# Fan-Yin Cheng

Hearing Function Lab • TexAN Lab

Department of Speech, Language, and Hearing Sciences, University of Texas at Austin
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## **EDUCATION**

- University of Texas-Austin (UT-Austin), TX, United States

Aug. 2017 - Present

- Doctor of Philosophy in Speech, Language, and Hearing Sciences
- University of Colorado-Boulder (CUB), CO, United States

Aug. 2016 - May 2017 (Unearned)

- Doctor of Philosophy in Speech, Language, and Hearing Sciences
- University of Colorado-Boulder, CO, United States

Aug. 2014 - May 2016

- Master of Arts in Speech, Language, and Hearing Sciences Research
- Thesis Title: Cross-linguistic Semantic Priming Effects in English Language Learners
- Committee: Pui Fong Kan, Bhuvana Narasimhan, and Christina Meyers
- National Cheng Kung University (NCKU), Tainan, Taiwan

Sep. 2009 - June 2014

- Bachelor of Arts in Foreign Languages and Literature
- National Cheng Kung University, Tainan, Taiwan

Jan. 2009 - June 2014

- Certificate program in Teaching Chinese to Speakers of Other Languages (20 credits and 18 hours of internship)

## RESEARCH EXPERIENCE

- Graduate Research Assistant, Texas Auditory Neuroscience (TexAN) Lab, UT-Austin

June 2020 - Present

- Organizing database and analyzing data for Spencer Smith, Ph.D, Au.D
- Reviewing the literature about spatial listening, and the efferent neural mechanisms effects on periphery
- Creating the experiments protocols
- Managing the lab website
- Research Assistant, Child Language and Learning Lab, CUB

May 2015 - July 2016

- Organizing database and analyzing data for Pui Fong Kan, Ph.D, CCC-Slp
- Training new research assistants in the lab
- Collaborating with the RAs in San Francisco
- Managing the lab website
- Research Assistant, Language, Development, and Cognition Lab, CUB

Feb. 2015 - June 2015

- Collecting data for Bhuvana Narasimhan, Ph.D
- Producing Stimuli for chapter "The Influence of Visual, Auditory, and Linguistic Cues On Children's Novel Verb Generalization"
- Research Assistant, Prof. Li-Mei Chen's Research Lab, NCKU, Taiwan

**July 2011 - June 2014** 

- Collecting data from 3 to 6-year-old mandarin-speaking subjects every 3 months for Li-Mei Chen, Ph.D
- Providing direct assistance by recording procedure and assessment tools organization
- Designing the software "TCSIM" (Mandarin version of TOCS+) with assistance from Prof. Megan Hodge's team at University of Alberta
- Transcribing data into IPA symbols and analyzing  $F_1$  and  $F_2$  of vowels in TF32
- Preparing publication drafts in consonants, tones, and vowels
- Training the members in the lab
- Collaborating with Prof. D. Kimbrough Oller's team at the University of Memphis in examining the acoustic analysis software LIPP
- Organizing annotated bibliography about Mandarin-speaking children with Cerebral Palsy

## **CLINICAL EXPERIENCE**

- Graduate Clinician, Dell Children's Medical Center (Ascension), TX
- June 2021- August 2021 (\*\*\*hours)
- Preceptor: Michelle Hsieh Pho, Au.D., Ph.D., CCC-A, and Madison Loffler, Au.D., CCC-A, FAAA
- Conducting behavioral audiometry (including VRA, CPA) for children
- Conducting sedated and non-sedated Auditory Brainstem Response (ABRs) testing, and Dostortion product otoa-coustic emissions (DPOAEs).
- Conducting Ototoxicity monitorying and inpatient bedside hearing screening
- Graduate Clinician, Austin Ear, Nose & Throat (ENT) Clinic- Central , TX

  January 2021- May 2021 (263hours)
  - Preceptor: Deepa Suneel, Au.D, and Elaine Leatherwood, M.A., CCC-A, FAAA
  - Conducting diagnostic audiometry for children and adults
  - Conducting comprehensive hearing aid services
  - Assessing vestibular system with Vestibular Nystagmography (VNG)
  - Conducting electrophysiologic testing, including neurodiagnostic Auditory Brainstem Response (ABRs), Electro-cochleography (ECochGs), Vestibular Evoked Myogenic Potential (VEMPs)
- Graduate Clinician, Austin Regional Clinic-Round Rock, TX

**August 2020- December 2020 (217.7hours)** 

- Preceptor: Angel F. De La Cruz, Au.D, FAAA
- Conducting comprehensive diagnostic hearing evaluation for children and adults
- Conducting hearing aids consultation, fitting, and follow-up meetings
- Graduate Clinician, University of Tesxas Speech and Hearing Center, TX June 2020- August 2020 (117.5 hours)
  - Preceptors: Amanda Zappler, Au.D, CCC-A and Sangeeta C. Kamdar, Ph.D, Au.D, CCC-A
  - Evaluating comprehensive audiometry virtually via SimuCase, AudsimFlex, and Virtual Audiometer (VAS)
  - Conducting summer camp Crew at the Zoo for school-age children (age around six to eight years old)
  - Conducting four week virtually aural rehabilitation
  - Conducting hearing conservation programs with college-age students
- **Graduate Clinician**, University of Tesxas Speech and Hearing Center, TX March 2020- May 2020 (59 hours)
  - Preceptors: Amanda Zappler, Au.D, CCC-A, Sangeeta C. Kamdar, Ph.D, Au.D, CCC-A, and Levi Young, Au.D, CCC-A
  - Conducting four weeks virtually aural rehabilitation
  - Fitting and programming hearing aids
- Graduate Clinician, Austin ENT Clinic-Dr. James Kamper's Office, TX February 2020- March 2020 (47.5 hours)
  - Preceptor: Jessica DeLaRosa, Au.D, CCC-A
  - Evaluating basic audiogram and tympanometry for children and adults
  - Assessing vestibular system with VNG and Computerized Dynamic Posturography (CDP)
- Graduate Clinician, University of Tesxas Speech and Hearing Center, TX January 2019-January 2020 (158.3 hours)
  - Preceptors: Amanda Zappler, Au.D, CCC-A and Craig A. Champlin, Ph.D, Au.D, CCC-A
  - Evaluating comprehensive audiological evaluation for adults
  - Providing hearing aids to adults with limited income through the Sertoma Hearing Aid Recycling Program (SHARP)
  - Counseling for geriatric patients regarding hearing loss, amplification use and communication strategies
  - Completing preschool screening rotation with assessing speech, language, and hearing of preschoolers
  - Measuring objective results to adults with Otoacoustic Emission (OAE), Automatic Auditory Brainstem Response (AABR), neurological ABR, tone burst ABR, click ABR, complex ABR (cABR), Auditory Steady State response (ASSR)
- Observation, University of Colorado Hospital, CO

**July 2016** 

- Observing Kathleen Zaccaro, MA, CCC-A and Donna Malsam, Ph.D, Au.D, CCC-A in Adult diagnostic
- Observing Shannon Elam, Ph.D, Au.D, CCC-A in Pediatric amplification/cochlear implants

## TEACHING EXPERIENCE

- Assistant Instructor, UT-Austin, Austin, TX
  - Fall, 2021; Spring, 2021; Fall, 2020 SLH 158L Anatomy and Physiology of the Speech and Hearing Mechanisms Lab
- Teaching Assistant, UT-Austin, Austin, TX

- Fall, 2021; Spring, 2021; Fall, 2020 SLH 358 Anatomy and Physiology of the Speech and Hearing Mechanisms
- Sping, 2020; \*Fall, 2019; \*Spring 2019; \*Fall, 2018 CSD 358 Anatomy and Physiology of the Speech and Hearing Mechanisms
  - \* Presented three lectures on speech acoustics with the guidance and feedback of Dr. Lester-Smith
- Sping, 2020; Fall, 2019; Spring 2019 SLH 158L Anatomy and Physiology of the Speech and Hearing Mechanisms
- Spring 2019 CSD 378 Principles of Aural Rehabilitation

## **HONOR**

- The 6th MEKTEC CUP Creative Competition, NCKU

Nov. 2010

- In Humanity and Social Sciences section: Award for Excellent

## SCHOLARSHIP AND FELLOWSHIP

- Graduate School Summer Fellowship, Graduate School, UT-Austin

May. 2021

- Total Award: \$7500

- Roderick P. Hart Student Achievement Award, Moody College of Communication, UT-Austin

May. 2021

- Total Award: \$1000

- Graduate School Fellowship, Graduate School, UT-Austin

Sep. 2020

- Total Award: \$5000

- Graduate School Fellowship, Graduate School, UT-Austin

Sep. 2019

- Total Award: \$5000

- Professional Development Award, Graduate School, UT-Austin

Dec. 2019

- Total Award: \$500

- Graduate School Fellowship, Graduate School, UT-Austin

Sep. 2018

- Total Award: \$5000

- Graduate School Meritorious Award, Department of Communication Scienes, and Disorders, UT-Austin Sep. 2017

- Stipend: \$20000 - Tuition: \$9328

- Medical Health Insurance: \$2185

- Provost Fellowship, Department of Communication Scienes, and Disorders, UT-Austin

Sep. 2017

- Total Award: \$5000

- Department Travel Funding, Department of Speech, Language, and Hearing Sciences, CUB

Nov. 2016

- Total Award: \$700

- Department Fellowship, Department of Speech, Language, and Hearing Sciences, CUB

May 2016

- Total Award: \$6,000

- Department Research Funding, Department of Speech, Language, and Hearing Sciences, CUB

Nov. 2015

- Total Award: \$772

## **PUBLICATIONS**

- Cheng, F.-Y., Xu, C., Gold, L., & Smith, S. (submitted). Rapid enhancement of subcortical neural responses to sine-wave speech.
- Cheng, F.-Y., & Smith, S. (submitted). Comparing two statistical methods for objectively detecting speech frequency following responses (sffr).
- Cheng, F.-Y., Campbell, J., & Liu, C. (submitted). Auditory sensory gating: Effects of noise.
- Cheng, F.-Y., & Champlin, C. A. (2021). Auditory brainstem responses to successive sounds: Effects of gap duration and depth. Audiology Research, 11(1), 38-46.

- Narasimhan, B., Cheng, F.-Y., Davidson, P., Kan, P. F., & Wagner, M. (2017a). The influence of visual, auditory, and linguistic cues on children's novel verb generalization. In G. Sengupta, S. Sircar, G. Raman, & R. Balusu (Eds.), *Perspectives on the architecture and acquisition of syntax (pp. 217-233)*. Springer, Singapore.
- Chen, L.-M., Cheng, F.-Y., & Hsu, W. C. (2013). Longitudinal changes of formant values and vowel space in two mandarin-speaking children before 9 years of age. *Proceedings of Meetings on Acoustics*, 19(1).
- Hsu, W. C., Chen, L.-m., & Cheng, F.-Y.. (2013). Acoustic vowel space and speech rate in mandarin-speaking children with cerebral palsy. *Proceedings of Meetings on Acoustics*, 19(1).
- Chen, L.-M., Cheng, F.-Y., & Ni, H.-C. (2013). Speech rate and speech intelligibility in children with cerebral pals. *Proceedings of* 2012 *Language and Language Teaching Conference*, 42-47.

## **PRESENTATIONS**

- Cheng, F.-Y., Campbell, J., & Liu, C. (2020). Auditory sensory gating: Effects of noise. In *Cognitive neuroscience society* 2020. Virtual Meeting.
- Cheng, F.-Y., So, W., & Champlin, C. A. (2019). Auditory brainstem responses to successive sounds: Effects of gap duration and depth. *The Journal of the Acoustical Society of America*, 146(4), 2831-2831.
- So, W., Cheng, F.-Y., & Champlin, C. A. (2019). Effects of interaural phase on the frequency following response. *The Journal of the Acoustical Society of America*, 146(4), 2832-2832.
- Narasimhan, B., Cheng, F.-Y., Davidson, P., Kan, P. F., & Wagner, M. (2017b). Multimodal cues in children's verb learning. In *Linguistic society of america annual winter meeting* 2017. Austin, TX.
- Cheng, F.-Y., & Kan, P. F. (2016). Crosslinguistic semantic priming effects in english-language learners. In *Annual conference of the american speech, language, and hearing association*. Philadelphia, PA.
- Simon-Cereijido, G., Kan, P. F., Cheng, F.-Y., & Wyatt, K. (2016). Learning grammatical morphemes in L2-english: A comparison between L1-spanish and L1-cantonese children. In *National research conference on early childhood*. Washington D.C.
- Cheng, F.-Y., Kan, P. F., & Yamashita, J. (2015). Cross-linguistic priming in mandarin-english bilingual speakers. In *Annual conference of the american speech, language, and hearing association*. Denver, CO.
- Cheng, F.-Y., & Ni, H.-C. (2012). Phonological features in 4 to 6-year-old mandarin-speaking children. In *International conference on languages, literatures, and cultures*. Taichung, Taiwan.

## TRAINING AND CERTIFICATES

- Collaborative Institutional Training Initiative (CITI), CUB

Nov. 2014

- Training Program of IRB and Graduate Institute of Clinical Medicine, NCKU, Taiwan

March 2013

## **SKILLS**

- Language: Mandarin (Native), English (Fluent), Japanese (Intermediate), American Sign Language (Basic)
- **Computer Skills**: Matlab, Audacity, Praat (an acoustic analitical software), E-prime, SALT, TF32, LIPP, TOCS+ (a children's speech test), Filemaker pro
- Statistical Software: SPSS, Matlab, R

## **VOLUNTEER EXPERIENCE**

- Volunteer, Conference of 2011 EAST-WEST: Deterritorialization, Negotiation, Glocalization

May 2011

- Hold by the International Association for Philosophy and Literature and NCKU
- Translator, 2010 Spring International Education Expo, Kaohsiung, Taiwan

March 2010

- Hold by OH! Study Education Consulting Center
- **Volunteer**, Conference of 2010 Culture as Creativity and Business:

Re-examining the Entanglement of symbol, Capital, and Power

March 2010

- Hold by Cultural Studies Association and NCKU

## LEADERSHIP AND ARTS EXPERIENCE

- Drama Director and Performer, Department of Foreign Language and Literature, NCKU Dec. 2011 May 2013
  - Directed the graduation drama of Foreign Language and Literature Department Japanese section
  - Performed the main character Shimitsu Atsuko in Japanese section
- Public Relations Planner, Department of Foreign Language and Literature, NCKU Oct. 2011 April 2013
  - Arranged the 28<sup>th</sup> English Singing Contest of NCKU for about 100 teams Directed the graduation drama of Foreign Language and Literature Department Japanese section
  - Scheduled activities, and served as the liaison between staff and attendees
- Life Counselor, Summer Camp of Foreign Language and Literature Department, NCKU Jan. 2011 July 2011
  - Collaborated with President and other coordinators to train staff
  - Arranged activities of the 8<sup>th</sup> FLLD camp of NCKU
  - Budget management
  - Scheduled activities, and served as the liaison between staff and attendees
- Scriptwriter and Performer, Ping-Fong Acting Troupe

Sep. 2009 - Jan. 2010

- Wrote one of the scripts for the performance supervised by Ping-Fong acting troupe
- Performed the character Ya-Fen Liang in drama Losing control