xu, C., Li, M., Liu, C., and Tao, S. (May 2019). Temporal structures of English and Mandarin running speech. Poster presentation at the 177th Meeting of the Acoustical Society of America, Louisville, KY.

Li, M., Xu, C., Liu, C., and Tao, S. (May 2019). Formant discrimination of speech and non-speech sounds in temporally modulated noise: Effect of language experience. Poster presentation at the 177th Meeting of the Acoustical Society of America, Louisville, KY.

Xu, C., Wang, Y., Yang, X., and Liu, C. (Nov. 2018). Aging effects on categorical perception of Mandarin tones in noise. Poster presentation at the 176th Meeting of the Acoustical Society of America, Victoria, BC, Canada.

Xu, C., Zhang, H., Wang, Y., and Ding, H. (Nov. 2016). Informational masking of six-talker babble on Mandarin Chinese vowel and tone identification: Comparison between native Chinese and Korean listeners. Poster presentation at the 172nd Meeting of the Acoustical Society of America, Honolulu, Hawaii.

Zhang, H., Xu, L., Xu, C., Yang, X., and Ding, H. (Nov. 2016). Vowel and tone identification of Mandarin Chinese: Comparison between native Chinese and Korean listeners. Poster presentation at the 172nd Meeting of the Acoustical Society of America, Honolulu, Hawaii.

Grants submitted.

Not applicable/ Information not provided.

Grants awarded.

Not applicable/ Information not provided.

Activities related to clinical service delivery.

Not applicable/ Information not provided.

Clinical supervision experience

Not applicable/ Information not provided.

Professional development experiences

Reviewer for American Journal of Audiology (2021 & 2022)

Facilitators for Health Interprofessional Practice and Education Days at UT Austin (2022 & 2023)

Mentor for Intellectual Entrepreneurship Pre-Graduate School Internship Program at UT Austin (2020)

Membership:

Acoustical Society of America (2019 – present)

Student Academy of Audiology (UT Austin)

Professionally related service activities

Reviewer:

Research Enhanced Support Grant (RESG) Program at California State University, Sacramento (2023)

Journal Speech, Language, and Hearing Research (2023)

American Journal of Audiology (2021 & 2022)

Membership:

American Speech-Language-Hearing Association

American Academy of Audiology

California Academy of Audiology

Community Partnerships/Community Outreach

Special Olympics Hearing Screening, Austin, Texas (February 2022)

Buckner Villas Nursing Home Outreach, Austin, Texas (September 2019 to December 2019)

Preschool speech, language, and hearing screening, Austin, Texas (2019-2020)

Service on Departmental, College and University committees.

University Committees:

Faculty Senate's faculty representative (At-Large member) on the Research and Creative Activity Awards Committee (Fall 2023 - Spring 2025)

Department of Communication Sciences and Disorders Committees:

Department Curriculum Committee
Department Scholarship Committee
Department Affirmative Action/ Equal Opportunity Committee
Doctor of Audiology Program Doctoral Project Committee
Doctor of Audiology Program Comprehensive Exam Committee
Doctor of Audiology Program Admissions and Issues
Doctor of Audiology Program Accreditation Committee – ACAE
Doctor of Audiology Program Accreditation Committee – CAA

Academic/Professional Honors and Recognition

Graduate School Continuing Fellowship (AY 2022-2023), UT Austin, Awarded \$46,000 2022

Graduate School Fellowship, UT Austin, Awarded \$6000 2020

Professional Development Award, UT Austin, Awarded \$600 Fall 2019

Professional Development Award, UT Austin, Awarded \$650 Spring 2019

Courses taught at Sacramento State

CSAD 610. Introduction to Clinic.^A
Fall 2023

CSAD 643. Tinnitus.^A
Fall 2023

CSAD 720. Clinical Methods: Externship II.^A
Fall 2023

^{BS} Courses taught in the Communication Sciences and Disorders Bachelor of Science program.

^{2B} Courses taught in the Communication Sciences and Disorders Second Bachelor program (CSAD2B)

^{MS} Courses taught in the Communication Sciences and Disorders Master of Science program.

^A Courses taught in the Communication Sciences and Disorders Doctor of Audiology program.

^{SL} Courses taught in the Communication Sciences and Disorders Summer SLPA program.