

Postdoctoral researcher / Lab manager
McGill Neurolinguistics Laboratory,
School of Communication Sciences and Disorders

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Education

- 2014 – ongoing Postdoctoral researcher,
Neurolinguistics laboratory,
School of communication sciences and disorders, McGill University
- 2012 – 2014 Postdoctoral Fellowship in psychology,
Language and Memory Laboratory, McGill University.
- 2006 – 2012 PhD in linguistics, specialized in neuro-phonetics,
Laboratoire de Sciences Phonétiques & Laboratoire de Neurosciences et
Électrophysiologie Cognitive, Université de Montréal.
- 2007 Speech therapy research internship,
Université de Montréal.
- 2003 – 2006 MA in linguistics, specialized in phonetics,
Laboratoire de Sciences Phonétiques, Université de Montréal.
- 2000 – 2003 BA in linguistics,
Université de Montréal.

Awards and distinctions

- 2010 *Prix 2010 d'Excellence en Enseignement ('Excellence in teaching award'),*
Université de Montréal.
- 2006 *Dean's honour roll - master's,* Université de Montréal.
- 2003 *Bachelor's with mention of excellence,* Université de Montréal.
- 2000 – 2003 *Dean's honour roll - bachelor's,* Université de Montréal.

Funding and Scholarships (*selection*)

- 2016 – 2018 *Insight Development Grants*
Social Sciences and Humanities Research Council of Canada (SSHRC).
"The role of phrase final lengthening in speech parsing and its interaction with stress-timed, syllable-timed, and mora-timed language structure."
- 2012 – 2014 *Bourse postdoctorale ('Postdoctoral award').*
Fonds Québécois de Recherche sur la Société et la Culture (FQRSC).
- 2011 *Fernand-Séguin scholarship.*
Centre de recherche Fernand-Séguin, Montréal.
- 2008 *Arsène David scholarship.*
Faculté des études supérieures et postdoctorales, Université de Montréal.
- 2007 – 2010 *Canada Graduate Scholarship Program: Doctoral Scholarship.*
Social Sciences and Humanities Research Council of Canada (SSHRC).
- 2006 – 2008 *Bourse de doctorat en recherche.*
Fonds Québécois de Recherche sur la Société et la Culture (FQRSC).

- 2006 *Admission Scholarship – Doctorate*
Département de linguistique et de traduction, Université de Montréal.
- 2004 *Canada Graduate Scholarship Program: Master’s Scholarship.*
Social Sciences and Humanities Research Council of Canada (SSHRC).

Publications and communications

Peer reviewed papers

- Gilbert, A. C.**, Boucher, V. J. & Jemel, B. (2015). The perceptual chunking of speech: a demonstration using ERPs. *Brain Research*, 1603, 101-113. [doi:10.1016/j.brainres.2015.01.032](https://doi.org/10.1016/j.brainres.2015.01.032).
- Gilbert, A. C.**, Boucher, V. J. & Jemel, B. (2014). Perceptual chunking and its effect on memory in speech processing: ERP and behavioral evidence. *Frontiers in Psychology*, 5(220), 1-9. [doi : 10.3389/fpsyg.2014.00220](https://doi.org/10.3389/fpsyg.2014.00220).

Peer reviewed conference proceedings (*p* = poster presentation, *t* = talk)

- Gilbert, A. C.**, Itzhak, I., & Baum, S. (2016). A cross-language investigation of word segmentation by bilinguals with varying degrees of proficiency: Preliminary results. *Proceedings of Speech Prosody 2016*. (*p*)
- Gilbert, A. C.**, Boucher, V. J., & Jemel, B. (2015). Individual differences in working memory capacity and their effect on speech processing. In The Scottish Consortium for ICPhS 2015 (Ed.), *Proceedings of the 18th International Congress of Phonetic Sciences*. University of Glasgow : Glasgow, United Kingdom. (*p*)
- Gilbert, A. C.**, Boucher, V. J., & Jemel, B. (2012). Effects of temporal chunking on speech recall. In Q. Ma, H. Ding, & D. Hirst (Eds.), *Proceedings of the 6th International Conference on Speech Prosody* (Vol. 2, pp. 524-527). Shanghai, Chine : Tongji University Press. (*p*)
- Gilbert, A. C.**, Boucher, V. J., & Jemel, B. (2011). The role of rhythmic chunking in speech: Synthesis of findings and evidence from statistical learning. In W.-S. Lee & E. Zee (Eds.), *Proceeding of The 17th International Congress of Phonetic Sciences* (pp.747-750). Hong Kong, Chine : City University of Hong Kong. (*t*)
- Gilbert, A. C.**, Boucher, V. J., & Jemel, B. (2010). Exploring the rhythmic segmentation of heard speech using evoked potentials. *Speech Prosody 2010*, 100 334, 1-3. (*t*)
- Boucher, V. J., & **Gilbert, A. C.** (2009). The physiology and acoustics of vocal fatigue I: New findings of criterion-based signs for the prevention of acquired voice disorders. In J. I. Godino-Llorente & P. Gomez-Vilda (Eds.), *3rd Advanced Voice Function Assessment International Workshop* (pp. 97-100). Madrid, Spain: Universidad Politécnica de Madrid. (*t*)
- Boucher, V. J., & **Gilbert, A. C.** (2009). The physiology and acoustics of vocal fatigue II: What software designers need to know about signs of potential vocal fold lesions. In J. I. Godino-Llorente & P. Gomez-Vilda (Eds.), *3rd Advanced Voice Function Assessment International Workshop* (pp. 101-104). Madrid, Spain: Universidad Politécnica de Madrid. (*t*)
- Gilbert, A. C.**, Boucher, V. J., & Jemel, B. (2008). Size of rhythm-groups affects the memory trace of heard words in utterances: Results from a pilot study using evoked potentials. In P. A. Barbosa, S. Madureira & C. Reis (Eds.), *Proceedings of the Speech Prosody 2008 Conference* (pp. 379-382). Campinas, Brazil: Editora RG/CNPq. (*p*)
- Boucher, V. J. & **Gilbert, A. C.** (2008). Investigations of speech segmentation : Addressing the writing bias in language research. In A. Botinis (Eds.) *Proceedings of the ISCA Tutorial and Research Workshop on Experimental Linguistics 2008* (pp.45-48), Athens, Greece: University of Athens. (*t*)
- Gilbert, A. C.**, & Boucher, V. J. (2007). What do listeners attend to in hearing prosodic structures? Investigating the human speech-parser using short-term recall. In H. van Hamme & R. van Son (Eds.), *Proceedings of the Eighth Annual Conference of the International Speech Communication Association (InterSpeech2007)* (pp. 430-433), Antwerp, Belgium: ISCA. (*p*)
- Gilbert, A. C.**, & Boucher, V. J. (2006). Syntax and syllable count as predictors of French tonal groups: Drawing links to memory for prosody. In R. Hoffmann & H. Mixdorff (Eds.), *Proceedings of the 3rd International Conference on Speech Prosody* (pp. 289-292). Dresden, Germany: TUD press. (*p*)

Gilbert, A. C., & Boucher, V. J. (2005). Size-constraints on intonation groups in speech: Evidence of an independent syllable-count principle. *Journal of the Acoustical Society of America*, 117, 2458. (Abstract, p)

Boucher, V. J., & **Gilbert, A. C.** (2005). Constraints on immediate memory for prosody: Evidence of a correspondence with the prosodic organization of speech. In B. G. Bara, L. Barsalou & M. Bucciarelli (Eds.), *Proceedings of XXVII Annual Conference of the Cognitive Science Society* (pp. 328-330). Mahwah, NJ: Erlbaum. (p)

Talks (selection of talks not previously mentioned in Proceedings section)

Gilbert, A. C., Wolpert, M., Kousaie, S., & Baum, S. R. (2017). *Producing appropriate prosodic cues in a non-dominant language: preliminary results from French-English bilinguals*. 8th Tutorial and Research Workshop on Experimental Linguistics (ExLing 2017), Heraklion, Greece.

Gilbert, A. C., Cousineau-Perrusse, M., & Titone, D. (2017). *Est-ce que les locuteurs bilingues utilisent les mêmes stratégies de planification en langue maternelle et en langue seconde?* Plasticité, musique et langage, 85e Congrès de l'ACFAS, Montréal, Qc.

Gilbert, A. C., Cousineau-Perrusse, M., & Titone, D. (2017). *Planification des énoncés chez les locuteurs bilingues : impact des variables individuelles sur la production en langue maternelle et en langue seconde*. Le rôle des habiletés perceptuelles et cognitives dans le langage oral et écrit, 85e Congrès de l'ACFAS, Montréal, Qc.

Boucher, V. J., **Gilbert, A. C.**, & Jemel, B. (2017). *The entrainment of EEG delta oscillations in speech listening*. 8th Tutorial and Research Workshop on Experimental Linguistics (ExLing 2017), Heraklion, Greece.

Morningstar, M., **Gilbert, A. C.**, Burdo, J., Leis, M., & Dirks, M. A. (2017). *Recognition of vocal socio-emotional expressions at varying levels of emotional intensity*. Advances in Understanding the Recognition of Vocal Cues of Emotion, Association for Psychological Science conference, Boston, MA.

Phillips, N., Coulter, K., Gonzalez Cautela, B., René, J.-L., Covey, A., **Gilbert, A. C.**, Kousaie, S., Titone, D., Baum, S. R., Klein, D., & Gracco, V. (2017). *L'influence du contenu et de la compétence linguistique sur le traitement de phrases dans le bruit chez les bilingues*. Plasticité, musique et langage, 85e Congrès de l'ACFAS, Montréal, Qc.

Gilbert, A. C., Itzhak, I., Koussaie, S., Baum, S. R. (2016). *Localisation des frontières lexicales chez les locuteurs bilingues : résultats préliminaires*. Impacts cognitifs et neurophysiologiques du bilinguisme, 84e Congrès de l'ACFAS, Montréal, Qc

Gilbert, A. C. (2013). *How do L2 ability and Cognitive Capacity Modulate L1 vs. Acoustic-Phonetic Realization*. CRBLM/McGill Psychology DataStorm 2013, Montréal, Canada.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2012). *The on-line "perceptual chunking" of speech: ERP evidence*. CRBLM Workshop on Rhythm Perception and Production, Montréal, Canada.

Gilbert, A. C., Boucher, V. J., Jemel, B. & Lalonde, B. (2010). *Segmentation de la parole : des groupes rythmiques et des énoncés, pas des mots et des phrases*. 78e Congrès de l'ACFAS, Montréal, Canada.

Posters (selection of posters not previously mentioned in Proceedings section)

Gilbert, A. C., Cousineau-Perusse, M., & Titone, D. (2016). *Are Bilinguals More "Risk-Averse" in their Scope of Planning During Second vs. First Language Production?* Mental Lexicon 2016, Ottawa, Canada.

Gilbert, A. C., Itzhak, I, & Baum, S. (2016). *Bilingual word segmentation: A cross-language ERP investigation*. 23rd Annual Meeting of the Cognitive Neuroscience Society, New York, NY.

Boucher, V. J., **Gilbert, A. C.**, & Jemel, B. (2016). *The impact of eurhythmic structures on speech processing: ERPs attest to effects on sensory memory*. 23rd Annual Meeting of the Cognitive Neuroscience Society, New York, NY.

Gonzalez, E., Itzhak, I., **Gilbert, A. C.**, & Titone, D. (2016). *How does Word Concreteness and Cognate Status Independently Affect Bilingual Semantic Processing?* Mental Lexicon 2016, Ottawa, Canada.

Gilbert, A. C., Pivneva, I., & Titone, D. (2015). *Individual Differences in Executive Control and Second Language Exposure Modulate the Acoustic Realization of Phonological Cues in Highly Proficient Bilingual Speakers*. 56th Annual Meeting of the Psychonomic Society, Chicago, É.U.

Gilbert, A. C., Pivneva, I., & Titone, D. (2014). *Lexical quality and the acoustic-phonetic realization of bilingual speech*. 9th International Conference on the Mental Lexicon, Niagara on the Lake, On.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2013). *Input chunking and its effect on speech processing*. 11th Symposium of Psycholinguistics, Tenerife, Spain.

Gilbert, A. C., Pivneva, I. & Titone, D. (2013). *Individual Differences in Second Language Ability and Executive Control Modulate Voice Onset Time During Bilingual Speech*. 2013 Psychonomic Society Annual Meeting, Toronto, Canada.

Gilbert, A. C., Pivneva, I. & Titone, D. (2013). *Individual Differences in Executive Control and Second Language Ability Modulate Voice Onset Time During Bilingual Speech*. Intl. Conference on Multilingualism, Montréal, Canada.

Khawajkie, Y., **Gilbert, A. C.**, Pivneva, I. & Titone, D. (2013). *Cross-Language VOT Differences in Spontaneous Speech, L2 Proficiency, and Cognitive Control*. 2013 Auditory Cognitive Neuroscience Workshop, Hamilton, Canada.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2011). *The role of rhythmic chunking in speech: synthesis of findings and evidence from statistical learning*. Experimental and theoretical advances in prosody 2, Montréal, Canada.

Gilbert, A. C., Jemel, B. & Boucher, V. J. (2010). *Closure Positive Shifts (CPS) : evoked by prosodic rhythm-groups in meaningful and meaningless speech*. 17th Annual Cognitive Neuroscience Society Meeting, Montréal, Canada.

Gilbert, A. C., Jemel, B. & Boucher, V. J. (2009). *Closure Positive Shifts (CPS) as reflecting on-line segmentation of prosodic rhythm-groups in speech*. First Neurobiology of Language Conference, Chicago, USA.

Invited talks (selection)

Gilbert, A. C. (2016). *La prosodie comme outil de segmentation de la parole : Du chunking perceptif à la détection des frontières lexicales*. Conférence linguistique de l'UQÀM, Montréal, Canada.

Boucher, V. J. & **Gilbert, A. C.** (2013). Brain waves and prosodic structure: Recent results and perspectives. Université Paris 7, France.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2012). Le chunking perceptif de la parole. Presented in *ORT6030 : Méthodes de recherche en orthophonie*, Université de Montréal, Montréal, Canada.

Gilbert, A. C. (2012). How language works, according to Pinker's *The language instinct*. Presented in *PSYC537: Advanced topics in psychology of language*, McGill University, Montréal, Canada.

Gilbert, A. C. & Columbus, G. (2012). On Croft & Cruse : Radical construction grammar, Presented in *PSYC537: Advanced topics in psychology of language*, McGill University, Montréal, Canada.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2011). The role of rhythmic chunking in speech: synthesis of findings. *Center for Research on Language Mind and Brain*, McGill University, Montréal, Canada.

Research and technical training

Training (selection)

Introduction to Bayesian Inference and Its Application Through Hierarchical Linear Modeling, Montréal, Qc. 2017. *Graduate Association of Students of Psychology (GASP) Psychology Methods Workshops*

Course on Research Ethics, on applying the *Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans, 2nd edition (TCPS 2; web tutorial)*. 2016. *Panel on Research Ethics, Canada*.

Introduction to Knowledge Translation Planning, Montréal, Qc. 2016. *Center for Research on Brain, Language, and Music (CRBLM)*.

MEG@McGill Comprehensive Training: Full-day MEG/EEG imaging crash course, Montréal, Qc. 2015. *McConnell Brain Imaging Centre, Montreal Neurological Institute*.

Introductory Workshop on Mixed-Effects Modelling, Montréal, Qc. 2015. *NSERC-CREATE: Training in Auditory Cognitive Neuroscience*.

BrainVision Analyzer 2 Workshop, Montréal, Qc.
2015. *Brain Vision LLC, University McGill.*

Residue Iteration Decomposition (RIDE) workshop (toolbox pour Matlab), Montréal, Qc.
2015. *Center for research on brain, language, and music.*

Linear mixed models workshop, Montréal, Qc.
2014. *Center for research on brain, language, and music.*

R for programmers, Montréal, Qc.
2014. *Software Carpentry/Mozilla Science Lab.*

Praat workshop, Montréal, Qc.
2012. *McGill University.*

Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Allemagne.
2010. *International Summer School on Multimodal Approaches in Neuroscience*

Université du Québec à Montréal, Montréal, Qc.
2010. *Institut d'été en sciences cognitives 2010 : l'évolution du langage*

City University of New York, New York, É.U.
2010. *Tutorial in Neurolinguistic Methods*

Technical Skills

Softwares

- Acoustical analysis :
KayLab suite (CSL, Multi-Speech, MDVP.), Praat, Wavesurfer, WinPitch.
- Electrophysiological signal analysis :
BrainVision Analyzer, Matlab (EEGLab, FieldTrip, RIDE), BioProc, EEProbe, Cognitrace.
- Stimuli design and presentation :
E-Prime, Inquisit, Goldwave, KayLab ASL.
- Statistics :
SPSS, R.
- Graphics :
Photoshop, Illustrator, Grapher

Lab techniques

- Electroencephalography (EEG), Event-Related Potential (ERP).
- Monopolar and bipolar electromyography (EMG).
- Studio recording and audiometric screening.

Teaching

Courses

2015. Lecturer *LSV716 : Phonétique et phonologie*, Département des lettres et communications, Faculté des lettres et des sciences humaines, Université de Sherbrooke.
(Course evaluation available upon request.)

2006 – 2011. Lecturer *LNG1400 : Notions de phonétique et de phonologie*, Département de linguistique et de traduction, Université de Montréal.
(Course evaluation available upon request.)

2011. Lecturer *LNG2400 : Phonétique instrumentale du français*,

Département de linguistique et de traduction, Université de Montréal.
(Course evaluation available upon request.)

Teaching material developed

2006. (With major revisions in 2007 et 2008). Codex for LNG1400 : *Notions de phonétique et de phonologie*.
Département de linguistique et de traduction, Université de Montréal. 190 pages.
Including supplementary information and autodidact exercises,
In collaboration with Charles A. Lamoureux et Victor J. Boucher

Student supervision

Assisted supervision of: Maxime Cousineau-Pérusse (2015-2016, undergrad), Julia Hamil (2014, undergrad), Caleb Harrison (2013-2014, undergrad), Yassemine Khawajkie (2012-2013, undergrad) and Lianne Morier (2012, undergrad)

Primary supervisor: Dr. Debra Titone, McGill Language and Memory Laboratory, Psychology department.

Assisted supervision of: Aruna Sundarsan (2015-2016, PhD student), Max Wolpert (2016, PhD student)
Primary supervisor: Dr. Shari Baum, McGill Neurolinguistics Laboratory, School of communication sciences and disorders

Laboratory supervision

2007 – 2012. Laboratory supervisor, *LNG3560 : Phonétique : théorie et description*, Département de linguistique et de traduction, Université de Montréal.

Teaching training (Available upon request)

Services

Event organization

2016 – 2017. Plasticité, musique et langage, held during the 85e Congrès de l'ACFAS, McGill University.

2016. Third Annual Postdoctoral Research Day (McGill representative).

2015 – 2016. Impacts cognitifs et neurophysiologiques du bilinguisme, held during the 84e Congrès de l'ACFAS, Université du Québec à Montréal.

2012 – 2013. Student coordinator of the Cognitive Area Brownbag, Department of Psychology, McGill University.

Reviews

Paper reviews : *Journal of Psycholinguistic Research*. (2 papers)

Journal of Applied Linguistics. (1 paper)

Journal of Phonetics. (1 paper)

Book review: *Cognitive Neuroscience of Language*, Routledge Psychology | Taylor & Francis.

Languages

Native : French.

Fluent : English (written, spoken)

Basic comprehension of Spanish and German (written and spoken).