

# THEA KNOWLES

PhD, CCC-SLP

*Last updated: November 5, 2022*

Oyer Speech & Hearing Building, room 205  
1026 Red Cedar Rd.  
Department of Communicative Sciences & Disorders  
Michigan State University  
East Lansing, MI 48824

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🌐 CASA Lab: casa-lab.com

## EMPLOYMENT

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<b>Assistant Professor</b> (tenure system) <b>Director of Clinical Applications of Speech Acoustics Laboratory</b> Communicative Sciences & Disorders Michigan State University East Lansing, MI	Fall 2022 - present
<b>Assistant Professor</b> (tenure system) <b>Director of Clinical Applications of Speech Acoustics Laboratory</b> Communicative Disorders & Sciences University at Buffalo Buffalo, NY	2019 - Summer 2022

## EDUCATION

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<b>Western University, London, ON</b> PhD, Speech & Language Sciences Health & Rehabilitation Sciences	2014 - 2019
<b>Western University, London, ON</b> MClSc, Speech-Language Pathology Communication Sciences & Disorders (combined MClSc/PhD)	2014 - 2019
<b>McGill University, Montréal, QC</b> B.A. Honours, Linguistics First Class Honours, Distinction	2008 - 2012

## GRANT AND FUNDING ACTIVITY

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### *Research*

<b>ASH Foundation New Investigators Research Grant</b> <i>American Speech-Language-Hearing Foundation</i> · Value: \$10,000; Role: PI	2021
<b>ASHA Advancing Academic-Research Careers Award</b> <i>American Speech-Language-Hearing Association</i> · Value: \$5,000	2021
<b>Ontario Graduate Scholarship</b> <i>Province of Ontario Graduate Scholarship Program</i> · Value: \$15,000 CAD annually	2017, 2018

- Competitive (merit-based) scholarship

### Graduate Student Research Program Award

2017

*Parkinson Society Southwestern Ontario*

- Value: \$20,000 CAD
- Competitive

### *Clinical*

### Parkinson Voice Project SPEAK OUT!® and LOUD Crowd® Grant

2020, 2021

- Value: Supports continuation of the SPEAK OUT!® and LOUD Crowd® programs at the University at Buffalo Speech, Language, and Hearing Clinic, including Parkinson Voice Project consultation, access to graduate student training, clinic resources, and opportunity to receive monetary funding to support LOUD Crowd® groups in 2020 & 2021
- Role: Lead Speech-language pathologist

## PUBLICATIONS

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### *Journal Articles*

† denotes a student author

12. **Knowles, T.** & Badh, G.† (accepted). The impact of face masks on speech acoustics in Parkinson's disease: Effect of clear and loud speech styles. *Journal of Speech, Language, and Hearing Research*.
11. **Knowles, T.**, Badh, G.† (2022). The impact of face masks on spectral acoustics of speech: Effect of clear and loud speech styles. *J. Acoust. Soc. Am.*, 11. DOI: 10.1121/10.0011400
10. Badh, G.† **Knowles, T.** (2022). Acoustic and perceptual impact of face masks on speech: A scoping review. OSF Preprints. <https://doi.org/10.31219/osf.io/fpsu2>
9. Aveni, K.† Ahmed, J., Borovsky, A., McRae, K., Jenkins, M., Sprengel, K., Fraser, J.A., Orange, J.B., **Knowles, T.**, & Roberts, A. (Accepted). Predictive language comprehension in Parkinson's disease. *PLOS ONE*.
8. **Knowles, T.**, Adams, S. G., & Jog, M. (2021). Speech rate mediated vowel and stop voicing distinctiveness in Parkinson's disease. *Journal of Speech, Language, and Hearing Research*, 64(11), 4096-4123. DOI: 10.1044/2021\_JSLHR-21-00160
7. **Knowles, T.**, Adams, S. G., & Jog, M. (2021). Variation in speech intelligibility ratings as a function of speech rate modification in Parkinson's disease. *Journal of Speech, Language, and Hearing Research*, 64(6), 1773-1793. DOI: 10.1044/2021\_JSLHR-20-00593
6. **Knowles, T.**, Adams, S. G., Page, A., Cushnie-Sparrow, D., & Jog, M. (2020). A comparison of speech amplification and personal communication devices for hypophonia. *Journal of Speech, Language, and Hearing Research*, 63(8), 2695-2712. DOI: 10.1044/2020\_JSLHR-20-00085
5. Adams, S., Kumar, N., Rizek, P., Hong, A., Zhang, J., Abeyesekera, A., Mancinelli, C., **Knowles, T.**, & Jog, M. (2020). Efficacy and acceptance of a Lombard-response device for hypophonia in Parkinson's disease. *The Canadian Journal of Neurological Sciences*, 47(5), 634-641. DOI: 10.1017/cjn.2020.90
4. Sonderegger, M., Stuart-Smith, J., **Knowles, T.**, Macdonald, R., & Rathcke, T. (2020). Structured heterogeneity in Scottish stops over the twentieth century. *Language*, 96(1), 94-125. DOI: 10.1353/lan.2020.0003

3. Abeyesekera, A., Adams, S., Mancinelli, C., **Knowles, T.**, Gilmore, G., Delrobaei, M., Jog, M. (2019). Effects of deep brain stimulation of the subthalamic nucleus settings on voice quality, intensity, and prosody in Parkinson’s disease: preliminary evidence for speech optimization. *Canadian Journal of Neurological Sciences*, 46(3), 287-294. DOI: 10.1017/cjn.2019.16
2. **Knowles, T.**, Clayards, M., & Sonderegger, M. (2018). Examining factors influencing the viability of automatic acoustic analysis of child speech. *Journal of Speech, Language, and Hearing Research*, 61(10), 2487-2501. DOI: 10.1044/2018\_JSLHR-S-17-0275.
1. **Knowles, T.**, Adams, S., Abeyesekera, A., Mancinelli, C., Gilmore, G., & Jog, M. (2018). Deep brain stimulation of the subthalamic nucleus parameter optimization for vowel acoustics and speech intelligibility in Parkinson’s disease. *Journal of Speech, Language, and Hearing Research*, 61(3), 510-524. DOI: 10.1044/2017\_JSLHR-S-17-0157.

### *Proceedings & Working Papers*

5. Cushnie-Sparrow, D., Adams, S.G., **Knowles, T.**, Leszcz, T.M., Jog, M. (2016). Effects of multi-talker noise on the acoustics of voiceless stop consonants in Parkinson’s disease. *Western Papers in Linguistics*.
4. **Knowles, T.**, Clayards, M., Sonderegger, M., Wagner, M., Nadig, A., & Onishi, K. (2015). Automatic forced alignment on child speech: Directions for improvement. *Proceedings of Meetings on Acoustics*. DOI: 10.1121/2.0000125.
3. Clayards, M. & **Knowles, T.** (2015). Prominence enhances voicelessness and not place distinction in English voiceless sibilants. *Proceedings of the 18th International Congress of Phonetic Sciences*. Glasgow, UK: the University of Glasgow.
2. Little, C. & **Knowles, T.** (2012). Didja know? A comparative study of affrication across word boundaries in Canadian and American English. *Strathy Student Working Papers on Canadian English*.
1. Cheng, J. & **Knowles, T.** (2012). Mandarin VP-Shell: Not as hard as you think. *McGill Cellar Door 1*, 4-20.

### MANUSCRIPTS

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Page, A., Schroeder, J. R.†, **Knowles, T.**, Jog, M., & Adams, S. (in revision). A comparison of voice amplifiers and personal communication systems for hypophonia: An exploration of communicative participation.

Cline, N.† & **Knowles, T.** (in prep). The impact of face masks on speech intelligibility and listener effort in Parkinson’s disease: Effect of clear and loud speech styles.

**Knowles, T.**, Cline, N.† & Parsa, V. (in prep). Controlled effects of face masks and shields on spectral acoustics, speech intelligibility, and listening effort.

Hassanpour, A.† **Knowles, T.**, & Parsa, V. (in prep). Impact of masks on automatic speech recognition algorithm performance in noise.

**Knowles, T.**, Adams, S.G., & Jog, M. (in prep). Voice acoustics along a modified speech rate continuum in Parkinson’s disease.

### PUBLICLY AVAILABLE CODE

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Keshet, J., Sonderegger, M., & **Knowles, T.** (2014). AutoVOT, v. 0.94.

- A software package for automatic measurement of voice onset time (VOT), using the algorithm described in Sonderegger & Keshet (2012).

- I maintain the README and the Praat plugin.

**Knowles, T.** (unpublished). Publicly available Praat scripts.

- <https://github.com/thealk/PraatScripts>
- Includes Visual Analog Scale administration tool, interactive tutorials, and various scripts designed to facilitate speech analysis.

## PRESENTATIONS

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### *Invited presentations*

6. Speights Atkins, M., Holt, Y., **Knowles, T.**, Cychosz, M. Best Practices for Scientific Data Collection, Management, and Analysis: Session 1, Select and Collect. American Speech-Language-Hearing Association (ASHA) Convention. New Orleans, LA. 11/2022. *1 hour seminar*
5. Speights Atkins, M., Holt, Y.,
4. **Knowles, T.**, Cychosz, M. Best Practices for Scientific Data Collection, Management, and Analysis: Session 2, Analyze and Apply. American Speech-Language-Hearing Association (ASHA) Convention. New Orleans, LA. 11/2022. *1 hour seminar*
3. **Knowles, T.** Speech amplification devices for hypophonia. SLP 625: Special Topics. Buffalo State University of New York, Buffalo, NY. 3/2021.
2. **Knowles, T.** Speech acoustic adjustments along a speech rate continuum in Parkinson's disease. Rehabilitation Science Seminar. University at Buffalo, Buffalo, NY. 3/2020.
1. **Knowles, T.**, Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. A comparison of speech amplification and personal communication devices for individuals with Parkinson's disease. Communicative Disorders & Sciences Research Colloquium. University at Buffalo, Buffalo, NY. 4/2018.

### *Refereed conference presentations*

*First author = presenter unless otherwise noted.*

28. **Knowles, T.**, Gates, K.† Mach, H., Higginbotham, J., Holder, T.† Speech Amplification Device Usage for Parkinson's disease: A Survey of Speech-Language Pathologists. American Speech-Language-Hearing Association (ASHA) Convention. New Orleans, LA. *poster presentation; presented by Kelly Gates.*
27. Cline, N.† **Knowles, T.**, Badh, G.† Impact of Face Masks on Speech Intelligibility in Parkinson's Disease: Clear and Loud Speech Strategies. American Speech-Language-Hearing Association (ASHA) Convention. New Orleans, LA. *poster presentation.*
26. Page, A., Schroeder, J. R.† **Knowles, T.**, Jog, M., Adams, S. A Comparison of Speech Amplification and Personal Communication Devices for Hypophonia: Exploring Communicative Participation. American Speech-Language-Hearing Association (ASHA) Convention. New Orleans, LA. *poster presentation; awarded ASHA Meritorious Poster Submission.*
25. **Knowles, T.**, & Badh, G. The impact of face masks on speech acoustics in Parkinson's disease: Effect of clear and loud speech styles. 05/2022. Acoustical Society of America. Denver, CO. *poster presentation.*
24. **Knowles, T.**, & Parsa, V. Controlled effects of face masks and shields on spectral acoustics, speech intelligibility, and listening effort. 02/2022. Motor Speech Conference. Charleston, SC. *poster presentation.*
23. **Knowles, T.**, Badh, G. The impact of face masks on spectral acoustics of speech: Effect of clear and loud speech styles. 02/2022. Motor Speech Conference. Charleston, SC. *poster presentation.*

22. Hassanpour, A., Knowles, T., & Parsa, V. Impact of masks on automatic speech recognition algorithm performance in noise. 01/2022. Speech in Noise Workshop (Virtual).
21. **Knowles, T.**, Adams, S., & Jog, M. Speech intelligibility in Parkinson’s disease as a function of speech rate and task. 06/2021. International Clinical Phonetics and Linguistics Association Conference (Virtual). *poster presentation*.
20. **Knowles, T.**, Adams, S., & Jog, M. Stop voicing contrasts in Parkinson’s: Effect of modified speaking rate in connected speech. Boston Speech Motor Control Symposium. (Virtual) 06/2021. *poster presentation*.
19. Aveni, K., Ahmed, J., Borovsky, A., McRae, K., Jenkins, M., Sprengel, K., Fraser, J.A., Orange, J.B., **Knowles, T.**, Roberts, A. Predictive language comprehension in Parkinson’s disease. [Virtual poster]. Psychonomics Annual Meeting, Austin TX (Virtual), United States. 11/2020. *poster presentation*.
18. **Knowles, T.**, Adams, S., & Jog, M. VOT voicing distinction is robust along a speech rate continuum in dysarthria. Laboratory Phonology, Virtual, 07/2020. *poster presentation*.
17. **Knowles, T.**, Adams, S., & Jog, M. Acoustic changes along a modified speech rate continuum in Parkinson’s disease. Motor Speech Conference. Santa Barbara, CA. 02/2020. *poster presentation*.
16. **Knowles, T.**, Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. Evaluating the efficacy of speech amplification and personal communication devices in Parkinson’s disease. American Speech-Language-Hearing Association (ASHA) Convention. Boston, MA. 11/2018. *poster presentation*.
15. **Knowles, T.**, Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. A comparison of voice amplification devices in Parkinson’s disease.
  - American Speech-Language-Hearing Association (ASHA) CONNECT Conference. Baltimore, MD. 7/2018 (new data presented). *poster presentation*.
  - Speech-Language Pathology and Audiology Canada (SAC) Conference. Edmonton, AB. 5/2018. *poster presentation*.
14. Mancinelli, C., Adams, S.G., Abeyesekera, A., **Knowles, T.**, Delrobaei, M., & Jog, M. Deep brain stimulation parameter optimization for rate of speech in Parkinson’s disease. American Speech-Language-Hearing Association Convention. Philadelphia, PA. 11/2016. *poster presentation*.
13. **Knowles, T.**, Adams, S.G., Abeyesekera, A., Mancinelli, C., & Jog, M. Deep brain stimulation parameter optimization for speech intelligibility and vowel acoustics in Parkinson’s disease. International Clinical Phonetics and Linguistics Association Conference, Halifax, NS. 6/2016. *oral presentation*.
12. Abeyesekera, A., Adams, S.G., **Knowles, T.**, Mancinelli, C., Delrobaei, M., & Jog, M. Deep brain stimulation and speech in Parkinson’s disease: Effects of stimulator settings and electrode contact positions. Southern Ontario Neuroscience Association, Waterloo, ON. 5/2016. *poster presentation*.
11. **Knowles, T.**, Adams, S.G., Abeyesekera, A., Mancinelli, C., Delrobaei, & M., Jog., M. Deep brain stimulation parameter optimization for speech intelligibility and speech acoustics in Parkinson’s disease. Motor Speech Conference, Newport Beach, CA. 3/2016. *poster presentation*.
10. Abeyesekera, A., Adams, S.G., **Knowles, T.**, Mancinelli, C., Delrobaei, & M., Jog., M. Deep brain stimulation parameter optimization for voice quality, speech intensity and prosody of speech in Parkinson’s disease. Motor Speech Conference, Newport beach, CA. 3/2016. *poster presentation*.

9. **Knowles, T.**, Clayards, M., Sonderegger, M., Wagner, M., Nadig, A., & Onishi, K. Automatic forced alignment on child speech: Directions for improvement. Meeting of the Acoustical Society of America, Jacksonville, FL. 11/2015. *poster presentation*.
8. Sonderegger, M., Stuart-Smith, J., Macdonald, R., **Knowles, T.**, & Rathcke, T. Stability and change in Scottish stops: A real-time study of three acoustic cues in Glaswegian vernacular. New Ways of Analyzing Variation 44, Toronto. 10/2015. *oral presentation*.
7. Clayards, M., & **Knowles, T.** Prominence enhances voicelessness and not place distinction in English voiceless sibilants. 18th International Congress of Phonetic Sciences. Glasgow, Scotland. 8/2015. *International oral presentation*.
6. Stuart-Smith, J., Sonderegger, M., Macdonald, R., **Knowles, T.**, & Rathcke, T. (2014). The private life of stops: VOT in a real-time corpus of spontaneous Glaswegian. 14th Conference on Laboratory Phonology. Tokyo, Japan. 7/2014. *oral presentation*.
5. Clayards, M., & **Knowles, T.** Sibilants, prominence, contrast and breathy voice. Phonetic Building Blocks of Speech. University of Victoria. Victoria, BC. 9/2014. *poster presentation*.
4. Clayards, M. & **Knowles, T.** Prosodic strengthening and sibilants. Linguistic Institute Conference on Universality and Variability in segment-prosody interactions. Ann Arbor, MI. 6/2013. *oral presentation*.
3. Fleischer, D., **Knowles, T.**, Cheng, J., Wagner, M., & Clayards, M. Syntactic effects on compensation for assimilation. Architectures and Mechanisms for Language Processing. Riva del Garda, Italy. 9/2012. *oral presentation*.
2. Little, C. & **Knowles, T.** Didja Know? Affrication in North American English Dialects.
  - Change and Variation in Canada 7. University of Toronto. Toronto, ON. 5/2012. *joint oral presentation*.
  - 2nd Annual Hunter Undergraduate Linguistics and Language Study. Hunter College. New York, NY. 5/2012. *oral presentation*.
  - International Linguistic Assoc. 58th Annual Conference. Kingsborough Community College. Brooklyn, NY. 4/2012. *joint oral presentation*.
  - 10th Annual Harvard Undergraduate Linguistics Colloquium. Harvard University. Cambridge, MA. 4/2012. *joint oral presentation*.
1. **Knowles, T.** (2011). Gender and Lexical Variation: Coffee Tasting Descriptors.
  - McGill Canadian Conference for Linguistics Undergraduates. Montréal, QC. 3/2011. *oral presentation*.
  - 9th Annual Harvard Undergraduate Linguistics Colloquium. Harvard University. Cambridge, MA. *oral presentation*.

### ***Local presentations***

11. **Knowles, T.** Speech amplification clinic: Speech-language pathology in-service. H.A. Leeper Speech & Hearing Clinic. Western University, London, ON. 1/2019.
10. **Knowles, T.**, Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. Evaluating the efficacy of voice amplification and personal communication devices in Parkinson's disease. Speech & Language Seminar, Health & Rehabilitation Sciences, Western University. London, ON. 10/2018. *Local oral presentation*.
9. **Knowles, T.**, Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. A comparison of voice amplification devices in Parkinson's disease.

- 5th Annual Movement Disorders Research Retreat. London, ON. 6/2018. *Local oral presentation.*
  - Health & Rehabilitation Graduate Research Conference. Western University, London, ON. 2/2018. *Local oral presentation.*
8. **Knowles, T.** The effect of rate manipulation on acoustic distinctiveness and intelligibility in dysarthria: Prospectus.
    - Speech & Language Seminar, Health & Rehabilitation Sciences, Western University. London, ON. 10/2017. *Local oral presentation.*
    - 4th Annual Movement Disorders Research Retreat. London, ON. 6/2017. *Local oral presentation.*
  7. **Knowles, T.,** Adams, S.G., Abeyesekera, A., Mancinelli, C., Gilmore, G., & Jog, M. Deep brain stimulation parameter optimization: Vowel acoustics in Parkinson's disease. Health & Rehabilitation Graduate Research Conference. Western University, London, ON. 2/2017. *Local oral presentation.*

Cushnie-Sparrow, D., Adams, S.G., Leszcz, T., **Knowles, T.,** & Jog, M. Effects of multitalker noise on the acoustics of voiceless stop consonants in Parkinson disease. Western Interdisciplinary Student Symposium on Language Research, London, ON. 3/2016. *Local oral presentation.*
  6. **Knowles, T.,** Adams, S., Leszcz, T., Jog, M. Acoustic correlates of noise-related speech intelligibility deficits in Parkinson's disease. Health and Rehabilitation Sciences Graduate Research Conference. Western University, London, ON. 2/2016. *Local oral presentation.*
  5. **Knowles, T.,** Adams, S.G., Abeyesekera, A., Mancinelli, C., Delrobaei, & M., Jog, M. Deep brain stimulation and speech.
    - 3rd Annual Movement Disorders Research Retreat. Toronto, ON. 6/2016. *Local oral presentation.*
    - 2nd Annual Movement Disorders Research Retreat. London, ON. 6/2015. *Local oral presentation.*
  4. **Knowles, T.,** Adams, S.G., Abeyesekera, A., Mancinelli, C., Delrobaei, & M., Jog, M. Effect of deep brain stimulation parameters on speech intelligibility and speech acoustics in Parkinson's disease.
    - Health & Rehabilitation Sciences Graduate Research Conference. Western University, London, ON. 2/2015. *Local poster presentation.*
    - Faculty of Health Sciences Research Day. Western University, London, ON. 3/2015. *Local poster presentation.*
  3. Abeyesekera, A., Adams, S., **Knowles, T.,** Mancinelli, C., Delrobaei, M., & Jog, M. Effect of different deep brain stimulation parameters on voice quality, speech intensity, and prosody in Parkinson's Disease. Health & Rehabilitation Sciences Graduate Research Conference, Western University, London, ON. 2/2015. *Local poster presentation.*
  2. Mancinelli, C., Adams, S., Abeyesekera, A., **Knowles, T.,** Delrobaei, M., & Jog, M. Deep brain stimulation parameter optimization for rate of speech in Parkinson's Disease. Health & Rehabilitation Sciences Graduate Research Conference, Western University, London, ON. 2/2015. *Local poster presentation.*
  1. Clayards, M., Wonnacott, E., & **Knowles, T.** A case study of childhood L2 learning of phonological contrasts. McGill School of Communication Sciences and Disorders 50th Anniversary Open House. McGill University. Montréal, QC. 11/2013. *Local poster presentation.*

## MEDIA

“**Speech in Parkinson’s disease: The potential role of amplification devices.**” Article written for *The Parkinson’s Update (68)*. Parkinson Society Southwestern Ontario. Online. Summer/Fall 2018. <https://parkinsonsociety.ca/wp-content/uploads/2018/07/Parkinson-68-complete-for-web-Compressed-003-final.pdf>

“**The R-Ladies Piece.**” Interview by GradCast for *Radio Western*. Radio. 6/2017.

“**Research fine-tunes Parkinson’s speech impact.**” Interview by Paul Mayne for *Western News*. Online. 3/2016. <https://news.westernu.ca/2016/03/research-fine-tunes-parkinsons-speech-impact/>

## PROFESSIONAL EXPERIENCE: RESEARCH

**Lab Director: Clinical Applications of Speech Acoustics (CASA) Lab** 2022 - present  
*Communicative Sciences & Disorders, Michigan State University* *East Lansing, MI*

**Lab Director: Clinical Applications of Speech Acoustics (CASA) Lab** 2019 - 2022  
*Communicative Disorders & Sciences, University at Buffalo* *Buffalo, NY*

**Research Assistant** November 2014 - August 2019  
*Speech Movement Disorders Lab, Western University* *London, ON*

- Assist with study design, ethics submission, data collection related to a comparison of assistive speech devices for individuals with Parkinson’s disease

**Lab Coordinator/Research Assistant** October 2014 - June 2017  
*Language & Cognition Lab, Western University* *London, ON*

- Assist with study design, ethics proposals, recruitment, data collection/analysis related to language comprehension in Parkinson’s disease
- Manage research assistants, coordinate meetings, ensure project deadlines are met

**Project Manager: Tools for Looking at Variability in Speech** August 2013 - June 2014  
*McGill University* *Montréal, QC*

- Multidisciplinary collaboration with Communication Sciences & Disorders, Linguistics, & Psychology investigating viability of automated analysis with large scale variable speaker populations
- Trained & managed 12+ research assistants in speech analysis

**Lab Manager: Speech Learning Lab** August 2013 - June 2014  
*Linguistics Department, McGill University* *Montréal, QC*

- Trained & managed research assistants in acoustic analysis
- Provided training materials and conducted tutorial on Praat scripting

**Lab Manager: Montréal Language Modeling Lab** June 2013 - June 2014  
*Linguistics Department, McGill University* *Montréal, QC*

- Developed automated scripts for speech analysis, performed data collection & acoustic analysis
- Trained & managed research assistants & coordinated meetings

**Research Assistant: CHILDES PhonBank Project** September 2012 - March 2014  
*Linguistics Department, McGill University* *Montréal, QC*

- Edited and maintained corpus of child phonological data
- Provided detailed feedback for ongoing development of PhonBank software



**Research Assistant: McGill Prosody Lab**

June 2012 - June 2014

*Linguistics Department, McGill University**Montréal, QC*

- Performed data collection for a variety of speech production and perception experiments
- Assisted in data analysis using MatLab and Praat software

**Research Assistant: Speech Learning Lab**

November 2011 - June 2014

*Linguistics Department, McGill University**Montréal, QC*

- Assisted in speech perception and production experimental design
- Conducted acoustic and statistical analysis

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**PROFESSIONAL EXPERIENCE: CLINICAL**


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**Speech-language pathologist (Clinical Fellowship)**

November 2019 - June 2022

*UB Speech and Hearing Clinic**Buffalo, NY*

- Lead SPEAK OUT!® and LOUD Crowd® therapy sessions for people with Parkinson's disease.

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**TEACHING EXPERIENCE**


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***Instructor*****Research Methods (CSD803)**

Fall 2022

*Michigan State University, Department of Communicative Sciences & Disorders**co-taught***Anatomy and Physiology of the Speech Mechanism (CSD213)**

Fall 2022

*Michigan State University, Department of Communicative Sciences & Disorders***Data Analytics for Speech, Language, and Hearing Sciences (CDS491/687)**

Spring 2022

*University at Buffalo, Department of Communicative Disorders & Sciences***Motor Speech Disorders (CDS640)**

Fall 2020, 2021

*University at Buffalo, Department of Communicative Disorders & Sciences**co-taught***Anatomy and Physiology of the Speech Mechanism (CDS288)**

Fall 2019, 2020, 2021

*University at Buffalo, Department of Communicative Disorders & Sciences****Teaching Assistant*****Speech Science (COMMSCI9615)**

Fall 2016, 2017

*Western University, School of Communication Sciences & Disorders*

- Conducted three weekly labs on healthy and disordered speech acoustics for graduate SLP and Audiology students

**Voice Disorders (COMMSCI9631)**

Spring 2017

*Western University, School of Communication Sciences & Disorders*

- Graded quizzes and exams related to healthy and disordered voice production for graduate SLP students

***Guest Lectures*****“Introduction to dysarthria”**

October 2022.

*Introduction to Communicative Sciences & Disorders (CSD203)**Michigan State University***“So you’re thinking about graduate school for communication disorders?”**

December 2020.

*Syntax 1 (LING371)**McGill University*

**“Introduction to phonetics”**  
*Speech Science (COMMSCI9615)*

September 2017, 2018  
*Western University*

**“Treatment trends in hypokinetic dysarthria”**  
*Motor Speech Disorders (SLP714)*

March 2018  
*Central Michigan University*

**“Pursuing a PhD in communication sciences and disorders”**  
*Professional Practice Issues (COMMSCI9636)*

November 2017  
*Western University*

### ***Workshops & tutorials***

**“Intro to RMarkdown”**  
*R-Ladies, Coventry UK Chapter*

March 2021

**Praat Scripting Workshops**  
*Department of Communicative Disorders & Sciences*

Spring 2021  
*University at Buffalo*

- Regular workshops (every 3 weeks) to introduce students from CDS, Linguistics, and Cognitive Science to programming in the Praat acoustic analysis software.
- I organize the workshops and facilitated two. Some of the students in my lab are required to learn these skills and we build on them at our biweekly lab meetings as well.

**Coding for Speech**  
*Department of Communicative Disorders & Sciences*

Spring 2020  
*University at Buffalo*

- Weekly workshops on using tools to analyze speech data, given to students and faculty at the University at Buffalo and led by me.
- Terminated after 2 sessions due to COVID19 pandemic

**“RMarkdown and Bookdown for academic writing”**  
*R-Ladies, London, Ontario Chapter*

January 2020

**“Dissertating with RMarkdown and Bookdown”**  
*R-Ladies, London, Ontario Chapter*

April 2019

**“Figuring out figures in R”**  
*R-Ladies, London, Ontario Chapter*

October 2018

**“Using RMarkdown to generate reports and manuscripts”**  
*R-Ladies, London, Ontario Chapter*

March 2018

**“Introduction to Praat Scripting”**  
*Department of Linguistics*

Spring 2014  
*McGill University*

- Conducted tutorials for various linguistics laboratory research assistants on automating aspects of acoustic analysis by writing scripts in Praat

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## **ACADEMIC SERVICE & LEADERSHIP**

### ***Advising***

**MA Thesis Committees**  
*University at Buffalo, Department of Communicative Disorders & Sciences*

- Francesca D’Alessandro. *Impact of Vocal Hygienic Advice on the Voice of University Lecturers (2021)*.

### ***Service to the Profession***

## Journal Article Reviews

- *American Journal of Speech Language Pathology*
- *Journal of Speech, Language, and Hearing Research*
- *International Journal of Language and Communication Disorders*

## Conference Planning & Abstract Review

- America Speech-Language and Hearing Association Convention: Speech and Language Science Subcommittee (2021, 2022)
- Western University Health & Rehabilitation Sciences Graduate Research Conference (2015, 2016)

## *Service to the Department*

### Communicative Disorders & Sciences

*University at Buffalo*

- Member of graduate admissions committee; Spring 2022
- Member of search committee for Assistant/Associate Professor; Winter 2022
- Member of Coalition for Anti-Racism & Equity; Summer 2020 - Spring 2022
- Member of search committee for Clinical Assistant/Associate Professor; Fall 2020
- Leader of subcommittee departmental SWOT analysis; Winter 2020
- Member of search committee for Assistant Professor; Fall 2019

## *Outreach*

### Co-founder: R-Ladies

*London, Ontario Chapter*

2017 — 2019

*London, ON*

- Founded and ran a local chapter of R-Ladies Global, “a world-wide organization to promote gender diversity in the R community.”
- Curated speakers to give monthly, hands-on workshops on using the R statistical language and programming environment at no cost to members of the London, Ontario community
- I would also occasionally lead the workshops (see Teaching: Workshops & Tutorials)

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## PROFESSIONAL DEVELOPMENT AND VOLUNTEERING

### *As faculty member*

#### Acoustical Society of America School

*Acoustical Society of America*

Spring 2022

*Englewood, CO*

- Interdisciplinary early career workshop on acoustics.

#### Evaluating and Facilitating Online Courses: Faculty Academy

*University at Buffalo*

Winter 2022

*Buffalo, NY*

- Intensive workshop for faculty to learn to “assess and improve your online course utilizing research-based evaluation tools.”

#### Designing and Building Online Courses: Faculty Academy

*University at Buffalo*

Summer 2021

*Buffalo, NY*

- Intensive workshop for faculty to learn to “apply and implement best practices for design, assessment, engagement, and technology integration.”

**Pathways Program Attendee**

June 2020

*American Speech-Language-Hearing Association**Mentorship program (virtual)*

- Mentorship program for early career researchers in communication sciences and disorders
- "Intended as an initial step to enhance the training, retention, and funding success of clinical scientists in CSD, with the ultimate goal of advancing the evidence base of the discipline."

**New Faculty Academy Fellow (Scholarly Writing)**

Fall 2019

*University at Buffalo**Buffalo, NY*

- Weekly workshops for new faculty to improve elements of their scholarly research

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**TECHNICAL STRENGTHS**


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**Computer Languages**R, Praat, L<sup>A</sup>T<sub>E</sub>X, MatLab, Python

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**PROFESSIONAL AFFILIATIONS**


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**Member**

- Acoustical Society of America; 2021 — present
- Laboratory Phonology Association; 2020 — 2022
- American Speech-Language-Hearing Association (ASHA); 2019 — Present
- ASHA Special Interest Groups 2, 19; 2016 — Present
- Academy of Neurologic Communication Disorders and Sciences; 2018 — 2019
- Movement Disorders Society; 2016 — Present
- American National Student Speech-Language-Hearing Association; 2016 — 2019
- Ontario Association of Speech-Language Pathologists and Audiologists (Student member); 2014 — 2019

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**OTHER INFORMATION**


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**Citizenship**

United States, Canada

**Languages**

English (native), Spanish (advanced), French (novice)