

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

annie.c.gilbert@mcgill.ca

Education

- 2012 – 2016 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 honor roll - master's*, Université de Montréal.
- 2003 *Bachelor's with mention of excellence*, Université de Montréal.
- 2000 – 2003 *Dean's honor roll - bachelor's*, Université de Montréal.

Scholarships and funding (*selection*)

- 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 Counsel 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 Counsel 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.

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.

Peer reviewed proceedings

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*.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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)

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 the XXVII Annual Conference of the Cognitive Science Society* (pp. 328-330). Mahwah, NJ: Erlbaum.

Presentations (*selection, not mentioned in Proceedings section*)

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

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*. Présenté à The 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*. Présenté à The 9th International Conference on the Mental Lexicon, Niagara on the Lake, On.

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

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2013). *Input chunking and its effect on speech processing*. Presented at the 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*. Presented at The 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*. Presented at the International 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*. Presented at The 2013 Auditory Cognitive Neuroscience Workshop, Hamilton, Canada.

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

Morier, L., **Gilbert, A. C. & Titone, D.** (2012). *Can Incongruent Prosody Disrupt On-Going Interpretation of Idioms?* Presented at The 2012 Auditory Cognitive Neuroscience Workshop, Montréal, Canada. Août 2012.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2011). *The role of rhythmic chunking in speech: synthesis of findings and evidence from statistical learning*. Presented at the 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*. Presented at the 17th Annual Cognitive Neuroscience Society Meeting, 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*. Presented at the 78^e Congrès de l'ACFAS, 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*. Presented at the First Neurobiology of Language Conference, Chicago, USA.

Gilbert, A. C. (2007). *Comparaison des facteurs prédictifs de la prosodie en parole spontanée et dirigée*. Presented at the 75e Congrès de l'ACFAS, Trois-Rivières, Canada.

Gilbert, A. C., & Boucher, V. J. (2005). *Constraints on memory for tonal patterns: A structuring principle of speech prosody*. Presented at the 9th European Congress of Psychology, Granada, Spain.

Gilbert, A. C., & Boucher, V. J. (2005). *Size-constraints on intonation groups in speech: Evidence of an independent syllable-count principle*. Presented at the 149th Meeting of the Acoustical Society of America, Vancouver, Canada.

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*. Présenté aux Conférence linguistique de l'UQÀM, Montréal, Qc.

Boucher, V. J. & **Gilbert, A. C.** (2013). Brain waves and prosodic structure: Recent results and perspectives. Université Paris 7, France, June 4th 2013.

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, December 5th 2012.

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, Septembre 12th 2012.

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, October 3rd 2012.

Gilbert, A. C., Boucher, V. J. & Jemel, B. (2011). The role of rhythmic chunking in speech: synthesis of findings. Presented to the *Center for Research on Language Mind and Brain*, McGill University, Montréal, Canada, June 20th 2011.

Research and technical training

Training (selection)

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*

Center for Research on Language, Mind, and Brain, Montréal, Qc.

2007. *Formation à l'utilisation de BESA (Brain Electrical Source Analysis), MEGIS Software*

Assistantships

2003 – 2008. Research assistant, Laboratoire de sciences phonétiques, Université de Montréal.

Technical knowledge

Softwares

- Acoustical analysis :

KayLab suite (CSL, Multi-Speech, ASL, MDVP.), Praat, Wavesurfer, WinPitch.

- Electrophysiological signal analysis :

BrainVision Analyzer, Matlab (EEGLab, FieldTrip, RIDE), BioProc, EEProbe, Cognitrace.

- Stimuli design and presentation :

Goldwave, E-Prime, Inquisi, 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 exercices.
In collaboration with Charles A. Lamoureux et Victor J. Boucher

Student supervision

Assisted supervision of: Maxime Cousineau-Pérusse (2015-2016), Aruna Sundarsan (2015-2016), Julia Hamil (2014), Caleb Harrison (2013), Yasmine Khawajkie (2013) and Lianne Morier (2012)
Primary supervisor: Dr. Debra Titone, McGill Language and Memory Laboratory.

Laboratory supervision

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

Teaching assistantships

2003 – 2006. Teaching assistant, *LNG2400 : Phonétique instrumentale du français*, Département de linguistique et de traduction, Université de Montréal.

2004 – 2005. Teaching assistant, *LNG1400 : Notions de phonétique et de phonologie*, Département de linguistique et de traduction, Université de Montréal.

2002. Teaching assistant, *LNG2960 : Phonétique expérimentale 2*,
Département de linguistique et de traduction, Université de Montréal.

Teaching training (*Available upon request*)

Languages

Native : French.

Fluent : English (written, spoken)

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

Sections “**Scientific affiliations**”, “**Services to the university**” and “**Media**” are available upon request.