

GARRET LYNN KURTEFF

Curriculum Vitae

kurteff [at] utexas [dot] edu

Pronouns: they / them

CURRENT POSITION

PhD candidate (ABD) at the University of Texas at Austin, department of Speech, Language & Hearing Sciences

RESEARCH INTERESTS

- Neurobiology of speech perception & production
- Neural substrates of speech motor control
- Reorganization of language after stroke & surgical intervention
- Brain-to-text decoding, brain-computer interfaces

CLINICAL INTERESTS

- Neurogenic communication disorders: aphasia & apraxia of speech
- Head & neck cancer, dysphagia
- Gender-affirming voice therapy

EDUCATION

Ph.D. in Speech, Language & Hearing Sciences

University of Texas at Austin

Aug. 2018 - Present

Austin, TX

- Mentor: Liberty Hamilton
- Other committee members: Jun Wang, Rosemary Lester-Smith, Maya Henry, Stephanie Riès
- Expected graduation: Spring 2024

M.S. in Speech, Language & Hearing Sciences

University of Texas at Austin

Aug. 2018 - Dec. 2020

Austin, TX

- Mentors: Liberty Hamilton, Rosemary Lester-Smith
- Thesis: Modulation of Neural Responses to Naturalistic Speech Production and Perception

B.A. in Linguistics and Psychology

University of California, Berkeley

Dec. 2015

Berkeley, CA

- Mentors: Keith Johnson, Lev Michael, Joseph Campos

PEER-REVIEWED JOURNAL ARTICLES & PREPRINTS

All listed preprints submitted to peer-reviewed journals

1. **Kurteff, G.L.**, Lester-Smith, R.A., Martinez, A., Currens, N., Holder, J., Villarreal, C., Mercado, V.R., Truong, C., Huber, C., Pokharel, P., & Hamilton, L.S. (2023). *Speaker-induced suppression in EEG during a naturalistic reading and listening task*. Journal of Cognitive Neuroscience. doi:10.1162/jocn.a.02037
2. Levy, D.F., Silva, A.B., Scott, T., Liu, J., Harper, S., Zhao, L., Hullett, P., **Kurteff, G.**, Andrews, J., Wilson, S.M., Leonard, M., & Chang, E.F. (2023). *Apraxia of speech with phonological alexia and agraphia following resection of the left middle precentral gyrus*. Journal of Neurosurgery: Case Lessons. doi:10.3171/case22504
3. Zhao, L., Silva, A.B., **Kurteff, G.L.**, & Chang, E.F. (2023) *Inhibitory control of speech production in the human premotor frontal cortex*. bioRxiv. doi:10.1101/2023.03.01.530698
4. Ammanuel, S., Almeida, N.C., **Kurteff, G.**, Kakaizada, S., Molinaro, A., Berger, M.S., Chang, E.F., & Hervey-Jumper, S.L. (2021). *Natural language assessment correlates with health-related quality of life in adult glioma patients*. Journal of Neuro-Oncology. doi:10.1093/neuonc/noaa215.575
5. Chang, E.F., **Kurteff, G.**, Andrews, J., Briggs, R.G., Conner, A.K., Battiste, J.D., & Sughrue, M.E. (2020). *Pure apraxia of speech after focal surgical resection of area 55b in dorsal premotor cortex*. Neurosurgery. doi:10.1093/neuros/nyaa002
6. De Witte, E., Piai, V., **Kurteff, G.**, Cai, R., Mariën, P., Dronkers, N., Chang, E.F., & Berger, M.S. (2018). *A valid alternative for in-person language assessments in brain tumor patients: Feasibility and validity measures of the new TeleLanguage test*. Neuro-Oncology Practice. doi:10.1093/nop/npy020
7. Chang, E.F., **Kurteff, G.**, & Wilson, S.M. (2018). *Selective interference with syntactic encoding during sentence production by direct electrocortical stimulation of the inferior frontal gyrus*. Journal of Cognitive Neuroscience. doi:10.1162/jocn.a.01215

JOURNAL ARTICLES SUBMITTED/IN PREPARATION

1. **Kurteff, G.L.**, & Hamilton, L.S. (in prep). *Stereo EEG mapping of sensorimotor responses to self-generated speech*.

CONFERENCE PRESENTATIONS

1. Hamilton, L.S., Asghar, S., Desai, M., **Kurteff, G.L.**, Field, A., Nussbaum, N.L., Clarke, D., Tyler-Kabara, E.C., Anderson, A., & Weiner, H.L. (2023). *Utilizing Clinical Intracranial Epilepsy Monitoring Infrastructure for Basic Science Research of Speech and Language Development*. Poster session presented at the Annual Meeting of the Child Neurology Society, Vancouver, BC, Canada.
2. **Kurteff, G.**, & Hamilton, L.S. (2022). *Stereo EEG mapping of sensorimotor responses to self-generated speech*. Poster session presented at the Annual Meeting of the Texas Speech-Language Hearing Association, Fort Worth, TX; Association for Research in Otolaryngology, virtual meeting due to COVID-19.
3. Cheng, C., Young, N., Teplansky, K., **Kurteff, G.**, Salman, R., Mau, T., & Wang, J. (2022). *Fricative production in laryngeal, electrolaryngeal, and tracheoesophageal speech*. Poster session presented at the biannual meeting of the Conference on Motor Speech, Charleston, SC.
4. **Kurteff, G.**, & Hamilton, L.S. (2021). *Encoding of phonological features in intracranial recordings of human speech cortex during a dual perception-production task*. Poster session presented at the Annual Meeting of Advances and Perspectives in Auditory Neuroscience, virtual meeting due to COVID-19.

5. **Kurteff, G.**, Martinez, A., Currens, N., Holder, J., Mercado, V., Truong, C., Huber, C., Pokharel, P., & Hamilton, L.S. (2020a; 2021b). *Methods for Investigating Continuous Speech Production and Perception with EEG*. Poster session presented at a. the Annual Meeting of the Society for Neurobiology of Language; b. Texas Speech-Language Hearing Association, virtual meetings due to COVID-19.
6. **Kurteff, G.**, Fox, N.P., Dronkers, N.F., Desai, M., Shafi, A., & Chang, E.F. (2019). *Behavioral and neuroanatomical description of stimulation-induced speech arrest*. Poster session presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA.
7. Chang, E.F., **Kurteff, G.**, & Wilson, S.M. (2017). *Selective interference with syntactic encoding during sentence production by direct electrocortical stimulation of the inferior frontal gyrus*. Poster session presented at the Annual Meeting of the Society for the Neurobiology of Language, Baltimore, MD, USA.
8. De Witte, E., Piai, V., **Kurteff, G.**, Cai, R., Berger, M.S., Chang, E.F., & Dronkers, N. (2016). *Usability and validity of a phone battery to assess language functions in brain tumor patients undergoing awake surgery*. Poster session presented at the Annual Meeting of the Academy of Aphasia, Llandudno, Wales; UK and Society of Neurooncology, Scottsdale, AZ, USA.

THESES AND DISSERTATIONS

1. **Kurteff, G.** (2020). *Modulation of neural responses to naturalistic speech production and perception*. UT Electronic Theses and Dissertations. doi:10.26153/tsw/14461

RESEARCH EXPERIENCE

UT Austin Department of Communication Sciences & Disorders

Aug. 2018 - Present

Graduate Research Assistant

Austin, TX

- Principal Investigator: Liberty Hamilton
- Researching neural representation of language via electrocorticography (ECoG) and other electrophysiological methods (sEEG, EEG, EMG)
- Rotation with Jun Wang Fall 2021
- Candidacy reached Spring 2023

UCSF Department of Neurological Surgery

Aug. 2016 - Aug. 2018

Research Specialist

San Francisco, CA

- Principal Investigator: Edward F. Chang
- Performed research on aphasia found in postoperative neurosurgical patients
- Collected data using various aphasia batteries, in addition to helping develop aphasia batteries
- Performed intraoperative awake language mapping

UC Berkeley Department of Linguistics

Aug. 2015 - Dec. 2015

Undergraduate Researcher

Berkeley, CA

- Principal Investigator: Sarah Bakst
- Aided graduate student Sarah Bakst with her dissertation on coarticulation and individual variation of coda /r/ and /l/
- Used Praat alongside knowledge of phonetics to align text grids with participant data
- Wrote a Python scripts to extract ultrasound images based on target phoneme's position

UC Berkeley Department of Linguistics

Jan. 2015 - May 2015

Undergraduate Researcher

Berkeley, CA

- Principal Investigator: Dr. Lev Michael
- Worked in Dr. Lev Michael's lab on documentation and morphological description of Matsigenka, an Arawakan language
- Collaborated with Dr. Lev Michael directly in novel glossing of semantically complex morphemes
- Used FLEx to write and maintain a digital corpus of Matsigenka

Golden Bear Sleep & Mood Research Clinic

Jul. 2014 - Aug. 2015

Research Assistant & Morning Supervisor

Berkeley, CA

- Principal Investigator: Dr. Allison Harvey
- Worked in Dr. Allison Harvey's lab, assessing early-morning wakefulness in teenagers with sleep disorders caused by late-night technology usage via cognitive-behavioral tasks
- Distributed flyers to recruit test subjects
- Morning Supervisor (November 2014 - August 2015): trained new research assistants to collect data and oversaw morning experiments

CLINICAL EXPERIENCE

Ascension Seton

May 2021 - Aug. 2021

Speech-Language Pathology Externship

Austin, TX

- Supervisor: Elizabeth Otterbein, MS, CCC-SLP
- Treated adult clients in a mixture of inpatient and outpatient hospital settings
- Inpatient treatment focused on bedside swallow examinations, modified barium swallow studies, and dysphagia treatment
- Outpatient treatment focused on management of tracheoesophageal voice prostheses in people with total laryngectomies, voice and lymphedema therapy for survivors of head and neck cancer, modified barium swallow studies, cognitive-linguistic therapy, and gender-affirming voice therapy.

All Care Therapies

Jun. 2020 - Aug. 2020

Speech-Language Pathology Externship

Georgetown, TX

- Supervisors: Holly Mouton, MS, CCC-SLP; Lynzy Melzer, MA, CCC-SLP
- Treated pediatric and adult clients in a private practice setting
- Treatment focused on early language, articulation and phonological disorders, and autism spectrum disorders

Round Rock ISD

Jan. 2020 - May 2020

Speech-Language Pathology Externship

Round Rock, TX

- Supervisors: Vanessa Baca, MA, CCC-SLP; Jeanette Fields, MA, CCC-SLP
- Student externship at Stony Point High School
- Delivered speech-language pathology services to special education students with autism spectrum disorders, cognitive deficits, and developmental disorders
- Services focused on social communication, receptive and expressive language through AAC, fluency, articulation, and joint attention

UT Austin

Jan. 2019 - Dec. 2019

Graduate Student Clinician

Austin, TX

- Supervisors: Nickole Hines-Staples, MA, CCC-SLP, BIES; Jessica H. Franco, PhD, CCC-SLP, BCBA-D; Kristy Armer, M.S., CCC-SLP
- Hines-Staples rotation: Performed evaluation and treatment for children with expressive language, phonological, and articulation disorders at the UT Speech and Hearing Clinic (UTSHC)

- Franco rotation: Treated adults with Autism Spectrum Disorder and Down syndrome in a group setting as part of UTSHC's "Convo Club;" evaluated children with phonological disorders
- Armer rotation: Performed evaluation and treatment for varying adult populations, including Autism Spectrum Disorder and aphasia

UT Austin

Aug. 2018 - Present

Graduate Student (List of Relevant Coursework)

Austin, TX

- Acquired Cognitive Communication Disorders I, II (Maya Henry, Stephanie Grasso)
- Anatomy & Physiology of the Auditory System (Liberty Hamilton)
- Developmental Language Disorders (Mary Beth Schmitt)
- Dysphagia (Corinne Jones)
- Fluency Disorders (independent study, Courtney Byrd)
- Human Language Processing (Zenzi Griffin)
- Inferential Statistics (Alexander Etz)
- Neural Networks and Linguistic Structure (Kyle Mahowald)
- Neurolinguistics (Fernando Llanos-Lucas)
- Speech Perception (Chang Liu)

UCSF Department of Neurological Surgery

Aug. 2016 - Aug. 2018

Assistant Specialist

San Francisco, CA

- Performed aphasia evaluations using WAB, BNT, and QAB (Quick Aphasia Battery) in presurgical and postsurgical patients
- Worked with team of neurologists and neurosurgeons to intraoperatively map language in the brain using nonstandardized language assessments and electrocortical stimulation
- Collected data to help develop new aphasia assessments (QAB, TeleLanguage)

In-Home Supportive Services

Sep. 2013 - Jan. 2015

Personal Care Attendant

Berkeley, CA

- Provided assistance for a student with tetraplegia including homemaking, physical therapy, and hygienics

TEACHING EXPERIENCE

UT Austin

Aug. 2021 - Dec. 2021

Assistant Instructor

Austin, TX

- Served as primary instructor for "Language and the Brain"
- Designed all course materials and led lectures for class of ~70 students
- Supervised two TAs

UT Austin

Aug. 2019 - Dec. 2020

Teaching Assistant

Austin, TX

- TA for "Language and the Brain," taught by Dr. Liberty Hamilton
- Guest lectures lead: "Introduction to EEG," "Cortical Stimulation Mapping"
- Semesters TAing: Fall 2019, Fall 2020

UC Berkeley DeCal Program

Sep. 2013 - Jan. 2015

Student Instructor

Berkeley, CA

- With three other student instructors, instructed a two unit course at UC Berkeley, "Intro to 3D Modeling" for three semesters
- Taught fundamentals of 3D modeling and 3D printing in Autodesk CAD software

ACADEMIC AND COMMUNITY SERVICE

Out in Science, Technology, Engineering, and Mathematics (oSTEM) May 2022 - Present
Member *Austin, TX*

- Member of an on-campus chapter of an organization for LGBTQ+ students in STEM
- Discussed my experience as a queer PhD student with undergraduates/recent graduate members considering graduate school

Neuroscience Undergraduate Reading Program (NURP) Aug. 2020 - Dec. 2020
Mentor *Austin, TX*

- Mentored student who conducted original research on an EEG dataset through student organization in the Department of Neuroscience
- Project title: “Do speech errors affect EEG activity in naturalistic perception and production?”

brainWaves Podcast Jul. 2019 - Present
Co-Host *Austin, TX*

- Co-host of “brainWaves” podcast with Maansi Desai, fellow graduate student at UT
- Podcast topics include auditory neuroscience, communication disorders, and how to effectively communicate science to the general public as a researcher
- Prominent researchers from the fields of auditory neuroscience and communication sciences and disorders are invited as guests onto the podcast to communicate their research in a fashion suitable for the general public

Yellow Bike Project Mar. 2019 - Mar. 2020
Volunteer Mechanic *Austin, TX*

- Repairing donated bicycles for a local nonprofit bicycle cooperative

Society for Linguistics Undergraduate Students (SLUGS) Jan. 2014 - Dec. 2015
Member & President *Berkeley, CA*

- Discussed undergraduate and graduate research on campus
- Created community for Linguistics undergraduates at UC Berkeley
- Coordinated talks for the club from various guest speakers within the discipline of linguistics
- Served as club president from May 2015 to December 2015
- Returned as an alumnus to give presentations on my current research (April 2017)

3D Modeling Club (3DMC) Mar. 2013 - Jan. 2015
Founding Member *Berkeley, CA*

- Helped to create UC Berkeley’s first 3D modeling and printing club
- Expanded club by hosting weekly meetings and teaching a student-taught course through the university’s “DeCal” program
- Secured funding for club-owned 3D printing equipment

HONORS AND AWARDS

- William Orr Dingwall Foundation Dissertation Fellowship in the Cognitive, Clinical, and Neural Foundations of Language recipient, Fall 2023 - Spring 2024
- UT Austin Graduate School Fellowship recipient, Summer 2023 (declined)
- Texas Speech-Language-Hearing Foundation, President’s Research Endowment Fund recipient, Spring 2023

- Cold Spring Harbor Laboratory Regeneron Scholarship recipient, Genetics & Neurobiology of Language course, Summer 2022
- TSHA 2022 Audiology Research Symposium award winner, Winter 2022
- TSHA 2021 Audiology Research Symposium award winner, Spring 2021
- UT Austin Moody Doctoral Fellowship recipient, Fall 2019 - Spring 2022
- UT Austin Provost Fellowship recipient, Fall 2018 & Summer 2019
- UC Berkeley Dean's Honors, Spring 2015 & Fall 2015