

THEA KNOWLES

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Lab website:
<https://www.casa-lab.com>

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CURRENT EMPLOYMENT

Assistant Professor (tenure system) Communicative Disorders & Sciences University at Buffalo Buffalo, NY	2019 - Present
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EDUCATION

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

PUBLICATIONS

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- Sonderegger, M., Stuart-Smith, J., Macdonald, R., **Knowles, T.**, & Rathcke, T. (2020). Structured heterogeneity in Scottish stops. *Language*.
- 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
- 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.
- 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.
- 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*.
- 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: 25:060001.
- 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.

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*.

Cheng, J. & **Knowles, T.** (2012). Mandarin VP-Shell: Not as hard as you think. *McGill Cellar Door 1*, 4-20.

MANUSCRIPTS

Adams, S. Kumar, N., Rizek, P., Hong, A., Zhang, J., Abeyesekera, A., Mancinelli, C., **Knowles, T.** & Jog, M. (In review). Efficacy and acceptance of a Lombard-response device for hypophonia in Parkinson's disease.

Knowles, T., Adams, S., Page, A., Cushnie-Sparrow, D., & Jog, M. (Submitted). A comparison of speech amplification and personal communication devices for hypophonia. Submitted to JSLHR.

Avenia, K., Ahmed, J., Borovsky, A., McRae, K., Jenkins, M., Sprengel, K., Fraser, J.A., Orange, J.B., Knowles, T., Roberts, A. (In prep). Predictive language comprehension in Parkinson's disease.

CODE

Keshet, J., Sonderegger, M., & **Knowles, T.** (2014). AutoVOT, v. 0.93.

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

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.

CONFERENCE & WORKSHOP PRESENTATIONS

Refereed conference presentations

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. *International poster presentation*

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) Conference. Boston, MA. 11/2018. *International poster presentation*

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). *International poster presentation*
- Speech-Language Pathology and Audiology Canada (SAC) Conference. Edmonton, AB. 5/2018. *National poster presentation*

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. *International poster presentation, presented by first author.*

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. *International oral presentation.*

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. *Provincial poster presentation, presented by first author.*

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. *International poster presentation.*

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. *International poster presentation, presented by first author.*

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. *International poster presentation.*

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. *International oral presentation, presented by first author.*

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, presented by first author.*

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. *International oral presentation, presented by first author.*

Clayards, M., & **Knowles, T.** Sibilants, prominence, contrast and breathy voice. Phonetic Building Blocks of Speech. University of Victoria. Victoria, BC. 9/2014. *International poster presentation, presented by first author.*

Clayards, M. & **Knowles, T.** Prosodic strengthening and sibilants. Linguistic Institute Conference on Universality and Variability in segment-prosody interactions. Ann Arbor, MI. 6/2013. *International oral presentation, presented by first author.*

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. *International oral presentation, presented by last author.*

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. *National oral presentation.*
- 2nd Annual Hunter Undergraduate Linguistics and Language Study. Hunter College. New York, NY. 5/2012. *International oral presentation.*
- International Linguistic Assoc. 58th Annual Conference. Kingsborough Community College. Brooklyn, NY. 4/2012. *International oral presentation.*
- 10th Annual Harvard Undergraduate Linguistics Colloquium. Harvard University. Cambridge, MA. 4/2012. *International oral presentation.*

Knowles, T. (2011). Gender and Lexical Variation: Coffee Tasting Descriptors.

- McGill Canadian Conference for Linguistics Undergraduates. Montréal, QC. 3/2011. *National oral presentation.*
- 9th Annual Harvard Undergraduate Linguistics Colloquium. Harvard University. Cambridge, MA. *International oral presentation.*

Invited presentations

Knowles, T. Speech amplification clinic: Speech-language pathology in-service. H.A. Leeper Speech & Hearing Clinic. Western University, London, ON. 1/2019.

Knowles, T. Louder but not clearer: Exploring underpinnings of speech intelligibility in dysarthria through acoustic, clinical, and technological lenses. Job talk presented at the University of Minnesota Twin Cities. Minneapolis, MN. 1/2019.

Knowles, T. Louder but not clearer: Exploring underpinnings of speech intelligibility in dysarthria through acoustic, clinical, and technological lenses. Job talk presented at the University at Buffalo. Buffalo, NY. 11/2018.

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.

Local presentations

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.*

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.*

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.*

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, presented by first author.*

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.*

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.*

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.*

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, presented by first author.*

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, presented by first author.*

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, presented by first author.*

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/>

HONOURS & AWARDS

Graduate Student Conference Travel Subsidy (Summer) <i>Western University Society of Graduate Students</i>	2018
· Value: \$500.00	
Graduate Student Conference Travel Award <i>Western University Faculty of Health Sciences</i>	2018
· Value: \$250.00	
Graduate Student Conference Travel Subsidy (Spring) <i>Western University Society of Graduate Students</i>	2018
· Value: \$300.00	
Graduate Student Teaching Award Nominee (not awarded) <i>Western University</i>	2018
Ontario Graduate Scholarship	2018-2019

- Value: \$15,000
- Ontario Graduate Scholarship** 2017-2018
- Value: \$15,000
- Graduate Student Research Program Award** 2017-2018
Parkinson Society Southwestern Ontario
- Value: \$20,000
- Vanier Scholarship Nominee (not awarded)** 2016
Nominated by Western University Faculty of Health Sciences
- Western University “3 Minute Thesis” First Place Winner** 2016
Western University
- Value: \$1,000
- Harmonize for Speech Graduate Student Award** 2016
Harmonize for Speech Ontario
- Value: \$750
- Graduate Student Conference Travel Subsidy (Spring)** 2016
Western University Society of Graduate Students
- Value: \$500.00
- Graduate Student Conference Travel Award** 2016
Western University Health & Rehabilitation Sciences
- Value: \$400.00
- Graduate Student Conference Travel Award** 2016
Western University Faculty of Health Sciences
- Value: \$300.00
- Student Achievement Award** 2015
Ontario Association of Speech-Language Pathologists & Audiologists
- Value: OSLA Membership
- Acoustical Society of America Student Poster Honorable Mention** 2015
Meeting of the 170th Acoustical Society of America, Jacksonville
- Best PhD Student Poster Award** 2015
Health & Rehabilitation Sciences Graduate Research Conference, Western University
- Graduation with First Class Honours & Distinction** 2012
McGill University
- Dean’s Honour List** 2010
McGill University

PROFESSIONAL EXPERIENCE: RESEARCH

Research Assistant	November 2014 - August 2019
<i>Speech Movement Disorders Lab, Western University</i>	<i>London, ON</i>

- 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

PROFESSIONAL EXPERIENCE: CLINICAL

Speech-language pathologist (Clinical Fellowship) November 2019 - present
UB Speech and Hearing Clinic Buffalo, NY

- Lead LOUD Crowd therapy sessions for people with Parkinson's disease.

Student Clinician: Hospital July 2019 - August 2019
Grand River Hospital Kitchener, ON

- Provided swallowing and communication assessments on a stroke unit.

Student Clinician: Speech Amplification Clinic September 2018 - June 2019
H.A. Leeper Speech & Hearing Clinic London, ON

- Developed policies and procedures for and led assessments of individuals with hypophonia seeking a speech amplification device
- Coordinated meetings with speech-language pathologists, audiologists, neurologists and clinic staff to ensure timely prescription of appropriate devices

Student Clinician: Schoolboard May 2018 - June 2018
Thames Valley District Schoolboard London, ON

- Conducted assessment and intervention for school-aged children

Student Clinician: Fluency disorders August 2017
Camp ShoutOut Holton, MI, USA.

- Provided individual and group intervention to children with fluency disorders

Student Clinician: Acquired neurogenic language disorders May 2015 - July 2015
H.A. Leeper Speech & Hearing Clinic London, ON

- Conducted assessment and intervention for adults with aphasia
- Provided individual & group therapy

Student Clinician: Voice disorders May 2015 - June 2015
H.A. Leeper Speech & Hearing Clinic London, ON

- Delivered LSVT-LOUD to client with Parkinson's disease

Student Clinician: TykeTalk January 2015 - April 2015
H.A. Leeper Speech & Hearing Clinic London, ON

- Conducted assessment and intervention for young children with suspected speech and/or language difficulties
- Assisted in providing Hanen Target Word intervention

TEACHING EXPERIENCE

Instructor

Anatomy and Physiology of the Speech Mechanism (CDS288) Fall 2019
University at Buffalo

Teaching Assistant

Speech Science (COMMSCI9615) Fall 2016, 2017
Communication Sciences & Disorders Western University

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

Voice Disorders (COMMSCI9631) Spring 2017
Communication Sciences & Disorders Western University

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

Guest Lectures

“Introduction to phonetics” September 2017, 2018
Speech Science (COMMSCI9615) Western University

“Treatment trends in hypokinetic dysarthria” March 2018
Motor Speech Disorders (SLP714) Central Michigan University

“Pursuing a PhD in communication sciences and disorders” November 2017
Professional Practice Issues (COMMSCI9636) Western University

Workshops & tutorials

Coding for Speech Spring 2020
Department of Communicative Disorders & Sciences University at Buffalo

“RMarkdown and Bookdown for academic writing” January 2020 *R-Ladies, London, Ontario Chapter*

“Dissertating with RMarkdown and Bookdown” April 2019
R-Ladies, London, Ontario Chapter

“Figuring out figures in R” October 2018
R-Ladies, London, Ontario Chapter

“Using RMarkdown to generate reports and manuscripts” March 2018
R-Ladies, London, Ontario Chapter

“Introduction to Praat Scripting” Spring 2014
Department of Linguistics McGill University

VOLUNTEER & RELATED EXPERIENCE

Pin Pals Volunteer February - March 2016
Autism Ontario London, ON

- Weekly one-on-one bowling outings with children with autism spectrum disorder

Operation Smile Volunteer September 2015 - June 2016
Western University London, ON

- Assisted in fundraising for medical charity providing surgical training for doctors treating children born with cleft lip/palate in underfunded international locations

IAL Voice Institute Attendee June 2015
International Association of Laryngectomees Baltimore, MD

- Passed IAL examination which confirmed acquisition of basic and intermediate levels of knowledge in postlaryngectomy rehabilitation

Aphasia Retreat Day Volunteer May 2015
Western University London, ON

- Volunteered as “communication ramp” for adults with aphasia during full day retreat
- Facilitated communication using SCAA strategies during games and activities

Speech-Language Pathology Assistant January 2013 - July 2014
Speech Therapy Montréal Montréal, QC

- Assisted with early intervention language screenings
- Performed inventory of therapy materials, created client database

Software Carpentry Bootcamp Attendee January 2013
McGill University Montréal, QC

- Professional development related to programming skill enhancement with command line tools, GitHub, and Python

ACADEMIC SERVICE & LEADERSHIP

Lab Director: Clinical Applications of Speech Acoustics (CASA) Lab <i>Communicative Disorders & Sciences, University at Buffalo</i>	2019 — Present Buffalo, NY
Co-founder <i>R-Ladies London, Ontario Chapter</i>	2017 — 2019 London, ON
Chair/Organizer <i>Health & Rehabilitation Sciences Alumni Speaker Series, Western University</i>	2016 — 2017 London, ON
Sponsorship Subcommittee Leader <i>Health & Rehabilitation Sciences Graduate Research Conference, Western University</i>	2016 — 2017 London, ON
Vice-President Finance <i>Health & Rehabilitation Sciences Graduate Student Society, Western University</i>	2016 — 2017 London, ON
President <i>Health & Rehabilitation Sciences Graduate Student Society, Western University</i>	2015 — 2016 London, ON
Co-organizer <i>Health & Rehabilitation Sciences Graduate Research Conference, Western University</i>	2016 London, ON
Abstract Reviewer <i>Health & Rehabilitation Sciences Graduate Research Conference, Western University</i>	2015, 2016 London, ON
Professional Program Preview Day Volunteer <i>School of Communication Sciences & Disorders, Western University</i>	2015 London, ON

TECHNICAL STRENGTHS

Computer Languages R, Praat, L^AT_EX, MatLab, Python

PROFESSIONAL AFFILIATIONS

American Speech-Language-Hearing Association <i>Member</i>	2019 — Present
Movement Disorders Society <i>Member</i>	2016 — Present
Academy of Neurologic Communication Disorders and Sciences <i>Member</i>	2018 — 2019
ASHA Special Interest Groups 2, 19 <i>Member</i>	2016 — Present
American National Student Speech-Language-Hearing Association <i>Student Member</i>	2016 — 2019
Ontario Association of Speech-Language Pathologists and Audiologists <i>Student Member</i>	2014 — 2019

PERSONAL INTERESTS

- Rock climbing: competed in three US National Championships and one North American Continental Championship
- Long-distance running: completed two marathons and two half marathons
- Coffee preparation science: former Director of Quality Control at Café Myriade, current hobbyist

OTHER INFORMATION

Citizenship	United States
Permanent Residency	Canada
Languages	English (native), Spanish (advanced), French (novice)