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Academic Employment

Assistant Professor, Department of Psychology
Toronto Metropolitan University

Jan 2021 –

Postdoctoral Fellow, Evaluative Clinical Sciences Platform
Sunnybrook Research Institute, Sunnybrook Health Sciences Centre

Nov 2017 – Dec 2020

Postdoctoral Associate, École d'orthophonie et d'audiologie
Université de Montréal

Sep 2016 – Oct 2017

Affiliations

Adjunct Scientist (status only), Rotman Research Institute
Baycrest Academy for Research and Education

Nov 2023 –

Education

McMaster University
PhD, Psychology, Neuroscience, & Behaviour

Sep 2012 – Aug 2016

The Ohio State University
M.A., Speech and Hearing Science
B.Mus. Music Theory; Minor, Psychology

Sep 2010 – Aug 2012

Sep 2005 – Jun 2010

Grants and Funding [10 total]*Research Grants, As Principal Investigator [4]*

SSHRC Explore Grant (7,000 CAD)
Title: *Effect of aging stereotypes on hearing ability in older adults*

2024–2025

Internal Equipment Grant; Toronto Metropolitan University (20,000 CAD)
Title: *Cortisol responsivity in vulnerable populations*
Co-investigators: Dr. Frank Russo, Dr. Alexandra Fiocco,
Dr. Leslie Atkinson

2023–2024

CFI John R. Evans Leaders Fund (152,000 CAD)
Title: *Hearing loss at the cocktail party*
Reference: 41598

2021–2026

NSERC Discovery Grant (140,000 CAD)
 Early Career Researcher Discovery Launch Supplement (12,500 CAD) 2021–2027
 Title: *Effects of hearing acuity on visual perception and cognitive function*
 (ECR extension for a total of 168,000)
 Reference: RGPIN/03752–2021

Research Grants, As Co-Investigator [2]

American Tinnitus Association Research Grant (50,000 USD) 2018–2019
 Title: *Validating the gap-startle model of tinnitus detection in humans*
 PI: Dr. Sylvie Hebert

McMaster University LIVE Lab Grant (2,600 CAD) 2015–2016
 Title: *Examining the relationship between coupled oscillations and motor trajectories in a synchronization task*
 PI: Dr. Fiona Manning

Training Grants, as Academic Supervisor [2]

Mitacs Accelerate (120,000 CAD) 2026–2029
 Title: *De-stigmatizing Hearing Aid Usage in Older Adults*
 Co-supervisors: Frank Russo, Gurjit Singh
 Trainee: Danielle Mullen
 Industrial Sponsor: Sonova Canada
 Reference: IT52223

Mitacs Accelerate (15,000 CAD) 2023–2024
 Title: *Assessment of a Novel Sound-based Treatment for Managing Distress Related to Tinnitus*
 Co-supervisors: Frank Russo, Gurjit Singh
 Trainee: Mahnoor Javed
 Industrial Sponsor: Sonova Canada
 Reference: IT36938

Conference and Event Grants, as Principal Applicant [2]

Internal SRC Events/Activities Supplemental Funding Support (2000 CAD) 2026
 Toronto Metropolitan University
 Office of the Provost
 Supports 2026 Ontario Network Emerging Auditory Research Day

Internal SRC Events/Activities Supplemental Funding Support (2000 CAD) 2026
 Toronto Metropolitan University
 Office of the Vice President of Research and Innovation
 Supports 2026 Ontario Network Emerging Auditory Research Day

Publications in Preparation [data and analysis complete] [* = trainee authors]

Glassman, H., **Paul, B. T.**, & Russo, F. (In prep) Impact of Soundscapes on Mental Well-Being and Physiological Stress: A Systematic Review.

Pec, M.*, Aguiar, P. V*, Lo, C. Y., & **Paul, B. T.** (In prep). Understanding Attitudes About Age-Related Hearing Loss and their Impact on Hearing Aid Uptake.

Adachi, R.*, Du, E.*, & **Paul, B. T.** (In prep). Testing the Effect of Age Stereotype Exposure on Older Adults' Hearing Beliefs and Auditory Function.

Publications and Preprints [26] [19 as senior or first author] [* = trainee authors]

Duda, V., **Paul, B. T.**, Jemel, B., & Hébert, S. (Submitted). When perception meets prediction: Tinnitus as a model of internal-external auditory interactions. Submitted to *Brain*.

Aguiar, P. V.*, & **Paul, B. T.** (**Preprint**). Influence of partial speaker face occlusion during audiovisual speech perception in age-related hearing loss. Preprint file: https://doi.org/10.31234/osf.io/rsdum_v1. Under review in *Ear and Hearing*.

Pec, M. A.*, Alain, C., & **Paul, B. T.** (2026). Evidence for memory-guided auditory attention in aging and hearing loss. *Psychology and Aging*. Advance online publication. <https://doi.org/10.1037/pag0001026>

Aguiar, P. V.*, & **Paul, B. T.** (2026). Evaluating perceptual evidence of cross-modal plasticity in older adults with hearing loss using an audio–visual word mismatch task. *Hearing Research*. 481, 109779. <https://doi.org/10.1016/j.heares.2026.109779>

Paul, B. T., Aguiar, P. V.*, & Al-Shaikh, J. H.* (2026). Influence of speech-in-noise perception, gender, and age on lipreading ability for monosyllabic words. *Speech Communication*, 103354. <https://doi.org/10.1016/j.specom.2026.103354>.

Paul, B. T., Srikanthanathan, A. *, Daien, M., & Dimitrijevic, A. (2026) Association between high-frequency hearing sensitivity and visual cross-modal plasticity during active visual stimulus processing. *Journal of Neurophysiology*, 135:1, 249-260. <https://doi.org/10.1152/jn.00214.2025>.

Aguiar, P. V.*, Williams, M. R.*, & **Paul, B. T.** (2025) Visual cortical responses in age-related hearing loss show evidence for compensatory neuroplasticity. *GeroScience*. <https://doi.org/10.1007/s11357-025-02013-w>

Aguiar, P. V*, Preman, J. *, & **Paul, B. T.** (2025). Cross-modal neuroplasticity in partial hearing loss: a mini-review. *Frontiers in Neuroscience, section Auditory Cognitive Neuroscience*. 19:1627888. <https://doi.org/10.3389/fnins.2025.1627888>.

Paul, B. T., Trinh, V., Chen, J., Le., T., Lin, V. & Dimitrijevic, A. (2025). Speech outcomes in cochlear implant users depend on visual cross-modal cortical activity measured before or after implantation. *Brain Communications*, fcaf071. <https://doi.org/10.1093/braincomms/fcaf071>.

Adachi, R.*, & **Paul, B. T.** (2024). Comparison of subjective self-reported hearing and objective speech-in-noise perception as predictors of social isolation and loneliness in adults 60 years and older. *International Journal of Audiology*, 1–9. <https://doi.org/10.1080/14992027.2024.2442735>

- Le, T., Oakden, W., Mukherjee, S., Ferdous, Z., Kuroiwa, M., Liu, V., Zhang, A.Z., Situ, Y., **Paul, B. T.**, Stanis, G. (2023). Magnetic Targeting of Gadolinium Contrast to Enhance MRI of the Inner Ear in Endolymphatic Hydrops. *The Laryngoscope*. 133(4): 914–923, <https://doi.org/10.1002/lary.30267>.
- Xiu, B. *, **Paul, B. T.**, Chen, J., Le., T., Lin, V. & Dimitrijevic, A (2022). Neural responses to naturalistic audiovisual speech are related to listening demand in cochlear implant users. *Frontiers in Human Neuroscience*, 16:1043499. <https://doi.org/10.3389/fnhum.2022.1043499>.
- Paul, B. T.**, Munir, D., Uzelac, M., Chen, J., Le., T., Lin, V. & Dimitrijevic, A. (2022). Evidence of visual crossmodal reorganization positively relates to speech outcomes in cochlear implant users. *Scientific Reports*, 12:17749, <https://doi.org/10.1038/s41598-022-22117-z>.
- Mukherjee S., Kuroiwa M., Oakden W., **Paul, B. T.**, Noman, A., Chen, J., Lin, V., Dimitrijevic, A., Stanis, G., & Le, T. (2022). Local magnetic delivery of recombinant adeno-associated virus AAV2(quad Y-F) mediated brain-derived neurotrophic factor gene therapy restores hearing after noise injury. *Molecular Therapy*, 30(2), 519–533. <https://doi.org/10.1016/j.ymthe.2021.07.013>.
- Paul, B. T.**, Chen, J., Le., T., Lin, V. & Dimitrijevic, A. (2021). Cortical alpha oscillations in cochlear implant users reflect subjective ratings of listening effort during speech-in-noise perception. *PLOS ONE* 16(7): e0254162. <https://doi.org/10.1371/journal.pone.0254162>.
- Prince, P. *, **Paul, B. T.**, Chen, J., Le., T., Lin, V. & Dimitrijevic, A. (2021). Neural correlates of visual stimulus encoding and verbal working memory differ between cochlear implant users and normal-hearing controls. *European Journal of Neuroscience*, 54 (3), 5016–5037. <https://doi.org/10.1111/ejn.15365>.
- Paul, B. T.**, Uzelac, M. *, Chan, E., & Dimitrijevic, A. (2020). Poor early cortical differentiation of speech predicts perceptual difficulties of severely hearing-impaired listeners in multi-talker environments. *Scientific Reports*, 10:6141. <https://doi.org/10.1038/s41598-020-63103-7>.
- Paul, B. T.**, Schoenwiesner, M., & Hébert, S. (2018). Towards an objective test of chronic tinnitus: Properties of auditory cortical potentials evoked by silent gaps in tinnitus-like sounds. *Hearing Research*, 366, 90–98. <https://doi.org/10.1016/j.heares.2018.04.005>.
- Paul, B. T.**, Waheed, S. *, Bruce, I. C., & Roberts, L. E. (2017). Subcortical amplitude modulation encoding deficits suggest evidence of cochlear synaptopathy in normal-hearing 18–19 year olds with higher lifetime noise exposure. *Journal of the Acoustical Society of America, Express Letters*, 142 (5), November 2017. <https://doi.org/10.1121/1.5009603>. (Erratum on this article available at: <https://doi.org/10.1121/1.5043082>).
- Paul, B. T.**, Bruce, I. C., & Roberts, L. E. (2017). Evidence that hidden hearing loss underlies amplitude modulation encoding deficits in individuals with and without tinnitus. *Hearing Research*, 344, 170–82. <https://doi.org/10.1016/j.heares.2016.11.010>. (Erratum on this article available at: <https://doi.org/10.1016/j.heares.2018.01.011>)
- Roberts, L. E., Bosnyak, D. J., Bruce, I. C., Gander, P. E., & **Paul, B. T.** (2015). Evidence for differential modulation of primary and nonprimary auditory cortex by forward masking in tinnitus. *Hearing Research*, 327, 9–27. <https://doi.org/10.1016/j.heares.2015.04.011>.
- Paul, B. T.**, Sederberg, P. B., & Feth, L. L. (2015). Imagined temporal groupings tune oscillatory neural activity for processing rhythmic sounds. *Timing & Time Perception*, 3, 172–88. <https://doi.org/10.1163/22134468-00002056>.

Paul, B. T., Bruce, I. C., Bosnyak, D. J., Thompson, D. C., & Roberts, L. E (2014). Modulation of electrocortical brain activity by attention in individuals with and without tinnitus. *Neural Plasticity*, Vol. 2014, Article ID 127824. <https://doi.org/10.1155/2014/127824>.

Broze, Y., **Paul, B. T.**, Allen, E., & Guarna, K. (2014). Polyphonic Voice Multiplicity, Numerosity, and Musical Emotion Perception. *Music Perception*, 32 (2), 143–159. <https://doi.org/10.1525/mp.2014.32.2.143>.

Paul, B. T., & Huron, D. (2010). An association between breaking voice and grief-related lyrics in Country Music. *Empirical Musicology Review*, 5 (2), 27–35.

Paul, B. T., (2008). Bilateral Keyboard Symmetry in the Music of Einojuhani Rautavaara. *The Ohio State University Online Music Journal*, 1 (2).

Conference Proceedings [2]

Broze, Y., & **Paul, B.** (2012). Voice Multiplicity Influences the Perception of Musical Emotions. Cambouropoulos, E., Tsougras, C., Mavromatis, P., Pasiadis, K., eds. Proceedings of the 12th International Conference on Music Perception and Cognition, 166–170 Thessaloniki, Greece.

Paul, B. (2010). Nostalgia-inducing music and perceived social support satisfaction. Demorest, S. ed. Proceedings of the 11th International Conference on Music Perception and Cognition, 790–793, Seattle, WA.

Magazine Articles [15; non-peer reviewed]

Since 2024, I have published a regular feature in Canadian Audiologist named “To the Brain and Back.”

9. Speech Emotion Perception, Hearing Loss, and Hearing Aid Use. 2026 13(5).
8. Auditory Attention Decoding. 2026 13(3).
7. “Second-Person Neuroscience” For Hearing Loss, Aging, and Social Connection. 2026. 13(1). (**Cover Story**) with Negar Salehi
6. Can Stress Cause Tinnitus and Hyperacusis? 2025. 12(5) (**Cover Story**)
5. Misophonia and the brain. 2025 12(3).
4. The role of visual neuroplasticity in cochlear implant users’ speech outcomes. 2025 12(1).
3. Brain responses to continuous speech. 2024 11(5).
2. A role for GABA for speech in noise listening in older adults. 2024 11(3).
1. To the Brain and Back: An Introduction. 2024 11(1).

Aguiar, P.V. & **Paul, B. T.** (January 2024). How vision influences speech understanding in age-related hearing loss. *Canadian Audiologist*. Volume 11 Issue 1. (**Cover Story**)

Paul, B. T. (November 2022). An evolving understanding of cochlear synaptopathy. (**Cover Story**). *Canadian Audiologist*, Volume 9 Issue 6.

Paul, B. T. (November 2020). Tinnitus with a normal audiogram: is hearing damaged missed by conventional testing? (**Cover Story**) *Canadian Audiologist*, Volume 7 Issue 6.

Paul, B. T. (September 2019). In memory of Larry Roberts. *Canadian Audiologist*, Volume 6 Issue 5.

Paul, B. T. (July 2019). Why is tinnitus hard to measure? *Canadian Audiologist*, Volume 6 Issue 4.

Hébert, S. & **Paul, B. T.** (August 2018). Using electroencephalography (EEG) to track brain responses to gaps embedded in soft sounds: A stepping stone towards an objective measure of tinnitus. *Tinnitus Today*, Summer 2018 Edition, 30-32.

Invited Talks and Keynotes [10]

Visual cross-modal plasticity in hearing loss: Implications for hearing restoration (April 25, 2026). 2026 NeuroXChange Conference, McMaster University Hamilton, ON, Canada. **Keynote**

Visual compensation in deafness and hearing loss. (March 28, 2024). Department of Psychology, Neuroscience, & Behaviour Colloquium, McMaster University, Hamilton, ON, Canada.

Visual function in CI users and in age-related hearing loss. (October 2023). Canadian Academy of Audiology Conference 2023, Ottawa, ON, Canada.

Neural correlates of multi-talker listening in cochlear implant users. (July 11, 2021). 2021 Conference on Implantable Auditory Prostheses (CIAP), virtual.

Tinnitus with a Normal Audiogram: Is there Undetected Hearing Loss? (February 22, 2020). 31st Seminar on Audition, "Assessment and Management of the Tinnitus Patient," organized by the Western University, Toronto, ON, Canada.

Measures of tinnitus-related plasticity in humans. (January 28, 2020) Symposium, *Neuroplasticity and Tinnitus - In memory of Dr. Larry E. Roberts*; the 43rd Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Jose, USA.

Hidden hearing loss in individuals with tinnitus and normal audiograms. (September 10, 2017). *Jos Eggermont Tinnitus Symposium ("JosFest")*, 6th International Conference on Auditory Cortex, Banff, Canada.

Electrophysiology for detecting "hidden" hearing loss: methods, applications, and challenges in research and clinical use. (January 18, 2017). Beaux-Midis Conference Series, University of Montreal, Canada.

Hidden Hearing Loss in Tinnitus Subjects with Normal Hearing Thresholds. (May 24, 2016). Invited Session: *"Acoustics Outreach to Budding Scientists: Planting Seeds for Future Clinical and Physiological Collaborations."* 171st meeting of the Acoustical Society of America, Salt Lake City, USA.

Cochlear damage related to tinnitus. (February 22, 2016). Invited Session: *"Active auditory processing: Basic mechanisms, individual differences and clinical applications."* Young Investigators Symposium; the 39th Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Diego, USA.

Conference Talks [12]

Paul, B. T. (December 05, 2025). Second-person neuroscience in aging and hearing loss. The inaugural Ontario Network for Emerging Auditory Research (ON-EAR), Toronto, ON, Canada

Paul, B. T. (February 20, 2021). Considerations When Using Neural Tracking Methods in Cochlear Implant Users: Electrical Artifacts and Experimental Design. The 44th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Virtual.

Paul, B. T., Uzelac, M., Chan, E., & Dimitrijevic A. Poor early cortical differentiation of speech explains perceptual difficulties of bilateral cochlear implant users in multi-talker environments. 2020 Percy Ireland Academic Day, University of Toronto, Toronto, ON, Canada. *This meeting was cancelled due to the 2020 pandemic.*

Paul, B. T., Srikanthanathan, A., & Dimitrijevic, A. (January 26, 2020). Hearing loss is associated with modified brain oscillations during non-auditory verbal working memory. The 43rd Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Jose, CA.

Paul, B. T., Chen, J., Lin, V., Le, T., & Dimitrijevic, A. (July 16, 2019). Neural correlates of selective attention predict speech streaming performance in bilateral CI users. 2019 Conference on Implantable Auditory Prostheses (CIAP), Lake Tahoe, CA.

Paul, B. T., Chen, J., Lin, V., Le, T., & Dimitrijevic, A. (June 30, 2018). EEG Alpha Activity as a Neural Marker of Listening Effort during speech-in-noise perception in cochlear implant users. 15th International Conference on Cochlear Implants, Antwerp, Belgium.

Paul, B. T. & Dimitrijevic, A. (May 23, 2018). Single-Trial EEG Alpha Activity as a Correlate of Listening Effort During Speech-In-Noise Perception in Cochlear Implant Users. 2018 Auditory EEG Signal Processing symposium, KU Leuven, Leuven, Belgium.

Paul, B. T., Bruce, I. C., & Roberts, L. E. (November 15, 2016). Evidence for Hidden Hearing Loss in Tinnitus Subjects with Normal Hearing Thresholds. 60th Congress on Speech Therapy and Audiology Montreal, Canada

Paul, B. T., Bruce, I. C., & Roberts, L. E. (March 17, 2016). Evidence for Hidden Hearing Loss in Tinnitus Subjects with Normal Hearing Thresholds. 10th annual meeting of the Tinnitus Research Initiative, Nottingham, UK.

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J., & Thompson, D. C. (June 8, 2015). Cochlear Neuropathy in Tinnitus. 9th annual meeting of the Tinnitus Research Initiative, Ann Arbor, USA.

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J., & Thompson, D. C. (August 8, 2014) Modulation of auditory evoked potentials by top-down auditory attention is modified in tinnitus. 2014 Annual NSERC-Create Auditory Cognitive Neuroscience Workshop, Montreal, Canada.

Paul, B. T., Sederberg, P. B., & Feth, L. L. (August 09, 2013). Patterns of neural activation and suppression that underlie musical meter. Society for Music Perception and Cognition 2013. Ryerson University, Toronto, Canada.

Posters, as presenting author [21]

Paul, B. T. & Dimitrijevic, A. (July 9-14, 2023). Investigating cross-modal plasticity and speech outcomes in CI users using EEG. 2023 Conference on Implantable Auditory Prostheses (CIAP), Lake Tahoe, CA.

Paul, B. T., Chen, J., Lin, V., Le, T., & Dimitrijevic, A. (May 6, 2019). Brain correlates of speech streaming in bilateral cochlear implant users predict selective attention performance. International Hearing Loss Conference, Niagara-on-the-Lake, Canada.

Paul, B. T., Tran, N., Murdoch, K., Roberts, L. E., & Bruce, I. C. (May 6, 2019). Testing for evidence of cochlear synaptopathy using amplitude modulation encoding tasks in the presence of background noise. International Hearing Loss Conference, Niagara-on-the-Lake, Canada.

Paul, B. T., Chen, J., Lin, V., Le, T., & Dimitrijevic, A. (February 10, 2019). Intra-Individual Correlations Between EEG Alpha Oscillations and Self-Reported Listening Effort Ratings During a Speech-in-Noise Task in Cochlear Implant Users. The 42nd Annual MidWinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD.

Paul, B. T., Sajeniouk, V., Chen, J., Le, T., Lin, V., & Dimitrijevic, A. (February 10, 2019). EEG Oscillations and Entrainment in Cochlear Implant Users While Watching “The Office”: Neural Correlates of Listening Effort and Speech Encoding with Continuous, Naturalistic Stimuli. 42nd Annual MidWinter Meeting of the Association for Research in Otolaryngology, Baltimore, United States of America.

Paul, B. T., Hébert, S., & Schoenwiesner, M. (February 11, 2018). Towards human validation of gap detection for objective tinnitus measurement: Estimating acoustical properties of tinnitus and recording gap-evoked potentials in tinnitus-like sounds. The 41st Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Diego, CA.

Paul, B. T., Bruce, I. C., Waheed, S., & Roberts, L. E. (February 13, 2018). Subcortical Amplitude Modulation Encoding Deficits in Young Adults with Greater Noise Exposure History Suggest Evidence of Cochlear Synaptopathy, The 41st Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Diego, CA.

Paul, B. T., Hebert, S., Schoenwiesner, M. (March 17, 2017). Towards an objective measure of tinnitus: properties of cortical potentials evoked by weak acoustic events. 25ième Journée Scientifique Centre de Recherche en Neuropsychologie et Cognition, Montreal, Canada.

Paul, B. T., Bruce, I. C., Waheed, S., & Roberts, L. E. (February 11, 2017). Inter-subject differences in amplitude modulation encoding correlate with history of noise exposure (poster). 40th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD, USA.

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J., & Thompson, D. C. (February 21, 2015). Top-Down Attention Modulates the Frequency of the 40-Hz Auditory Steady State Response during Gap-Induced Resets. The 38th Annual MidWinter Meeting for the Association for Research in Otolaryngology, Baltimore,

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J. (February 21, 2015). Differential modulation of electrocortical responses evoked from primary and nonprimary auditory cortex by forward masking in tinnitus (poster). The 38th Annual MidWinter Meeting for the Association for Research in Otolaryngology, Baltimore, MD, USA.

Paul, B. T., Roberts, L. E., & Bruce, I. C. (October 22, 2015). Cochlear factors related to tinnitus. Tenth anniversary symposium of the international laboratory for Brain, Music, and Sound Research, Montreal, Canada.

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J., & Thompson, D. C. (April 25, 2014) Modulation of auditory cortical representations by top-down auditory attention is modified in tinnitus. The Erasmus Mundus Symposium on Auditory Cognitive Neuroscience, Leipzig, Germany.

Paul, B. T., Roberts, L. E., Bruce, I. C., Bosnyak, D. J.; Thompson, D. C. (February 22, 2014). Attention Modulates the Reset of the Auditory Steady State Response. Association for Research in Otolaryngology 37th MidWinter Meeting, San Diego, USA

Paul, B. T., & Roberts L. E. (July 16, 2013). Modulation of auditory cortical responses by attention inside and outside of the tinnitus frequency region. 7th International Tinnitus Research Initiative Conference, Valencia, Spain

Paul, B., Sederberg, P. B., & Feth, L. (July 25, 2012). The Influence of Imposed Meter on Temporal Order Perception in Rhythmic Sequences. 12th International Conference on Music Perception and Cognition. Aristotle University of Thessaloniki, Thessaloniki, Greece.

Broze, Y, & Paul, B. T. (July 25, 2012). Voice Denumerability Influences Perception of Musical Emotions. 12th International Conference on Music Perception and Cognition, Thessaloniki, Greece.

Paul, B., Sederberg, P. B., & Feth, L. (July 21, 2012). The influence of metric organization on temporal order judgments in isochronous sequences. Perspectives on Rhythm and Timing Workshop, Glasgow, United Kingdom.

Paul, B. T., & Plazak, J. (August 13, 2011) Listener-defined Rhythmic Timing Deviations in Drum Set Patterns. Society for Music Perception and Cognition 2011, Rochester, NY, USA.

Paul, B. (August 26, 2010). Nostalgia-Inducing Music and Social Support Satisfaction. 11th International Conference on Music Perception and Cognition. University of Washington, Seattle, WA, USA

Paul B, & Huron, D. (August 5, 2009). Association between breaking voice and grief-related content in country music. Society for Music Perception and Cognition 2009, Indianapolis, IN, USA.

Conference Talks, as senior investigator [1]

Salehi, N. & Paul, B. T. (June 3-5, 2026). Conversation dynamics in older adults with age-related hearing loss. Annual Meeting for the Canadian Society for Brain, Behaviour, and Cognitive Science. York University, Toronto, Ontario, Canada.

Conference Posters, as senior investigator [17]

Ledezma, B., Adachi, R., Du, E., & Paul, B. T. (August 5, 2026). Effect of negative aging stereotypes on hearing ability and attitudes toward hearing aids. E-poster presentation. International Hearing Aid Conference (IHCON). Banff, Alberta, Canada.

Salehi, N. & Paul, B. T. (August 5, 2026). Conversation dynamics in older adults with age-related hearing loss. E-poster presentation. International Hearing Aid Conference (IHCON). Banff, Alberta, Canada.

Aguiar, P.V., & Paul, B. T. (August 5, 2026). Visual Influences of Speech Perception in Age-Related Hearing Loss. E-poster presentation. International Hearing Aid Conference (IHCON). Banff, Alberta, Canada.

Malhotra, K., Aguiar, P.V., & Paul, B. T. (June 3-5, 2026). Audiovisual Speech Accessibility in Aging Study: Effect of Mouth-Looking on Speech Perception and Metacognition. Annual Meeting for the Canadian Society for Brain, Behaviour, and Cognitive Science. York University, Toronto, Ontario, Canada.

Aguiar, P.V., & Paul, B. T. (December 5, 2025). Masking of speaker facial features during audiovisual speech perception in older adults with hearing loss. The inaugural Ontario Network for Emerging Auditory Research (ON-EAR), Toronto, ON, Canada.

Salehi, N., & Paul, B. T. (December 5, 2025). Conversation dynamics among older adults with age-related hearing loss (ARHL). The inaugural Ontario Network for Emerging Auditory Research (ON-EAR), Toronto, ON, Canada.

Aguiar, P.V., Preman, J., Paul, B.T. (February 25, 2025). The Influence of Speaker Facial Features on Audiovisual Speech Perception in Age-Related Hearing Loss. 48th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Orlando, CA, USA.

Pec, M., Salehi, N., Alain, C., Paul, B.T. (February 23, 2025). Memory-Guided Attention in Hearing Loss and Aging. 48th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Orlando, CA, USA.

Pec, M., Paul, B.T. (February 6, 2024). Neural Correlates of Memory-Guided Attention in Age-Related Hearing Loss. 47th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Anaheim, CA, USA.

Aguiar, P.V., Paul, B.T. (February 3, 2024). Eye-Fixation and Speech Perception for Visual and Auditory Words in Age-Related Hearing Loss. 47th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Anaheim, CA, USA.

Adachi, R. & Paul, B.T. (October 27, 2023). Relationship Between Measures of Hearing and Social Wellbeing in Older Adults. 52nd Annual Scientific and Educational Meeting of the Canadian Association on Gerontology. Toronto, Ontario, Canada.

Williams, M.R., Aguiar, P.V., Pec, M., Paul, B.T. (October 27, 2023). Visual compensation in age-related hearing loss: An EEG study. 52nd Annual Scientific and Educational Meeting of the Canadian Association on Gerontology. Toronto, Ontario, Canada.

Aguiar, P.V., Paul, B.T. (July 19, 2023). Impact of Visual Attention on Audiovisual Speech Perception in Age-Related Hearing Loss: An Eye-tracking Study. 2023 Annual Meeting for the Canadian Society for Brain, Behaviour, and Cognitive Science. Guelph, Ontario, Canada.

Pec, M., Aguiar, P.V., Williams, M.R., Paul, B. T. (July 13, 2023). EEG correlates of visual compensation in age-related hearing loss. Salzburg Mind Brain Annual Meeting 2023, Salzburg, Austria

Aguiar, P.V., Williams, M.R., Pec, M., Paul, B.T. (February 14, 2023). Crossmodal Compensation in Partial Hearing Loss: EEG comparison between Verbal and Non-Verbal Visual Processing. Poster presented at the 46th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Orlando, FL, USA.

Aguiar, P.V., Paul, B.T. (February 12, 2023). Visual Bias for Speech Perception in Age-Related Hearing Loss: An Eye-Tracking Study. The 46th Annual MidWinter Meeting of the Association for Research in Otolaryngology, Orlando, FL, USA.

Aguiar, P.V., Al-Shaikh, J. H., Paul, B.T. (February 12, 2022). The relationship between speech-in-noise listening and visual speechreading ability: a virtual study. The 45th Annual MidWinter Meeting of the Association for Research in Otolaryngology (virtual).

Symposium Organization [2]

“Advancements in human brain measurements to continuous speech and music stimuli” (2022). 44th Annual MidWinter Meeting of the Association for Research in Otolaryngology, (Virtual Meeting). Co-organized with Dr. Melissa Polonenko.

“The Neuroscience of Tinnitus in Humans: A Symposium in Memory of Dr. Larry E. Roberts”. May 23, 2020. 13th International Meeting of the Tinnitus Research Initiative, Vancouver, Canada. Co-organized with Dr. Phil Gander. *This symposium was accepted, but the meeting was cancelled due to the 2020 pandemic.*

Educational Workshops, Seminars, Webinars, and Other Outreach Activities [6]

Advanced techniques in EEG analysis: temporal response functions. June 29, 2019. Workshop preceding the 2019 *International Evoked Response Audiometry Study Group* in Sydney, Australia.

Using envelope following responses to find evidence of hidden hearing loss. February 24, 2017. Methods lecture during the *Frequency Following Response Workshop* for the Centre for Research on Brain, Language, and Music in Montreal, Canada.

Understanding Cases of Tinnitus with a Normal Audiogram: Is hearing loss undetected? Webinar Presented to the Canadian Academy of Audiology on June 09, 2020. Invited. Attendees: 56 (highest attended CAA science webinar to that date).

Finding hidden hearing loss: research approaches and evidence for cochlear damage in humans with normal hearing. (January 26, 2017). Brain, Music and Sound (BRAMS) 3rd Scientific Social, Montreal, Canada.

Ringling Ears: hidden hearing loss and the role of attention in tinnitus. (September 23, 2016). Cognition and Perception Seminar, McMaster University, Hamilton, Canada.

Music cognition and emotion. June 5, 2012. Public lecture hosted by *The Columbus Science Pub*, Columbus, Ohio USA.

Media appearances [2]

(March 2025) Guest on Hearing Health Matters Podcast:
<https://www.buzzsprout.com/421432/episodes/16824639-auditory-neuroplasticity-with-dr-brandon-paul>

(April 2025) Article quote in The Weather Network about music and the weather:
<https://www.theweathernetwork.com/en/news/lifestyle/community/fredrick-reyes-how-seasonal-shifts-impact-the-music-you-listen-to>

Fellowships and Scholarships [6]

Harry Barberian Memorial Scholarship (8.6k CAD)	2019–2020
McMaster Institute of Aging Research Fellowship (declined; 50k CAD)	2017–2018
NSERC-CREATE Fellowship, Auditory Cognitive Neuroscience (20k CAD)	2014–2015
NSERC-CREATE Fellowship, Auditory Cognitive Neuroscience (21k CAD)	2013–2014
McMaster Graduate Scholarship (24k CAD)	2012, 2016
The Patrick-McConnell Buckeye Foundation Scholarship (60k USD)	2005–2009

Awards [9]

<i>Ecole d'orthophonie et d'audiologie</i> Junior Researcher Award	2016
Medical Research Council Institute of Hearing Research Early Career Award (UK)	2016
McMaster International Excellence Award	2015
Society for Music Perception and Cognition Student Award	2013
<i>Five travel awards to conferences (ARO x2, ASA, Erasmus Mundus)</i>	2012–2016

Professional Memberships

Association for Research in Otolaryngology	2012–Present
Canadian Academy of Audiology	2026–Present
Acoustical Society of America	2011–2026
Canadian Society for Brain, Behaviour, and Cognitive Science	2023, 2026
Society for Music Perception and Cognition	2009–2015
Society for Music Theory	2007–2009

Teaching [14 courses; 3 upcoming]

Undergraduate Course Instruction, Toronto Metropolitan University
F = Fall; W = Winter

PSY 654 Cognitive Psychology (F23, W25, W26, F26, W27)
 PSY 713 Psychology of Perception (W22, W26, W27)
 PSY 102 Introduction to Psychology (F21, F22 (x2), W24, F24 (x2))
 PSY 514 Sensory and Perceptual Processes (W21, W23)

Graduate Course Instruction, Toronto Metropolitan University
 PS 8203/9204 Psychological Science Seminar I & II (W23)

Consulting

External consultant, *Decibel Therapeutics*, Boston, MA, USA May 2018 – Mar 2019

Departmental, Faculty, and University Service*Committees and Leadership Roles*

Member, Undergraduate Program Committee	2024–
Member, Academic Integrity Council	2023–
Member, Equity, Diversity, Inclusion, & Justice Committee	2022–2024

Member, Psychological Sciences Program Committee	2021–2022
Coordinator, Applied Cognitive Neuroscience Speaker Series	2021–2023

Reviewing Activities

TMU Internal Equipment Grant	2022
Ontario Graduate Scholarships (Psych)	2022–2026
Canada Graduate Scholarships - Doctoral (Psych)	2021
NSERC USRA Awards (Psych)	2021

Professional, Academic, and Community Service**Committees**

Member, Long Range Planning Committee Association for Research in Otolaryngology	2026–
Member, Conference Planning Committee Ontario Emerging Auditory Research (ON-EAR) Conference	2026–
Member, Science & Education Committee Canadian Academy of Audiology	2026–
Member, CIHR College of Reviewers	2024–
Member, Accommodations Committee Association for Research and Otolaryngology	2020–2026

Ad hoc Grant Reviewing [19]

Mitacs Accelerate/Elevate (ad hoc reviewer) [3]	2024–2026
NSERC Discovery Grant (ad hoc reviewer) [3]	2024–2026
CFI JELF (ad hoc reviewer) [2]	2025–2026
CIHR Fellowships Peer Reviewer [6]	2022, 2023, 2026
ECR Member, CIHR Project Grant Review, BSB [5]	2023

Peer Reviewing [64 articles]

<i>American Journal of Audiology</i>	<i>IEEE Transactions in Neural Systems & Rehabilitation</i>
<i>Auditory Perception & Cognition</i>	<i>International Journal of Audiology</i>
<i>Brain Communications</i>	<i>Journal of Clinical Medicine</i>
<i>Brain Research</i>	<i>Journal of the Canadian Acoustical Association</i>
<i>Brain & Behaviour</i>	<i>Journal of Neural Engineering</i>
<i>Brain Science Advances</i>	<i>Journal of Neurophysiology</i>
<i>Canadian Acoustics</i>	<i>Journal of Speech, Language, and Hearing Research</i>
<i>Communications Medicine</i>	<i>The Laryngoscope</i>
<i>Communications Psychology</i>	<i>Neural Plasticity</i>
<i>Ear and Hearing</i>	<i>NeuroImage</i>
<i>European Journal of Neuroscience</i>	<i>Neuroscience</i>
<i>Frontiers in Neuroscience/Psychology/Aging</i>	
<i>Hearing Research</i>	

PLOS ONE
Scientific Reports
Trends in Hearing