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<https://www.researchgate.net/profile/Chenhao-Chiu>

Education

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| PhD | Linguistics | 2008 – 2015 (degree conferred in February 2016)
University of British Columbia
Dissertation title: <i>Startling Auditory Stimulus as a Window into Speech Motor Planning</i>
Advisor: Dr. Bryan Gick |
| MA | Linguistics | 2005
National Chung Cheng University, Taiwan
Thesis title: <i>Phonological Words in Mandarin Speech Production</i>
Advisor: Dr. James Myers |
| BA | Land Economics | 2002
National Chengchi University, Taiwan |

Professional experience

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|-------------------|---------------------|---|
| 2016/08 – | Assistant Professor | Graduate Institute of Linguistics, National Taiwan University |
| 2016/07 – 2016/07 | Post-doc fellow | Institute of Linguistics, the Academia Sinica |
| 2014/02 – 2016/06 | Lecturer | Department of English Instruction, National Hsinchu University of Education |

Journal Articles

- Chiu, C.** (*submitted*). The role of duration in speech plans: An investigation on musically trained and untrained participants in response to startling auditory stimulus. *Journal of the Acoustical Society of America*.
- Chiu, C.** (*submitted*). Attention paid to perceptual cues in sibilant identification by Taiwan Mandarin listeners. *Folia Linguistica*.
- Chiu, C.**, Wei, G., Noguchi, M., and Yamane, N. (*in preparation*) Uncovering sibilant fricatives in Taiwan Mandarin: An investigation of tongue postures using ultrasound images. *Journal of the Acoustical Society of America - Express Letters*.

- Chiu, C.** (*in preparation*). The preparation and execution of pitch height by musically trained and untrained participants. *Journal of the Acoustical Society of America*.
- Sun, J. T.-S., Tian, Q., and **Chiu, C.** (2017). 上東谷霍爾語的發聲態對立 Contrastive phonation in upper Donggu Horpa. *Journal of Chinese Linguistics*, 45(1), 1 – 19. [SSCI](#); [A&HCI](#)
- Evans, J. P., Sun, J. T.-S., **Chiu, C.**, and Liou, M. (2016). Uvularization approximation as an articulatory vowel feature. *Journal of the International Phonetic Association*, 46(1), 1 – 31. [SSCI](#); [A&HCI](#)
- Chiu, C.** and Gick, B. (2014a). Pitch planning in English and Taiwanese Mandarin: Evidence from startle-elicited responses. *Journal of Acoustical Society of America-Express Letters*, 136(4): EL322 – 328. [SSCI](#); [A&HCI](#)
- Chiu, C.** and Gick, B. (2014b). Startling speech: Eliciting prepared speech using startling auditory stimulus. *Frontiers in Psychology – Cognitive Science*, 5: 1082, DOI: 10.3389/fpsyg.2014.01082. [SSCI](#); [A&HCI](#)
- Stevenson, A. J., **Chiu, C.**, Maslovat, D., Chua, R., Gick, B., Blouin, J.-S., and Franks, I. M. (2014). Cortical Involvement in the StartReact effect. *Neuroscience*, 269: 21 – 34. [SSCI](#); [A&HCI](#)
- Gick, B., Anderson, P., Chen, H., **Chiu, C.**, Kwon, H. B., Stavness, I., Tsou, L., and Fels, S. (2014). Speech function of the oropharyngeal isthmus: A modeling study. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, 2(4), 217 – 222. DOI: 10.1080/21681163.2013.851627

Proceeding papers and abstracts

- Chiu, C.** (2018). The association between electroglottograph amplitude and pitch contour in Taiwan Mandarin tone production. *The Proceedings of 1st Hanyang International Symposium on Phonetics and Cognitive Sciences of Language*, 1, 108 – 109.
- Chiu, C.** (2017). Absolute pitch height as part of speech plans: Evidence from response to auditory startle. *The Journal of the Acoustical Society of America*, 141, 3818.
- Gick, B., **Chiu, C.**, Roewer-Despres, F., Schellenberg, M., and Stavness, I. (2016). Articulatory setting as global coarticulation: Simulation, acoustics, and perception. In *The Journal of the Acoustical Society of America*, 140(4), 3221 – 3222.
- Chiu, C.** and Gick, B. (2015). Startle-induced evidence for multi-dimensional information in speech plans. In *Canadian Acoustics*, 43(3), 110 – 111.
- Noguchi, M., **Chiu, C.**, Wei, P.- C., and Yamane, N. (2015). Contrastive tongue shapes of the three sibilant fricatives in Taiwan Mandarin read speech. In *Canadian Acoustics*, 43(3), 112 – 113.
- Chiu, C.** and Gick, B. (2015). Decoupling functional units in speech production using auditory startle. In *Proceedings of the 18th International Congress of Phonetic Sciences (ICPhS)*.
- Chiu, C.** and Gick, B. (2013). Producing whole speech events: Anticipatory lip compression

- in bilabial stops. *Journal of the Acoustical Society of America - Proceedings of Meetings on Acoustics*, 19, pp. 060252 (abstract also appears in *Journal of the Acoustical Society of America*, 133(5): 3604).
- Gick, B., Stavness, I. and **Chiu, C.** (2013). Coarticulation in a whole event model of speech production. *Journal of the Acoustical Society of America - Proceedings of Meetings on Acoustics*, 19, pp. 060207 (abstract also appears in *Journal of the Acoustical Society of America*, 133(5): 3569).
- Gick, B., Francis, N., **Chiu, C.**, Stavness, I. and Fels, S. (2012). Producing whole speech events: Differential facial stiffness across the labial stops. *The Journal of the Acoustical Society of America*, 13(4), 3345.
- Gick, B., Stavness, I., **Chiu, C.** and Fels, S. (2011). Categorical variation in lip posture is determined by quantal biomechanical-articulatory relations. *Canadian Acoustics*, 39(3): 178 – 179.
- Chiu, C.** and Babel, M. (2010). Effects of syllable positions on Taiwanese Mandarin sibilant perception. In *Proceedings of the International Symposium on Chinese Spoken Language Processing (ISCSLP 2010)*. (p.60 – 64).
- Chiu, C.** (2010). Attentional weighting of Polish and Taiwanese Mandarin sibilant perception. In *Proceedings of the 2010 Canadian Linguistics Association Annual Conference*. Available at homes.chass.utoronto.ca/~cla-acl/actes2010/CLA2010-Chiu.pdf
- Chiu, C.** (2009). Acoustic and auditory comparisons of Polish and Taiwanese Mandarin sibilants. *Canadian Acoustics*, 37(3): 142 –143.
- Chiu, C.** (2006). Phonological words in language production in Mandarin. In *Proceedings of the 31st Annual Meeting of Berkeley Linguistics Society (BLS 31st)*. (p. 61 – 72).
- Tseng, M. and **Chiu, C.** (2004). Simultaneous compounds in Taiwan sign language. In *Proceedings of 8th Annual Language, Linguistics, and Language Graduate Student Conference*. (p. 123 – 138).

Presented posters

- Chiu, C.** (2018). The association between electroglottograph amplitude and pitch contour in Taiwan Mandarin tone production. *The 1st Hanyang International Symposium on Phonetics and Cognitive Sciences of Language (HISPhonCog 2018)*. May 18 – 19, Seoul, Korea.
- Chiu, C.** and Vondiziano, G. (2017). Duration of syllable production may not be part of speech plans: Evidence from response to auditory startle. *The 11th International Conference on Cognitive Science*. September 1 – 3, 2017, Taipei, Taiwan.
- Chiu, C.** (2017). Absolute pitch height as part of speech plans: Evidence from response to auditory startle. *The 173rd Meeting of the Acoustical Society of America*. June 25 – 29, 2017, Boston, MA, USA.
- Huang, H.-C., Lu, L., **Chiu, C.**, Lee, C.-L., and Wu, Y.-T. (2017). Relationship between Motor Skills and Language Abilities in Toddlers with Autism Spectrum Disorder. *The*

- 19th Annual Meeting of Taiwanese Society of Child and Adolescent Psychiatry*. June 10, 2017, Taipei, Taiwan.
- Gick, B., **Chiu, C.**, and Stavness, I. (2016). Embodied dynamics: A unified approach to local, non-local and global coarticulation. *Laboratory Phonology*. July 14 – 16, 2016, Ithaca, NY, USA.
- Noguchi, M., **Chiu, C.**, Wei, P.- C., and Yamane, N. (2015). Uncovering sibilant fricative merger in Taiwan Mandarin: Evidence from ultrasound images and acoustics. *The 89th Annual Meeting of the Linguistic Society of America*. January 8 – 11, 2015, Portland, OR, USA.
- Chiu, C.**, and Gick, B. (2014). Using auditory startle to uncover pitch and formants in speech planning. *Phonetic Building Blocks of Speech in Honour of John Esling*. September 18 – 20, 2014, Victoria, BC, Canada.
- Chiu, C.**, and Gick, B. (2013). Producing whole speech events: Anticipatory lip compression in bilabial stops. *The 21st International Congress on Acoustics*. June 2 – 7, 2013, Montréal, QC, Canada.
- Gick, B., Stavness, I., and **Chiu, C.** (2013). Coarticulation in a whole event model of speech production. *The 21st International Congress on Acoustics*, June 2 – 7, 2013, Montréal, QC, Canada.
- Chiu, C.**, Stevenson, A. J., Maslovat, D., Chua, R., Gick, B., and Franks, I. M. (2011). CV syllables as pre-planned units of action. *The 11th International Seminar on Speech Production*, June 20 – 23, 2011, Montréal, QC, Canada.
- Chiu, C.**, Stevenson, A. J., Maslovat, D., Chua, R., Gick, B., and Franks, I. M. (2011). Feed-forward control of phonetic gestures in CV syllables: Evidence from responses to auditory startle. *The 161st Meeting of the Acoustical Society of America*, May 23 – 27, 2011, Seattle, WA, USA.
- Chiu, C.**, Gick, B., and Fels, S. (2010). Towards a dynamic biomechanical model of the face for speech production. *Biomedical Engineering Workshop*, Nov. 24, 2010, University of British Columbia, Vancouver, BC, Canada.

Grants

2017 – 2019	<i>Phonetic details in Taiwan Mandarin syllable production (II)</i> , Ministry of Science and Technology (MOST 106-2410-H-002-122)	NT\$677,000
2017	新進教師專題研究計劃案補助 (New Faculty Research Grant), National Taiwan University	NT\$239,000
2016 – 2018	<i>Phonetic details in Taiwan Mandarin syllable production</i> , Ministry of Science and Technology (MOST 105-2410-H-002-230)	NT\$911,000

Awards, Fellowships, and honors

2008 – 2015	International Tuition Award
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	(UNIVERSITY OF BRITISH COLUMBIA)
2009 – 2012	University Four Year Fellowships for Graduate Students (UNIVERSITY OF BRITISH COLUMBIA)
2011	University Graduate Student Travel Fund (UNIVERSITY OF BRITISH COLUMBIA)
2009	St. John's College Li Pai Lin Memorial Graduate Scholarship (ST. JOHN'S COLLEGE AT UNIVERSITY OF BRITISH COLUMBIA)
2009	Student Travel Subsidy for the 2009 Annual Conference of the Canadian Acoustical Association (CANADIAN ACOUSTICAL ASSOCIATION)
2008	Faculty of Arts Graduate Award (UNIVERSITY OF BRITISH COLUMBIA)
2007	Grantee of Fulbright Study Grants for doctoral level studies in the U.S. (Fulbright scholarship) – <i>DECLINED</i>
2005	Grantee of Grants for Doctoral and Master Students for Short-term Training Overseas or Participation in International Conferences (THE CHIANG CHING-KUO FOUNDATION FOR INTERNATIONAL SCHOLARLY EXCHANGE)
2002	Graduate-Class Representative of the Department of Land Economics (NATIONAL CHENGCHI UNIVERSITY)

Professional Service

Reviewer:

<i>Journals</i>	<ul style="list-style-type: none"> – Journal of the International Phonetic Association – Journal of Phonetics – Transactions on Audio, Speech and Language Processing – Brain and Language – Journal of Chinese Language Teaching
<i>Grant agencies</i>	<ul style="list-style-type: none"> – MOST (Ministry of Science and Technology, Taiwan) – Division Leibniz Competition, Leibniz Association

Master thesis committee:

2018 HUNG, Kuo-Hsuan (2018). *The Neural Network Model Integrating Brain and Speech Model for Chinese Syllables*. NATIONAL CENTRAL UNIVERSITY.

LUNG, Chi-Yang (2018) *Formant Reconstruction under Sudden Pitch Raise in Singing: A Case in Untrained Singers*. NATIONAL CHIAO TUNG UNIVERSITY.

KUO, Chien-min (2018) *Mandarin Speakers' Perception of English Stress and Pure Tone: An Investigation on the F0, Duration and Amplitude*. NATIONAL TAIWAN NORMAL UNIVERSITY.

Professional Affiliation

2017 – present	Linguistic Society of Taiwan
2017 – present	International Phonetic Association
2009 – present	Acoustical Society of America

Guest lectures/Invited talks

2018	NATIONAL CENTRAL UNIVERSITY	Dept. of Electrical Engineering: “Recent perspectives and approaches of speech sciences: How do we perceive and plan our speech?”
2018	NATIONAL TAIWAN NORMAL UNIVERSITY	Dept. of Chinese as a Second Language: “Phonetic details in speech planning: An investigation using auditory startle”
2017	NATIONAL CHUNG CHENG UNIVERSITY	Graduate Institute of Linguistics: “Prepared units of action in articulation: An investigation using auditory startle”
2017	MINISTRY OF SCIENCE AND TECHNOLOGY	A.I. and Linguistics Seminar: “Phonetics and A.I. applications”
2017	NATIONAL TAIWAN UNIVERSITY	Dept. of Mechanical Engineering: “Linguistics: where social sciences meet natural sciences”
2017	NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY	Dept. of Applied English: “Linguistics: where social sciences meet natural sciences”
2016	NATIONAL TAIWAN UNIVERSITY	LING7014: “Speech motor planning”
2015	UNIVERSITY OF BRITISH COLUMBIA	LING 314: “Using auditory startle to reveal the details of speech planning”
2014	UNIVERSITY OF BRITISH COLUMBIA	LING 314: “What auditory startle tells us about speech planning”
2013	NATIONAL CHIAO TUNG UNIVERSITY	DFL2221: “The application of ultrasound in speech science”
2011	UNIVERSITY OF BRITISH COLUMBIA	LING 316: “Speech motor program”
2009	UNIVERSITY OF BRITISH COLUMBIA	LING 100: “Language and the Brain Functions”

Teaching experience

2014 – 2016	LECTURER	National HsinChu University of Education, Hsinchu, Taiwan
2013	TEACHING ASSISTANT	University of British Columbia (LING 100: INTRODUCTION TO LINGUISTICS)
2012	TEACHING ASSISTANT	University of British Columbia (LING 316: INTRODUCTION TO PHONETICS AND SPEECH SCIENCE) University of British Columbia (LING 101: LANGUAGES OF THE WORLD)
2011	TEACHING ASSISTANT	University of British Columbia (LING 101: LANGUAGES OF THE WORLD)
2009 – 2010	TEACHING ASSISTANT	University of British Columbia (LING 100: INTRODUCTION TO LINGUISTICS)
2007 – 2008	LECTURER LECTURER	St. John’s University, Taipei, Taiwan Hsing Wu College, Taipei, Taiwan

Fields of Interest/research

- Articulatory phonetics
- Laboratory phonology
- Psycholinguistics
- Speech motor control
- Computational modelling
- Cognitive science

Computer skills

Experiment delivery	<ul style="list-style-type: none"> • E-prime • Psychopy • DMDX 	<ul style="list-style-type: none"> • Paradigm • LabView
Experiment device	<ul style="list-style-type: none"> • Ultrasound • OptoTrak 	<ul style="list-style-type: none"> • Electromyography (EMG) • Electroglottography (EGG)
Multi-media analysis	<ul style="list-style-type: none"> • Praat • ELAN • Goldwave 	<ul style="list-style-type: none"> • Audacity • EdgeTrak • ImageJ
Statistics	<ul style="list-style-type: none"> • R • Statistica 	<ul style="list-style-type: none"> • SPSS • Statview
Modelling	<ul style="list-style-type: none"> • Artisynt 	
Editorial programs	<ul style="list-style-type: none"> • L^AT_EX 	<ul style="list-style-type: none"> • Microsoft Office

Language abilities

Native: Taiwan Mandarin, Taiwanese (Taiwan Southern Min)

Fluent: English

Beginner: Taiwan Sign Language (TSL), French, Korean