

## Intérêts de recherche

Je dirige le ***Laboratoire de Neuropsychologie du Vieillissement*** au Centre de recherche de l'Institut universitaire de gériatrie de Montréal (CRIUGM) à Montréal. Ma programmation de recherche vise à mieux comprendre la nature du déclin cognitif dans différentes maladies neurodégénératives du cerveau et les changements cérébraux associés à ce déclin. J'ai une expertise dans la maladie d'Alzheimer et les formes atypiques de démences (aphasies primaires progressives, atrophie corticale postérieure, démence fronto-temporale). Ma recherche vise également à mieux comprendre la nature du déclin mnésique chez des individus présentant des troubles cognitifs légers (MCI), ainsi que les changements cognitifs associés au vieillissement normal et aux facteurs qui les modulent (réserve cognitive, charge amyloïde, fardeau vasculaire).

Voici quelques-unes de mes thématiques de recherche :

- *Mémoire et langage* : Mieux comprendre les troubles sémantiques dans la phase prodromale et débutante de la maladie d'Alzheimer ainsi que leurs substrats cérébraux (IRM structurale et fonctionnelle, MEG), contribuant ainsi à améliorer le diagnostic précoce; mieux comprendre la nature des troubles sémantiques dans l'aphasie primaire progressive (démence sémantique).
- *Perception visuelle* : L'étude des troubles de la reconnaissance des visages dans les démences et dans les pathologies acquises (i.e. prosopagnosie).
- *Vieillesse cognitive et neuroimagerie* : L'impact de la charge amyloïde, des lésions de la matière blanche et de l'épaisseur corticale sur la cognition dans le vieillissement normal ainsi que le rôle de la réserve cognitive dans la modulation de ce déclin cognitif. Les modifications cérébrales liées au vieillissement normal et pathologique en lien avec la cognition en utilisant différentes méthodes de neuroimagerie (IRM, MEG, PET)
- *L'intervention cognitive* : L'intervention cognitive chez des personnes âgées présentant des troubles cognitifs. Intervention de l'anomie avec le téléphone intelligent dans l'aphasie primaire progressive (en collaboration avec Nathalie Bier); Intervention de la mémoire prospective dans le MCI (en collaboration avec Isabelle Rouleau et Marie-Julie Potvin)

Ma programmation de recherche a été financée par les *Fonds de recherche du Québec - Santé (FRQ-S)*, les *Instituts de recherche en santé du Canada (IRSC)*, l'*Institut du vieillissement des IRSC*, et la *Société Alzheimer du Canada*. J'ai obtenu aussi des bourses salariales *Chercheur-boursier FRQ-S junior I, II et senior*.

## Research interests

I am director of the *Neuropsychology of Aging Lab* at the Centre de recherche de l'Institut universitaire de gériatrie de Montréal (CRIUGM) in Montreal. The objective of my research program is to better understand the nature of cognitive decline in neurodegenerative diseases of the brain and the brain networks that are involved. I have an expertise with Alzheimer's disease and atypical forms of dementia (primary progressive aphasia, posterior cortical atrophy, frontotemporal dementia). The objective is also to better understand the nature of memory decline in Mild cognitive impairment, as well as cognitive changes that occur in normal aging and how these changes are modulated by factors such as cognitive reserve, amyloid burden and vascular burden.

Here are some of my research topics:

- *Memory and language*: I am trying to better understand semantic deficits in prodromal and early Alzheimer's disease, and the neural bases of these deficits (using structural and functional MRI and MEG), thereby contributing to improving early diagnosis. I am also interested in better understanding the nature of semantic deficits in semantic dementia, also known as the semantic variant of primary progressive aphasia.
- *Visual perception*: I am interested in studying face recognition deficits in dementias and in acquired neurological disorders (prosopagnosia).
- *Cognitive aging and neuroimaging*: The impact of beta-amyloid burden and white matter lesions on cognition in aging, and how this is mediated by cognitive reserve; Brain changes related to normal and pathological aging using various neuroimaging techniques (MRI, MEG, PET).
- *Cognitive intervention*: cognitive intervention programs in older persons with cognitive impairment. For instance, semantic memory intervention in PPA and anomia intervention using smartphone technology in Primary progressive aphasia (in collaboration with Nathalie Bier); Prospective memory intervention in Mild cognitive impairment (in collaboration with Isabelle Rouleau and Marie-Julie Potvin)

My research has been funded by the *Fonds de recherche du Québec - Santé (FRQ-S)*, the *Canadian Institutes of Health Research (CIHR)*, the *Institute of Aging (CIHR)*, and the *Alzheimer Society of Canada*. I have also held *FRQ-S Chercheur-boursier junior 1, junior 2 and senior* salary award.

## **Université de Montréal**

- Professeur titulaire/Full professor, département de psychologie, Université de Montréal (2017)
- Professeur agrégé/Associate professor, département de psychologie, Université de Montréal (2011)
- Membre du Comité du Programme Ph.D. recherche/intervention en Neuropsychologie clinique/ Committee member, Ph.D. Research/Intervention Program in Clinical Neuropsychology (CPA accr)
- Directeur du Programme de Ph.D. recherche/intervention en Neuropsychologie clinique juin 2011-décembre 2012 / Director of the Ph.D. Research/Intervention Program in Clinical Neuropsychology, June 2011-December 2012, Université de Montréal.
- Teaching :
  - *Current*: Mémoire humaine / Human Memory (3 credits, 45 hrs, undergraduate)
  - *Current*: Maturité et vieillesse / Psychology of Aging (3 credits, 45 hrs, undergraduate)
  - *Past*: Évaluation neuropsychologique adulte/aîné / Adult & older adult neuropsychological assessment (3 credits, 45 hrs, Ph.D. course in clinical neuropsychology)

## **Appartenance à des organismes professionnels / Credentials**

- Membre de l'Ordre des Psychologues du Québec/Registered member of the Quebec Board of Psychologists (OPQ)
- Attestation d'évaluation des troubles neuropsychologiques/Certificate of training for the assessment of neuropsychological disorders (OPQ)

## **Supervision**

### **Stagiaires postdoctoraux / Postdoctoral fellows:**

- Thomas Tannou, fellowship (postdoctorant) en gériatrie/neuropsychologie, 2019-20.
- Shady Rahayel, postdoctorant en neuropsychologie et neuroimagerie, 2018-19.
- Frédérique Escudier, postdoctorante en neuropsychologie (boursière postdoctorale ASC), 2016-18.
- Guillaume Vallet, postdoctorant en neuropsychologie (boursier postdoctoral FRQS), 2013-2016.
- Delphine Gandini, postdoctorante en neuropsychologie (boursière postdoctorale IRSC), 2010-2013.
- Simona Brambati, postdoctorante en neuropsychologie (boursière postdoctorale IRSC), 2007-2011.

### **Étudiants aux cycles supérieurs - diplômés / Graduate students - completed (2010- ) :**

- Marie Michelle Boudreau-Duhaime, D.Psy en neuropsychologie clinique, Université de Montréal (directeur/supervisor Dr. Sébastien Grenier), 2020.
- Josiane Héroux, D.Psy en neuropsychologie clinique, Université de Montréal (cosuperviseur Dr. Louis de Beaumont), 2019.
- Jessica Pineault, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal (boursière IRSC) (cosuperviseur Dr. Pierre Jolicoeur). 2018.
- Sophie Benoit, Ph.D. recherche/intervention en neuropsychologie clinique, UQAM (directrice/supervisor: Dr. Isabelle Rouleau), 2017.
- Pier-Luc Massicotte, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal, 2016.
- Simon Reeves, M.Sc. en neuropsychologie, Université de Montréal, 2016.
- Roxane Langlois, Ph.D. recherche/intervention en neuropsychologie clinique, UQAM, 2015 (cosupervision, directrice/supervisor: Dr. Isabelle Rouleau)
- Jacinthe Lacombe, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal, 2015
- Julie Brunet, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal, 2015
- Catherine Ethier-Majcher, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal (cosupervision, directeur/supervisor: Dr. Frédéric Gosselin), 2014
- Magalie Loïselle, Ph.D. recherche/intervention en neuropsychologie clinique, Université de Montréal, 2011

### **Étudiants au premier cycle / Undergraduate students (2010- ):**

- Emilie Delage, Laboratoire PSY3008, Baccalauréat en psychologie, U. de Montréal
- Antoine Slegers, Honors, Baccalauréat en psychologie, Université de Montréal
- Camille Legault-Denis, Laboratoire PSY3008, Baccalauréat en psychologie, U. de Montréal
- Shady Rahayel, Programme Honors, Baccalauréat en psychologie, Université de Montréal
- Maxime Montembeault, Programme Honors, Baccalauréat en psychologie, Université de Montréal

### **Collaborations & Publications**

#### **Collaborateurs nationaux / National collaborators:**

- Isabelle Rouleau, CHUM et Département de psychologie, UQAM, Montréal
- Walter Wittich, CRIR et École d'Optométrie, Université de Montréal
- Nathalie Bier, CRIUGM et Faculté de réadaptation, Université de Montréal
- Simona Brambati, CRIUGM et Département de psychologie, Université de Montréal
- Sylvie Belleville, CRIUGM et Département de psychologie, Université de Montréal, Montréal

- Jean-François Gagnon, Centre de recherche sur le sommeil de l'Hôpital Sacré-Cœur de Montréal et Département de psychologie, UQAM, Montréal
- Christian Bocti, CHUS et Faculté de Médecine, Université de Sherbrooke
- Howard Chertkow, Bloomfield Centre for Research in Aging, Lady Davis Institute, Jewish General Hospital et Department of Neurology and Neurosurgery and Medicine, McGill University
- Carol Hudon et Joël Macoir, CRULRG et Université Laval, Québec
- Pierre Jolicoeur, CERNEC et Département de psychologie, Université de Montréal, Montréal
- Marie-Jeanne Kergoat, Clinique de cognition IUGM et Université de Montréal, Montréal
- Juan Manuel Villalpando, Clinique de cognition IUGM, Montréal

**Collaborateurs internationaux / International collaborators:**

- François Maquestiaux, Université de Franche-Comté, Besançon, France
- Isabelle Simoes-Loureiro, Université de Mons, Belgique
- Emmanuel Barbeau, CERCO, Toulouse, France
- Mira Didic, Olivier Felician, Mathieu Ceccaldi, Service de Neurologie et de Neuropsychologie, AP-HM Hôpital de la Timone, Marseille, France
- Agnès Trebuchon Da-Fonseca, Service de Neurophysiologie clinique, AP-HM Hôpital de la Timone, Marseille, France
- Bruno Rossion et Thomas Busigny, Université catholique de Louvain (UCL), Belgique
- Stéphane Adam, Université de Liège, Belgique

**Une sélection de publications / A selection of publications:**

Lavallee MM, Gandini D, Rouleau I, Vallet G, Joannette M, Kergoat MJ, Busigny T, Rossion B, Joubert S (2016). A qualitative impairment in face perception in Alzheimer's disease: evidence from a reduced face inversion effect. *J Alzheimers Dis*, 51(4):1225-36 (2016).

Joubert S, Gour N, Guedj E, Didic M, Gueriot C, Koric L, Ranjeva JP, Felician O, Guye M, Ceccaldi M. Early-onset and late-onset Alzheimer's disease are associated with distinct patterns of memory impairment. *Cortex*. 74: 217-32 (2016).

Joubert S, Brambati SM, Ansado J, Barbeau EJ, Felician O, Didic M, Lacombe J, Goldstein R, Chayer C, Kergoat MJ. The cognitive and neural expression of semantic memory impairment in mild cognitive impairment and early Alzheimer's disease. *Neuropsychologia*, 48(4):978-88 (2010).

Joubert S, Felician O, Barbeau E, Ranjeva J-P, Christophe M, Didic M, Poncet M, Ceccaldi M. The right temporal lobe variant of frontotemporal dementia: cognitive and neuroanatomical profile of three patients. *Journal of Neurology*, 253(11):1447-1458 (2006).

Joubert S, Felician O, Barbeau E, Sontheimer A, Barton JJ, Ceccaldi M, Poncet M. Impaired configurational face processing in a case of progressive prosopagnosia associated with predominant right temporal atrophy. *Brain*, 126: 2537-2550 (2003).

## **Publications:**

### **Livres/books**

- (1) Barbeau E, Joubert S, Felician O Editeurs. *Traitement et reconnaissance des visages : du percept à la personne*. Editions Solal, 484 pages, Décembre 2008.

### **Chapitres de livre/book chapters**

- (2) Barbeau EJ, Joubert S (2010). Disorders of Face Processing. In: Koob G.F., LeMoal M. and Thompson R.F. (eds.) *Encyclopedia of Behavioral Neuroscience*, volume 1, pp. 405–410 Oxford: Academic Press.
- (3) Joubert S, Busigny T, Rossion B (2008). L'évaluation neuropsychologique de la prosopagnosie. In Barbeau E, Joubert S, Felician O (Eds). *Traitement et reconnaissance des visages : du percept à la personne*. Marseille, Editions Solal, p. 41-78.
- (4) Joubert S, Barbeau E, Felician O (2008). Les troubles sémantiques de la reconnaissance des personnes. In Barbeau E, Joubert S, Felician O (Eds). *Traitement et reconnaissance des visages: du percept à la personne*. Marseille, Editions Solal, p.441-468.
- (5) Barbeau E, Joubert S, Felician O (2008). Les troubles de la reconnaissance des visages. In Barbeau E, Joubert S, Felician O (Eds). *Traitement et reconnaissance des visages: du percept à la personne*. Marseille, Editions Solal, p. 27-40.
- (6) Joubert S, Joncas S, Barbeau E, Ska B, Joannette Y (2007). Cognition. In Gauthier S (Ed). *Clinical Diagnosis and Management of Alzheimer's disease (3rd Edition)*. London, Taylor & Francis. p.165-76.
- (7) Barbeau E, Tramon E, Joubert S, Mancini J, Ceccaldi M, Poncet M (2004). Évaluation de la mémoire de reconnaissance visuelle : normalisation d'une nouvelle épreuve en choix forcé et utilité en neuropsychologie clinique. In Ergis AM, Gely-Nargeot MC, Van-der-Linden M (Eds) *Les troubles de la mémoire dans la maladie d'Alzheimer*. Marseille, éditions Solal. p 85-101.
- (8) Ceccaldi M, Barbeau E, Didic M, Joubert S, Felician O, Poncet M. (2005). Mémoires et maladies dégénératives des lobes temporaux. In Gueguen B, Chauvel P, Touchon J (Eds). *Neurophysiologies des mémoires*. Paris, éditions Elsevier. p 133-145.
- (9) Barbeau E, Felician O, Joubert S, Didic M, Poncet M, Ceccaldi M. (2006). Test de reconnaissance d'images et maladie d'Alzheimer. In Michel BF, Verdureau F, Dubois B (Eds). *Images et démences*. Monographie du Groupe de Recherche sur la Maladie d'Alzheimer. Marseille, éditions Solal. p 171-80.

### **Articles publiés ou sous presse/Published articles or in press**

- (10) Sevigny-Dupont P, Bocti C, Joannette M, Lavallée MM, Vallet GT, Nikelski J, Chertkow H, Joubert S. Amyloid burden and white matter hyperintensities mediate age-related cognitive differences. *Neurobiology of Aging*. 86, 16-26 (2020).

- (11) Joannette M, Bocti C, Sevigny-Dupont P, Lavallée MM, Nikelski J, Vallet GT, Chertkow H, Joubert S. Education as a moderator of the relationship between episodic memory and amyloid load in normal aging. *Journal of Gerontology: Biological Sciences*. In Press.
- (12) Badji A, Noriega de la Colina A, Karakuzu A, Duval T, Desjardins-Crépeau L, Parizet M, Joubert S, Bherer L, Lamarre-Cliche M, Stikov N, Cohen-Adad J, Girouard H. Arterial stiffness cut-off value and white matter integrity in the elderly. *Neuroimage: Clinical*. In Press.
- (13) Pineault J, Jolicoeur P, Grimault S, Lacombe J\*, Brambati SM, Bier N, Chayer C, Joubert S. Neural Substrates of Residual Semantic processing in semantic variant primary progressive aphasia: A magnetoencephalography (MEG) case study. *Neurocase*. 25(3-4): 118-129 (2019).
- (14) Allain P, Joubert S. La Neuropsychologie du 21ème siècle sera-t-elle numérique ? [Will 21st century neuropsychology be digital?]. *Revue de Neuropsychologie*. 11(1) : 26-28 (2019).
- (15) Chasles M-J, Tremblay A, Escudier F, Lajeunesse A, Benoit S, Langlois R, Joubert S, Rouleau I. Early impairment of semantic memory in amnesic MCI: What is learned from verbal fluency. *Archives of clinical neuropsychology: the official journal of the National Academy of Neuropsychologists*. 1: 1-9 (2019).
- (16) Rahayel S, Bocti C, Sévigny Dupont P, Joannette M, Lavallée MM, Nikelski J, Chertkow H, Joubert S (2019). Subcortical amyloid load is associated with shape and volume in cognitively normal individuals. *Human brain mapping*. 40(13): 3951-3965 (2019).
- (17) Rahayel S, Postuma RB, Montplaisir J, Génier Marchand D, Escudier F, Gaubert M, Bourgoïn PA, Carrier C, Monchi O, Joubert S, Blanc F, Gagnon JF. Cortical substrates of cognitive impairment in idiopathic rapid eye movement sleep behavior disorder. *Sleep*. 42(6): 1 (2019).
- (18) Rahayel S, Bocti C, Sévigny Dupont P, Joannette M, Lavallée MM, Nikelski J, Chertkow H, Joubert S (2019). Subcortical amyloid relates to cortical morphology in cognitively normal individuals. *Eur J Nucl Med Mol Imaging*, 46(11):2358-2369 (2019).
- (19) Badji A, Noriega de la Colina A, Karakuzu A, Duval T, Desjardins-Crépeau L, Joubert S, Bherer L, Lamarre-Cliche M, Stikov N, Girouard H, Cohen-Adad J. Arterial stiffness and white matter integrity in the elderly: A diffusion tensor and magnetization transfer imaging study. *Neuroimage*. 186: 577-585 (2019).
- (20) Pineault J, Jolicoeur P, Grimault S, Bermudez P, Brambati SM, Lacombe J\*, Villalpando JM, Kergoat MJ, Joubert S. Functional changes in the cortical semantic network in amnesic mild cognitive impairment. *Neuropsychology*. 32(4):417-435 (2018).
- (21) Rahayel S, Postuma RB, Montplaisir J, Génier Marchand D, Escudier F, Gaubert M, Bourgoïn PA, Carrier C, Monchi O, Joubert S, Blanc F, Gagnon JF. Cortical and subcortical gray matter bases of cognitive deficits in REM sleep behavior disorder. *Neurology*. 90(20):e1759-e1770 (2018).
- (22) Slegers A, Joubert S, Cole J, Escudier F, Seni A, Bédirian V, Charbonneau S, Gagnon JF, Rouleau I. Normes québécoises pour une version abrégée de l'échelle de dénomination de Boston à 30 items. *Neuropsychologie Clinique et Appliquée*. 2, 95-108 (2018).
- (23) Marcone S, Gagnon JF, Desjardins C, David AC, Postuma RB, Montplaisir J, Joubert S, Rouleau I. Prospective memory in idiopathic REM sleep behavior disorder with or without mild cognitive impairment: a preliminary study. *The Clinical Neuropsychologist*. 33(3): 571-593 (2019).

- (24) Turcotte V, Gagnon ME, Joubert S, Rouleau I, Gagnon JF, Escudier F, Koski L, Potvin O, Macoir J, Hudon C. Normative data for the Clock Drawing Test for French-Quebec mid- and older aged healthy adults. *Clin Neuropsychol.* 32(1): 91-101 (2018).
- (25) St-Hilaire A, Parent C, Potvin O, Bherer L, Gagnon JF, Joubert S, Belleville S, Wilson MA, Koski L, Rouleau I, Hudon C, Macoir J. Trail Making Tests A and B: regression-based normative data for Quebec French-speaking mid and older aged adults. *Clin Neuropsychol.* 10(1): 91-103 (2018).
- (26) Lavoie M, Bherer L, Joubert S, Gagnon JF, Blanchet S, Rouleau I, Macoir J, Hudon C. Normative data for the Rey Auditory Verbal Learning Test in the older French-Quebec population. *Clin Neuropsychol.* 32(1): 15-28 (2018).
- (27) Benoit S, Rouleau I, Langlois R, Dostie V, Joubert S. Le POP-40 : Un nouvel outil d'évaluation de la mémoire sémantique liée aux personnes célèbres [The POP-40: A new clinical tool to assess semantic knowledge about famous persons]. *Rev Neuropsychol.* 10 (1) : 91-103 (2018).
- (28) Chauvel G, Maquestiaux F, Gemonet E, Hartley A, Didierjean A, Masters R, Dieudonné B, Verny M, Joubert S. Intact procedural knowledge in patients with Alzheimer's disease: Evidence from golf putting. *J. Mot. Behav.* 50(3):268-274 (2018).
- (29) Benoit S, Rouleau I, Langlois R, Dostie V, Joubert S. The impact of time and repeated exposure on famous person knowledge in amnesic Mild Cognitive impairment and Alzheimer's disease. *Neuropsychology.* 31(7):697-707 (2017).
- (30) Julien J, Joubert S, Ferland MC, Frenette LC, Boudreau-Duhaime MM, Malo-Véronneau L, de Guise E. Association of traumatic brain injury and Alzheimer disease onset: A systematic review. *Ann Phys Rehabil Med.* 60(5):347-356 (2017).
- (31) Joubert S, Vallet GT, Montembeault M, Boukadi M, Wilson MA, Laforce RJ, Rouleau I, Brambati SM. Comprehension of concrete and abstract words in semantic variant primary progressive aphasia and Alzheimer's disease: a behavioral and neuroimaging study. *Brain Lang.* 170:93-102 (2017).
- (32) Joyal M, Brambati SM, Laforce RJ, Montembeault M, Boukadi M, Rouleau I, Macoir J, Joubert S, Fecteau S, Wilson MA. The Role of the Left Anterior Temporal Lobe for Unpredictable and Complex Mappings in Word Reading. *Front. Psychol.* 8:517 (2017).
- (33) Aziz AL, Giusiano B, Joubert S, Duprat L, Didic M, Gueriot C, Koric L, Boucraut J, Felician O, Ranjeva JP, Guedj E, Ceccaldi M. Difference in imaging biomarkers of neurodegeneration between early and late-onset amnesic Alzheimer's disease. *Neurobiol Aging.* 54:22-30 (2017).
- (34) Montembeault M, Brambati SM, Joubert S, Boukadi M, Chapleau M, Laforce RJ, Wilson MA, Macoir J, Rouleau I. Naming unique entities in the semantic variant of primary progressive aphasia and Alzheimer's disease: Towards a better understanding of the semantic impairment. *Neuropsychologia.* 95:11-20 (2017).
- (35) Marcone S, Gagnon JF, Lecomte S, Imbeault H, Limoges F, Postuma RB, Bertrand JA, Joubert S, Rouleau I. Clinical Utility of the Envelope Task in Mild Cognitive Impairment and Dementia. *Can J Neurol Sci.* 44(1):9-16 (2017).
- (36) Chedid G, Provost JS, Wilson MA, Rouleau I, Ciquier G, Joubert S, Brambati SM. The differential role of the left and right anterior temporal lobes for pictures and names semantics: an fMRI study. *Front Psychol.* 7:1333 (2016).



- (37) Rouleau I, Lajeunesse A, Drolet V, Potvin MJ, Marcone S, Lecomte S, Imbeault H, Limoges F, Labelle V, Gagnon JF, Joubert S. L'évaluation clinique de la mémoire prospective dans le MCI [Clinical assessment of prospective memory in mild cognitive impairment]. *Psychol Neuropsychiatr Vieil*. 16(93) :152–158 (2016).
- (38) Vallet G, Rouleau I, Benoit S, Langlois R, Barbeau EJ, Joubert S. Alzheimer's disease and memory strength: gradual decline of memory traces as a function of their strength. *JJ Clin Exp Neuropsychol*. 38(6):648-60 (2016).
- (39) Lavalée MM, Gandini D, Rouleau I, Vallet G, Joannette M, Kergoat MJ, Busigny T, Rossion B, Joubert S (2016). A qualitative impairment in face perception in Alzheimer's disease: evidence from a reduced face inversion effect. *J Alzheimers Dis*. 51(4): 1225-1236 (2016).
- (40) Langlois R, Joubert S, Benoit S, Dostie V, Rouleau I. Memory for public events in amnesic mild cognitive impairment and Alzheimer's disease: the importance of rehearsal. *J Alzheimers Dis*. 22;50(4):1023-33 (2016).
- (41) Joubert S, Gour N, Guedj E, Didic M, Gueriot C, Koric L, Ranjeva JP, Felician O, Guye M, Ceccaldi M. Early-onset and late-onset Alzheimer's disease are associated with distinct patterns of memory impairment. *Cortex*. 74: 217-32 (2016).
- (42) Lacombe J, Jolicoeur P, Grimault SY, Pineault J, Joubert S. Neural changes associated with semantic processing in healthy aging despite intact behavioral performance. *Brain and Language*. (149): 118-27 (2015).
- (43) Callahan B, Joubert S, Tremblay MP, Macoir J, Belleville S, Rousseau F, Bouchard RW, Verret L, Hudon C. Semantic memory impairment for biological and man-made objects in individuals with amnesic mild cognitive impairment or late-life depression. *Journal of Geriatric Psychiatry and Neurology, J Geriatr Psychiatry Neurol*. 28(2):108-16 (2015).
- (44) Langlois R, Joubert S, Benoit S, Dostie V, Rouleau I. (2015). L'évaluation de la mémoire rétrograde dans la population Québécoise âgée: Le PUB-40 et le PUB-12 [Assessment of retrograde memory in the aging Quebec population: the PUB-40 and PUB-12]. *Canadian Journal on Aging*. 34(3): 411-21.
- (45) Bier N, Brambati S, Macoir J, Paquette G, Schmitz X, Belleville S, Faucher C, Joubert S. (2015). Relying on procedural memory to enhance independence in daily living activities: Smartphone use in a case of semantic dementia. *Neuropsychological Rehabilitation*. 25(6): 913-35.
- (46) Drolet V, Vallet GT, Imbeault H, Lecomte S, Limoges F, Joubert S, Rouleau I. [A comparison of the performances between healthy older adults and persons with Alzheimer's disease on the Rey auditory verbal learning test and the Test de rappel libre/rappel indicé 16 items]. *Geriatr Psychol Neuropsychiatr Vieil*;12(2):218-26 (2014).
- (47) Dion M, Potvin O, Belleville S, Ferland G, Renaud M, Bherer L, Joubert S, Vallet GT, Simard M, Rouleau I, Lecomte S, Macoir J, Hudon C. Normative Data for the Rappel libre/Rappel indicé à 16 items (16-item Free and Cued Recall) in the Elderly Quebec-French Population. *Clin Neuropsychol*, 12:1-19 (2014).
- (48) Rahayel S, Montplaisir J, Monchi O, Bedetti C, Postuma RB, Brambati S, Carrier J, Joubert S, Latreille V, Jubault T, Gagnon JF. Patterns of cortical thinning in idiopathic rapid eye movement sleep behavior disorder. *Mov Disord*. 30(5):680-7 (2015).

- (49) Busigny T, Van Belle G, Jemel B, Hosein A, Joubert S, Rossion B. Face-specific impairment in holistic perception following focal lesion of the right anterior temporal lobe. *Neuropsychologia*, 56:312-33 (2014).
- (50) Schmitz X, Bier N, Joubert S, Lejeune C, Salmon E, Rouleau I, Meulemans T. The benefits of errorless learning for serial reaction time performance in Alzheimer's disease. *J Alzheimers Dis*, 39(2):287-300 (2014).
- (51) Predovan D, Gandini D, Montembeault M, Rouleau I, Bherer L, Joubert S, Brambati SM. Loss of person-specific knowledge in Alzheimer's disease: Evidence from priming. *Neurocase*, 20(3):263-8 (2014).
- (52) Ethier-Majcher C, Joubert S, Gosselin F. Reverse correlating trustworthy faces in young and older adults. *Front Psychol.*, 4:592 (2013)
- (53) Ansado J, Collins L, Joubert S, Fonov V, Monchi O, Brambati SM, Tomaiuolo F, Petrides M, Faure S, Joannette Y. Interhemispheric coupling improves the brain's ability to perform low cognitive demand tasks in Alzheimer's disease and high cognitive demand tasks in normal aging. *Neuropsychology*, 27(4):464-80 (2013).
- (54) Bier N, Bottari C, Hudon C, Joubert S, Paquette G, Macoir J. The impact of semantic dementia on everyday actions: evidence from an ecological study. *J Int Neuropsychol Soc*;19(2):162-72 (2013).
- (55) Adam S, Joubert S, Missotten P. L'âgisme et le jeunisme: conséquences trop méconnues par les cliniciens et les chercheurs ! *Revue de Neuropsychologie*, 1-5 (2013).
- (56) Montembeault M, Joubert S, Doyon J, Carrier J, Gagnon JF, Monchi O, Lungu O, Belleville S, Brambati SM. The impact of aging on gray matter structural covariance networks. *Neuroimage*;63(2):754-9 (2012).
- (57) Rahayel S, Frasnelli J, Joubert S. The effect of Alzheimer's disease and Parkinson's disease on olfaction: a meta-analysis. *Behav Brain Res*. 231(1):60-74 (2012).
- (58) Wilson MA, Joubert S, Ferré P, Belleville S, Ansaldò AI, Joannette Y, Rouleau I, Brambati SM. The role of the left anterior temporal lobe in exception word reading: reconciling patient and neuroimaging findings. *Neuroimage*;60(4):2000-7 (2012).
- (59) Loiselle M, Rouleau I, Nguyen DK, Dubeau F, Macoir J, Whatmough C, Lepore F, Joubert S. Comprehension of concrete and abstract words in patients with selective anterior temporal lobe resection and in patients with selective amygdalo-hippocampectomy. *Neuropsychologia*;50(5):630-9 (2012).
- (60) Chauvel G, Maquestiaux F, Didierjean A, Joubert S, Dieudonné B, Verny M. Use of nondeclarative and automatic memory processes in motor learning: how to mitigate the effects of aging. *Geriatr Psychol Neuropsychiatr Vieil*;9(4):455-463 (2011).
- (61) Barbeau EJ, Didic M, Joubert S, Guedj E, Koric L, Felician O, Ranjeva JP, Cozzone P, Ceccaldi M. Extent and neural basis of semantic memory impairment in mild cognitive impairment. *J Alzheimers Dis*;28(4):823-37 (2012).
- (62) Tramoni E, Felician O, Koric L, Balzamo M, Joubert S, Ceccaldi M. Alteration of autobiographical memory in amnesic mild cognitive impairment. *Cortex*;48(10):1310-9 (2012).

- (63) Chauvel G, Maquestiaux F, Hartley AA, Joubert S, Didierjean A, Masters RS. Age effects shrink when motor learning is predominantly supported by nondeclarative, automatic memory processes: evidence from golf putting. *Q J Exp Psychol*;65(1):25-38 (2012).
- (64) Pineault J, Grimault S, Brambati S, Bier N, Lacombe J, Jolicoeur P, Joubert S. Les substrats neuronaux du traitement sémantique résiduel dans la démence sémantique : apports de la neuroimagerie fonctionnelle. *Médecine Sci*, 1:112-121 (2012).
- (65) Van Belle G, Busigny T, Lefèvre P, Joubert S, Felician O, Gentile F, Rossion B. Impairment of holistic face perception following right occipito-temporal damage in prosopagnosia: converging evidence from gaze-contingency. *Neuropsychologia*;49(11):3145-50 (2011).
- (66) Brunet J, Hudon C, Macoir J, Belleville S, Rousseau F, Bouchard RW, Verret L, Chertkow H, Chayer C, Kergoat MJ, Joubert S. The relation between depressive symptoms and semantic memory in amnesic mild cognitive impairment and in late-life depression. *J Int Neuropsychol Soc*;17(5):865-74 (2011).
- (67) Bier N, Macoir J, Joubert S, Bottari C, Chayer C, Pigot H, Giroux S; SemAssist Team. Cooking "shrimp à la créole": a pilot study of an ecological rehabilitation in semantic dementia. *Neuropsychol Rehabil*.;21(4):455-83 (2011).
- (68) Brambati SM, Benoit S, Monetta L, Belleville S, Joubert S. The role of the left anterior temporal lobe in the semantic processing of famous faces. *Neuroimage*, 53(2):674-81 (2010).
- (69) Joubert S, Brambati SM, Ansado J, Barbeau EJ, Felician O, Didic M, Lacombe J, Goldstein R, Chayer C, Kergoat MJ. The cognitive and neural expression of semantic memory impairment in mild cognitive impairment and early Alzheimer's disease. *Neuropsychologia*, 48(4):978-88 (2010).
- (70) Busigny T, Joubert S, Felician O, Ceccaldi M, Rossion B. Holistic perception of the individual face is specific and necessary: Evidence from an extensive case study of acquired prosopagnosia. *Neuropsychologia*, 48(14):4057-92 (2010).
- (71) Joubert S. L'histoire de la neuropsychologie au Québec. *Rev Neuropsychol*, 2(2): 93-97 (2010).
- (72) Joubert S. La mémoire sémantique: de la théorie à la clinique. *Rev Neuropsychol*, 2(1): 1 (2010). [Éditorial]
- (73) Brambati SM, Belleville S, Kergoat MJ, Chayer C, Gauthier S, Joubert S. Single and Multiple Domain Amnesic MCI: two sides of the same coin? *Dementia and Geriatric Cognitive Disorders*, 28(6):541-549. [Age Plus Prize 2009 - Canadian Institutes of Health Research (CIHR-IRSC)] (2009)
- (74) Langlois R, Fontaine S, Hamel C, Joubert S. [The impact of aging on the ability to recognize famous faces and provide biographical knowledge of famous people]. *Can J Aging*, 28(4):337-45 (2009).
- (75) Joubert S, Felician F, Brunet J, Lacombe J, Koric L, Barbeau EJ, Ceccaldi M. Déficiences sémantiques et visuospatiales subcliniques dans le trouble cognitif léger. *Neuropsychología Latinoamericana*, 1(1), 16-23 (2009).
- (76) Tramon E, Didic M, Barbeau EJ, Joubert S, Felician O, Ceccaldi M, Poncet M. [Pure progressive amnesia: an amnesic syndrome with preserved autonomy]. *Rev Neurol*, 165(6-7):549-59 (2009)
- (77) Bier N, Macoir J, Hudon C, Bottari C, Joubert S. Agir sur le monde qui nous entoure: réflexions sur les relations entre la mémoire sémantique, les actions routinières et la résolution de problèmes. *Rev Neuropsychol*, 1(3), 229-237 (2009).

- (78) Joubert S, Felician O, Barbeau EJ, Didic M, Poncet M, Ceccaldi M. Patterns of semantic memory impairment in Mild Cognitive Impairment. *Behav Neurol*, 19(1-2):35-40 (2008).
- (79) Loïsel M, Lepore F, Joubert S. Le traitement sémantique des concepts abstraits et concrets et ses substrats cérébraux: Une revue de la littérature. *Rev Neuropsychol*, 17, 3, 261-292 (2007).
- (80) Joubert S, Felician O, Barbeau E, Ranjeva J-P, Christophe M, Didic M, Poncet M, Ceccaldi M. The right temporal lobe variant of frontotemporal dementia: cognitive and neuroanatomical profile of three patients. *Journal of Neurology*, 253(11):1447-1458 (2006).
- (81) Joubert S. La démence sémantique : un syndrome atypique. *Fréquences*, 18(2): 35-39 (2006).
- (82) Joubert S, Mauries S, Barbeau E, Ceccaldi M, Poncet M. Who's who? Naming and identifying familiar persons in semantic dementia. *Dementia Review Journal*, Issue 1 & 2, review series, p. 23-25 (2005).
- (83) Rainville C, Joubert S, Felician O, Chabane V, Ceccaldi M, Perruch P. Wayfinding abilities in familiar and unfamiliar environments in a case of progressive topographical agnosia. *Neurocase*, 11(5), 297-309 (2005).
- (84) Barbeau E, Felician O, Joubert S, Sontheimer A, Ceccaldi M, Poncet M. Preserved visual recognition memory without the hippocampus: evidence from a case study. *Hippocampus*, 15(5): 587-96 (2005).
- (85) Joubert S, Felician O, Barbeau E, Sontheimer A, Guedj E, Ceccaldi M, Poncet M. Progressive prosopagnosia: clinical and neuroimaging results. *Neurology*, 63, 1962-1965 (2004).
- (86) Joubert S, Beauregard M, Bourgouin P, Beaudoin G, Leroux J-M, Lecours AR. Neural correlates of lexical and sublexical processes in reading. *Brain and Language*, 89(1): 9-20 (2004).
- (87) Joubert S, Mauries S, Barbeau E, Ceccaldi M, Poncet M. The role of context in remembering familiar persons: Insights from semantic dementia. *Brain Cogn*, 55(2): 254-61 (2004).
- (88) Barbeau E, Joubert S, Poncet M. A single case-study of diagonistic dyspraxia. *Brain Cogn*, 54(3): 215-7 (2004).
- (89) Barbeau E, Didic M, Tramoni E, Felician O, Joubert S, Sontheimer A, Ceccaldi M, Poncet M. Evaluation of visual recognition memory in MCI patients. *Neurology*, 62(8), 1317-1322 (2004).
- (90) Barbeau E, Sontheimer A, Joubert S, Didic M, Felician O, Tramoni E, Grimault S, Ceccaldi M, Poncet, M. Le cortex périrhinal chez l'homme. *Rev Neurol (Paris)*, 160(4), 401-11 (2004).
- (91) Joubert S, Felician O, Barbeau E, Sontheimer A, Barton JJ, Ceccaldi M, Poncet M. Impaired configurational face processing in a case of progressive prosopagnosia associated with predominant right temporal atrophy. *Brain*, 126: 2537-2550 (2003).
- (92) Joubert S, Mauries S, Barbeau E, Ceccaldi M, Poncet M. Preservation of autobiographical memory in a case of pure progressive amnesia. *Brain Cogn*, 53(2):235-8 (2003).
- (93) Karama S, Lecours AR, Leroux J-M, Beaudoin G, Bourgouin P, Joubert S, Beauregard M. Areas of brain activation in males and females during viewing of erotic film excerpts. *Human Brain Mapping*, 16(1), 1-13 (2002).
- (94) Vanhelle C, Lemieux S, Goulet P, Joubert S, Ska B, Joannette Y. Processing of speech acts by right-hemisphere brain-damaged patients: an ecological approach. *Aphasiology*, 14(11), 1127-1141 (2001).
- (95) Walter N, Cliche S, Joubert S, Beauregard M, Joannette Y. Grapheme-phoneme processing of single words. *Brain Cogn*, 46, 1-6 (2001).

- (96) Joubert S, Lecours AR. The role of sublexical graphemic processing in reading. *Brain and Language*, 72, 1-13 (2000).
- (97) Joubert S, Lecours AR. A study of the interaction between lexical and sublexical reading routes. *Brain Cogn*, 40(1), 150-153 (1999).

#### **Articles soumis ou en révision/submitted articles or under revision**

- (98) Joubert S, Gardy L, Didic M, Rouleau I, Barbeau EJ. A meta-analysis of semantic memory in Mild Cognitive Impairment. Submitted.
- (99) Julien J, Joubert S, Degré C, Beaujean O, Ferland, MC, Lague-Beauvais M, Dagher HJ, Marcoux, J, Kergoat MJ, de Guise E. Comparison of neuropsychological profiles in older adults with traumatic brain injury, Alzheimer's dementia, and with normal cognition. Submitted.
- (100) Lajeunesse A, Potvin MJ, Labelle V, Joubert S, Rouleau I. Characterization of prospective memory in mild cognitive impairment by using the Ecological Test of Prospective Memory. Submitted.
- (101) Noriega de la Colina A, Sabra D, Karakuzu A, Robitaille Grou M-C, Gros C, Boshkovski T, Joubert S, Bherer L, Lamarre-cliche M, Stikov N, Gauthier CJ, Cohen-Adad J, Girouard H. The impact of arterial stiffness on the corpus callosum integrity. Submitted.
- (102) Noriega de la Colina A, Badji A, Robitaille Grou M-C, Gagnon C, Boshkovski T, Lamarre-cliche M, Joubert S, Gauthier CJ, Bherer L, Cohen-Adad J, Girouard H. The impact of morning blood pressure surge on cerebral blood flow and memory in older adults with treated and controlled hypertension. Submitted.
- (103) Delage E, Rouleau I, Barbeau EJ, Joubert S. Les troubles sémantiques dans la phase prodromale de la maladie d'Alzheimer [Semantic impairment in prodromal Alzheimer's disease]. Submitted.

#### **Sélection d'entrevues (radio & TV)**

- Le Bel Âge. Alzheimer : Comment le prévenir ? (2019).
- Le Soleil. Le cerveau ce cachotier (2018).
- Journal de Montréal. Tout oublier même sa propre famille (2017).Télé-Québec.
- Les Électrons Libres. Maladie d'Alzheimer et reconnaissance des visages. février 2017.
- Radio-Canada International (RDI). La perception des visages dans la maladie d'Alzheimer. avril 2016.
- Émission Les années lumière. La mémoire. août 2015.
- Émission Les années lumière (Yannick Villedieu): la règle de trois (Radio-Canada radio). Les 3 systèmes de mémoire. Le 3, 9 et 16 décembre 2012.
- Émission Découverte (Radio-Canada télévision). La prosopagnosie. septembre 2011.