G. LYNN KURTEFF

Curriculum Vitae

kurteff [at] utexas [dot] edu

Pronouns: they / them / theirs

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
· Speech motor control and auditory feedback processing
· 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 Aug. 2018 - Jun. 2024
University of Texas at Austin *Austin, TX*

· Mentor: Liberty Hamilton
· Other committee members: Jun Wang, Rosemary Lester-Smith, Maya Henry, Stephanie Riès
· Expected graduation: June 2024
· Dissertation: *Cortical Suppression of Auditory Feedback during Speech Production and Perception*

M.S. in Speech, Language & Hearing Sciences Aug. 2018 - Dec. 2020
University of Texas at Austin *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 Dec. 2015
University of California, Berkeley *Berkeley, CA*

· Mentors: Keith Johnson, Lev Michael, Joseph Campos

HONORS AND AWARDS

- UT Austin CARE Research Day, Best Poster award, Spring 2024, $50
- Texas Speech-Language-Hearing Foundation, International travel grant, Spring 2024, $1,700
- William Orr Dingwall Foundation Dissertation Fellowship in the Cognitive, Clinical, and Neural Foundations of Language recipient, Fall 2023 - Spring 2024, $40,000
- UT Austin Graduate School Fellowship recipient, Summer 2023 (declined), $10,672
- Texas Speech-Language-Hearing Foundation, President's Research Endowment Fund recipient, Spring 2023, $1,375
- Cold Spring Harbor Laboratory Regeneron Scholarship recipient, Genetics & Neurobiology of Language course, Summer 2022, $1,750
- TSHA 2022 Audiology Research Symposium award winner, Winter 2022, $250
- TSHA 2021 Audiology Research Symposium award winner, Spring 2021, $250
- UT Austin Moody Doctoral Fellowship recipient, Fall 2019 - Spring 2022, $5,000
- UT Austin Provost Fellowship recipient, Fall 2018 & Summer 2019, $5,000
- UC Berkeley Dean's Honors, Spring 2015 & Fall 2015

PEER-REVIEWED JOURNAL ARTICLES

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. 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

4. 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

5. 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 validiy measures of the new TeleLanguage test.* Neuro-Oncology Practice. doi:10.193/nop/npy020

6. 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 & PREPRINTS

All listed preprints submitted to peer-reviewed journals

1. **Kurteff, G.L.**, Tyler-Kabara, E.C., Clarke, D., Weiner, H.L., Anderson, A.E., Watrous, A., Asghar, S., Field, A., & Hamilton, L.S. (in prep). *Processing of Auditory Feedback in Perisylvian and Insular Cortex.*

2. 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

CONFERENCE PRESENTATIONS

1. **Kurteff, G.L.**, Tyler-Kabara, E.C., Clarke, D., Weiner, H.L., Anderson, A.E., Watrous, A., Asghar, S., Field, A., & Hamilton, L.S. (2024). *Intracranial EEG Processing of Auditory Feedback in Perisylvian Cortex.* Poster session presented at the Annual Meeting of the Cognitive Neuroscience Society, Toronto, ON, Canada.

2. 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.

3. **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.

4. 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.

5. **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.

6. **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.

7. **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 Cogntive Neuroscience Society, San Francisco, CA, USA.

8. 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.

9. 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.L.** (in prep). *Cortical Suppression of Auditory Feedback during Speech Production and Perception.*

2. **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 Speech, Language, and Hearing Sciences   Aug. 2018 - Present
Hamilton Lab - 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

UCSF Department of Neurological Surgery Aug. 2016 - Aug. 2018
Chang Lab - Research Specialist *San Francisco, CA*

- Principal Investigator: Edward F. Chang
- Performed research on recovery from aphasia in postoperative neurosurgical patients
- 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 research
- Transcribed/aligned phonetic information in Praat
- Wrote Python scripts to extract ultrasound images of participants' articulation

UC Berkeley Department of Linguistics Jan. 2015 - May 2015
Undergraduate Researcher *Berkeley, CA*

- Principal Investigator: Dr. Lev Michael
- Used FLEx to create and maintain a digital corpus of Matsigenka, an Arawakan language
- Glossed semantically complex morphemes

Golden Bear Sleep & Mood Research Clinic Jul. 2014 - Aug. 2015
Research Assistant & Morning Supervisor *Berkeley, CA*

- Principal Investigator: Dr. Allison Harvey
- Administered cognitive-behavioral tasks to assess early-morning wakefulness in teenagers with sleep disorders
- Recruited test subjects via flyering
- Trained other RAs to collect data and oversaw morning experiments

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 and supervised two TAs

UT Austin Aug. 2019 - Dec. 2020
Teaching Assistant *Austin, TX*

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

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

CLINICAL EXPERIENCE

Ascension Seton
Speech-Language Pathology Externship

May 2021 - Aug. 2021

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 laryngectomees, 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
Speech-Language Pathology Externship

Jun. 2020 - Aug. 2020

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
Speech-Language Pathology Externship

Jan. 2020 - May 2020

Round Rock, TX

· Supervisors: Vanessa Baca, MA, CCC-SLP; Jeanette Fields, MA, CCC-SLP
· Delivered speech-language pathology services to special education students at Stony Point High School 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
Graduate Student Clinician

Jan. 2019 - Dec. 2019

Austin, TX

· Rotation with Nickole Hines-Staples, MA, CCC-SLP, BIES: Evaluation and treatment of children with expressive language, phonological, and articulation disorders at the UT Speech and Hearing Clinic (UTSHC)
· Rotation with Jessica H. Franco, PhD, CCC-SLP, BCBA-D: 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
· Rotation with Kristy Armer, M.S., CCC-SLP: Evaluation and treatment of varying adult populations, including Autism Spectrum Disorder and aphasia

UCSF Department of Neurological Surgery
Assistant Specialist

Aug. 2016 - Aug. 2018

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)

ACADEMIC AND COMMUNITY SERVICE

Out in Science, Technology, Engineering, and Mathematics (oSTEM)
Member

May 2022 - Present

Austin, TX

· Member of an on-campus chapter of an organization for LGBT+ students in STEM

· Discussed my experience as a trans 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

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

· 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 invited speaker/alumnus to discuss my Chang Lab research (April 2017)

RESEARCH SKILLS

· Data collection: EEG, ECoG, sEEG, fMRI, EMG, cortical stimulation, clinical speech and language assessment
· Analysis techniques: Event-related potential, neural time series extraction, encoding/decoding models, mixed-effects modeling, voxel-based lesion symptom mapping, stereotactic electrode localization, corpus analysis
· Programming languages: Python, MATLAB, R, Swift (C)
· Miscellaneous software: Praat, FreeSurfer, FLEx, XCode, LaTeX