

PUBLICATIONS

Tremblay SA, Tulsi J, Yang D, Alsibai Z, McDonald I, Aladeeb R, Novielli A, Wong TYM, Freitas JG, Miller M, Dhir V, Natasha Rajah M, Godard-Sebillotte C, Altuntur S, Karunanathan S, Geddes MR. Review of current research practices in social and structural determinants of health data collection in Canadian longitudinal cohorts of aging and dementia. *Neurobiol Aging*. 2026 Jun 17;167:53-75. doi: 10.1016/j.neurobiolaging.2026.06.005. Epub ahead of print. PMID: 42322668.

Dallaire-Théroux C, Denis HL, Cottez R, Tremblay C, Provencher A, Valentin-Escalera J, Leclerc M, Loïselle A, Tournissac M, Potvin O, Belleville S, Gangloff A, Picard F, Zetterberg H; Consortium for the Early Identification of Alzheimer's Disease – Quebec (CIMA-Q); Calon F. Distinct alterations of adiponectin, fibroblast growth factor 21 (FGF-21), and insulin-like growth factor binding protein 2 (IGFBP-2) link dysmetabolism with cognitive decline across the Alzheimer's disease spectrum. *Alzheimers Dement*. 2026 Feb;22(2):e71097. doi: 10.1002/alz.71097. PMID: 41630588; PMCID: PMC12865228.

Fernandes MGF, Pinard M, Sokullu E, Tremblay C, Gagnon JF, Calon F, Coulombe B, Brouillette J. Differences in blood levels of neuroigin-derived peptides in a cohort for early detection of Alzheimer's disease. *J Gerontol A Biol Sci Med Sci*. 2026 Mar 10;81(4):glag009. doi: 10.1093/gerona/glag009. PMID: 41639022; PMCID: PMC13049705.

Jobin B, Phillips NA, Frasnelli J, Boller B; CIMA-Q group. The predictive role of olfactory identification on episodic memory and mild cognitive impairment: Results from the CIMA-Q cohort. *J Alzheimers Dis*. 2026 Mar;110(1_suppl):S95-S104. doi: 10.1177/13872877251378386. Epub 2025 Sep 12. PMID: 40944318; PMCID: PMC12953685.

LaPlume AA, Mellah S; Consortium for the early identification of Alzheimer's disease-Quebec (CIMA-Q); Rajah MN, Belleville S. Educational attainment mitigates hippocampal-related episodic memory decline in individuals at risk of Alzheimer's disease. *J Neuropsychol*. 2026 Jun;20(2):394-409. doi: 10.1111/jnp.70039. Epub 2026 Mar 24. PMID: 41874386; PMCID: PMC13250359.

Décarie-Labbé L, Mellah S, Dialahy IZ; CIMA-Q Consortium; Belleville S. Predicting cognitive change using functional, structural, and neuropsychological predictors. *Brain Commun*. 2025 Apr 18;7(3):fcf155. doi: 10.1093/braincomms/fcaf155. PMID: 40337465; PMCID: PMC12056721.

Raymond-Lessard B, Bélanger C, Hudon C, Grenier S; CIMA-Q Group. Characterization of subclinical depressive and anxiety symptoms in older adults with subjective cognitive decline progressing to objective cognitive impairment: A prospective 4-year follow-up study. *J Alzheimers Dis.* 2025 Apr;104(3):720-731. doi: 10.1177/13872877251319538. Epub 2025 Mar 17. PMID: 40091588; PMCID: PMC12231827.

Moravveji S, Sadia H, Doyon N, Duchesne S. Sensitivity analysis of a mathematical model of Alzheimer's disease progression unveils important causal pathways. *Front Neuroinform.* 2025 Jul 23;19:1590968. doi: 10.3389/fninf.2025.1590968. PMID: 40771353; PMCID: PMC12325246.

Cottez RJ, Peyrot C, Denis HL, Tremblay C, Loïselle A, Dallaire-Thérout C, Filali-Mouhim A, Hébert SS, Leclerc N, Blennow K, Zetterberg H; Consortium for the Early Identification of Alzheimer's Disease – Quebec (CIMA-Q); Kergoat MJ, Calon F, Pichet Binette A. Plasma p-tau markers, vascular factors, and cognitive decline in the CIMA-Q cohort. *Alzheimers Dement.* 2026 Jun;22(6):e71588. doi: 10.1002/alz.71588. PMID: 42273887; PMCID: PMC13254824.

Décarie-Labbé L, Dialahy IZ, Corriveau-Lecavalier N, Mellah S; Consortium for the Early Identification of Alzheimer's Disease; (CIMA-Q) and; Belleville S. Examining the relationship between brain activation and proxies of disease severity using quantile regression in individuals at risk of Alzheimer's disease. *Cortex.* 2024 Apr;173:234-247. doi: 10.1016/j.cortex.2024.01.011. Epub 2024 Feb 15. PMID: 38432175.

Chamberland É, Moravveji S, Doyon N, Duchesne S. A computational model of Alzheimer's disease at the nano, micro, and macroscales. *Front Neuroinform.* 2024 Mar 22;18:1348113. doi: 10.3389/fninf.2024.1348113. PMID: 38586183; PMCID: PMC10995318.

Coulter K, Phillips NA and the CIMA-Q and COMPASS-ND groups. Bilinguals show evidence of brain maintenance in Alzheimer's disease. *Bilingualism: Language and Cognition.* 2024;27(5):1029–38. doi:10.1017/S1366728924000221

Grunden N, Phillips NA; Consortium for the Early Identification of Alzheimer's Disease-Quebec (CIMA-Q); COMPASS-ND group. A network approach to subjective cognitive decline: Exploring multivariate relationships in neuropsychological test performance across Alzheimer's disease risk states. *Cortex.* 2024 Apr;173:313-332. doi: 10.1016/j.cortex.2024.02.005. Epub 2024 Feb 21. PMID: 38458017.

Décarie-Labbé L, Dialahy IZ, Corriveau-Lecavalier N, Mellah S; Consortium for the Early Identification of Alzheimer's Disease; (CIMA-Q) and; Belleville S. Examining the relationship between brain activation and proxies of disease severity using quantile regression in individuals at risk of Alzheimer's disease. *Cortex*. 2024 Apr;173:234-247. doi: 10.1016/j.cortex.2024.01.011. Epub 2024 Feb 15. PMID: 38432175.

Delage E, Rouleau I, Akzam-Ouellette MA, Roy-Côté F, Joubert S; CIMA-Q. An examination of semantic performance in mild cognitive impairment progressors and nonprogressors. *Neuropsychology*. 2024 May;38(4):309-321. doi: 10.1037/neu0000947. Epub 2024 Feb 15. PMID: 38358721.

Belleville S, Purkart R, Therriault J, Gauthier S (2023) La Neuropsychologie de la Maladie d'Alzheimer. Chapter in *Traité de neuropsychologie clinique de l'adulte*. (E. Barbeau, P. Azouvi, H. Amieva, F. Collette (dir.), *La Neuropsychologie de la Maladie d'Alzheimer* (3e éd., tome 1, p. 613-622) ISBN-13 :9782807335158)

Jobin B, Boller B, Frasnelli J; CIMA-Q group. Smaller grey matter volume in the central olfactory system in mild cognitive impairment. *Exp Gerontol*. 2023 Nov;183:112325. doi: 10.1016/j.exger.2023.112325. Epub 2023 Nov 11. PMID: 37952649.

Lamontagne-Caron R, Desrosiers P, Potvin O, Doyon N, Duchesne S. Predicting cognitive decline in a low-dimensional representation of brain morphology. *Sci Rep*. 2023 Oct 5;13(1):16793. doi: 10.1038/s41598-023-43063-4. Erratum in: *Sci Rep*. 2023 Nov 17;13(1):20165. doi: 10.1038/s41598-023-46972-6. PMID: 37798311; PMCID: PMC10556003.

Belleville S, LaPlume AA, Purkart R. Web-based cognitive assessment in older adults: Where do we stand? *Curr Opin Neurol*. 2023 Oct 1;36(5):491-497. doi: 10.1097/WCO.0000000000001192. Epub 2023 Aug 13. PMID: 37591303; PMCID: PMC10487375.

Caillaud M, Maltezos S, Hudon C, Mellah S; Consortium for the Early Identification of Alzheimer's Disease-Quebec; Belleville S. Hippocampal Volume and Episodic Associative Memory Identify Memory Risk in Subjective Cognitive Decline Individuals in the CIMA-Q Cohort, Regardless of Cognitive Reserve Level and APOE4 Status. *J Alzheimers Dis*. 2023;94(3):1047-1056. doi: 10.3233/JAD-230131. PMID: 37355896; PMCID: PMC10473077.

Corriveau-Lecavalier N, Décarie-Labbé L, Mellah S, Belleville S, Rajah MN; Consortium for the Early Identification of Alzheimer's Disease-Quebec (CIMA-Q). Sex differences in

patterns of associative memory-related activation in individuals at risk of Alzheimer's disease. *Neurobiol Aging*. 2022 Nov;119:89-101. doi: 10.1016/j.neurobiolaging.2022.07.007. Epub 2022 Jul 24. PMID: 35985098.

Potvin O, Dieumegarde L, Duchesne S, the Alzheimer's Disease Neuroimaging Initiative, the CIMA-Q, the CCNA groups (2021) NOMIS: Quantifying morphometric deviations from normality over the lifetime of the adult human brain. *bioRxiv* 2021.01.25.428063; doi: <https://doi.org/10.1101/2021.01.25.428063>

Cuesta M, Verty LV, Ben Abdesslem H, Byrns A, Bruneau M-A, Frasson C and Belleville S (2022) Virtual Reality and EEG-Based Intelligent Agent in Older Adults With Subjective Cognitive Decline: A Feasibility Study for Effects on Emotion and Cognition. *Front. Virtual Real.* 2:807991. doi: 10.3389/frvir.2021.807991

Corriveau-Lecavalier N, Rajah MN, Mellah S, Belleville S. Latent patterns of task-related functional connectivity in relation to regions of hyperactivation in individuals at risk of Alzheimer's disease. *Neuroimage Clin.* 2021;30:102643. doi: 10.1016/j.nicl.2021.102643. Epub 2021 Mar 26. PMID: 33813263; PMCID: PMC8050799.

Corriveau-Lecavalier N, Duchesne S, Gauthier S, Hudon C, Kergoat MJ, Mellah S, Belleville S; Consortium for the Early Identification of Alzheimer's Disease-Quebec (CIMA-Q). A quadratic function of activation in individuals at risk of Alzheimer's disease. *Alzheimers Dement (Amst)*. 2021 Jan 20;12(1):e12139. doi: 10.1002/dad2.12139. PMID: 33521234; PMCID: PMC7817778.

Belleville S, Mellah S, Cloutier S, Dang-Vu TT, Duchesne S, Maltezos S, Phillips N, Hudon C; CIMA-Q group. Neural correlates of resilience to the effects of hippocampal atrophy on memory. *Neuroimage Clin.* 2021;29:102526. doi: 10.1016/j.nicl.2020.102526. Epub 2020 Dec 7. PMID: 33360019; PMCID: PMC7770959.

Beheshti I, Potvin O, Duchesne S. Patch-wise brain age longitudinal reliability. *Hum Brain Mapp.* 2021 Feb 15;42(3):690-698. doi: 10.1002/hbm.25253. Epub 2020 Nov 18. PMID: 33205863; PMCID: PMC7814761.

Dadar M, Duchesne S; CCNA Group and the CIMA-Q Group. Reliability assessment of tissue classification algorithms for multi-center and multi-scanner data. *Neuroimage*. 2020 Aug 15;217:116928. doi: 10.1016/j.neuroimage.2020.116928. Epub 2020 May 13. PMID: 32413463.

Hudon C, Escudier F, De Roy J, Croteau J, Cross N, Dang-Vu TT, Zomahoun HTV, Grenier S, Gagnon JF, Parent A, Bruneau MA, Belleville S; Consortium for the Early Identification of Alzheimer's Disease – Quebec. Behavioral and Psychological Symptoms that Predict Cognitive Decline or Impairment in Cognitively Normal Middle-Aged or Older Adults: a Meta-Analysis. *Neuropsychol Rev*. 2020 Dec;30(4):558-579. doi: 10.1007/s11065-020-09437-5. Epub 2020 May 11. PMID: 32394109.

Badhwar A, Collin-Verreault Y, Orban P, Urchs S, Chouinard I, Vogel J, Potvin O, Duchesne S, Bellec P. Multivariate consistency of resting-state fMRI connectivity maps acquired on a single individual over 2.5 years, 13 sites and 3 vendors. *Neuroimage*. 2020 Jan 15;205:116210. doi: 10.1016/j.neuroimage.2019.116210. Epub 2019 Oct 5. PMID: 31593793.

Belleville S, LeBlanc AC, Kergoat MJ, Calon F, Gaudreau P, Hébert SS, Hudon C, Leclerc N, Mechawar N, Duchesne S, Gauthier S; Consortium for the Early Identification of Alzheimer's disease-Quebec (CIMA-Q). The Consortium for the early identification of Alzheimer's disease-Quebec (CIMA-Q). *Alzheimers Dement (Amst)*. 2019 Nov 20;11:787-796. doi: 10.1016/j.dadm.2019.07.003. PMID: 31788534; PMCID: PMC6880140.

Duchesne S, Dieumegarde L, Chouinard I, Farokhian F, Badhwar A, Bellec P, Tétreault P, Descoteaux M, Boré A, Houde JC, Beaulieu C, Potvin O. Structural and functional multi-platform MRI series of a single human volunteer over more than fifteen years. *Sci Data*. 2019 Oct 31;6(1):245. doi: 10.1038/s41597-019-0262-8. PMID: 31672977; PMCID: PMC6823440.

Caillaud M, Hudon C, Boller B, Brambati S, Duchesne S, Lorrain D, Gagnon JF, Maltezos S, Mellah S, Phillips N; Consortium for the Early Identification of Alzheimer's Disease-Quebec; Belleville S. Evidence of a Relation Between Hippocampal Volume, White Matter Hyperintensities, and Cognition in Subjective Cognitive Decline and Mild Cognitive Impairment. *J Gerontol B Psychol Sci Soc Sci*. 2020 Aug 13;75(7):1382-1392. doi: 10.1093/geronb/gbz120. PMID: 31758692; PMCID: PMC7424270.

Marcotte C, Potvin O, Collins DL, Rheault S, Duchesne S. Brain atrophy and patch-based grading in individuals from the CIMA-Q study: a progressive continuum from subjective cognitive decline to AD. *Sci Rep*. 2019 Sep 19;9(1):13532. doi: 10.1038/s41598-019-49914-3. PMID: 31537852; PMCID: PMC6753115.

Marcotte C, Potvin O, Collins DL, Rheault S, Duchesne S. Brain atrophy and patch-based grading in individuals from the CIMA-Q study: a progressive continuum from subjective cognitive decline to AD. *Sci Rep*. 2019 Sep 19;9(1):13532. doi: 10.1038/s41598-019-49914-3. PMID: 31537852; PMCID: PMC6753115.

Potvin O, Khademi A, Chouinard I, Farokhian F, Dieumegarde L, Leppert I, Hoge R, Rajah MN, Bellec P, Duchesne S; CIMA-Q group; CCNA group. Measurement Variability Following MRI System Upgrade. *Front Neurol*. 2019 Jul 16;10:726. doi: 10.3389/fneur.2019.00726. PMID: 31379704; PMCID: PMC6648007.

Potvin O, Chouinard I, Dieumegarde L, Bartha R, Bellec P, Collins DL, Descoteaux M, Hoge R, Ramirez J, Scott CJM, Smith EE, Strother SC, Black SE, Duchesne S; CIMA-Q group; CCNA group. The Canadian Dementia Imaging Protocol: Harmonization validity for morphometry measurements. *Neuroimage Clin*. 2019;24:101943. doi: 10.1016/j.nicl.2019.101943. Epub 2019 Jul 18. PMID: 31351228; PMCID: PMC6661407.

Potvin O, Turcotte V, Duchesne S; CIMA-Q group. Association Between Cerebellum Volumes and Cognitive Functioning. *Alzheimer Dis Assoc Disord*. 2019 Jun 7. doi: 10.1097/WAD.0000000000000327. Epub ahead of print. PMID: 31180917.

Foveau B, Correia AS, Hébert SS, Rainone S, Potvin O, Kergoat MJ, Belleville S, Duchesne S, LeBlanc AC; the CIMA-Q Consortium for the early identification of Alzheimer's disease-Québec. Stem Cell-Derived Neurons as Cellular Models of Sporadic Alzheimer's Disease. *J Alzheimers Dis*. 2019;67(3):893-910. doi: 10.3233/JAD-180833. PMID: 30689579.

Duchesne S, Chouinard I, Potvin O, Fonov VS, Khademi A, Bartha R, Bellec P, Collins DL, Descoteaux M, Hoge R, McCreary CR, Ramirez J, Scott CJM, Smith EE, Strother SC, Black SE; CIMA-Q group and the CCNA group. The Canadian Dementia Imaging Protocol: Harmonizing National Cohorts. *J Magn Reson Imaging*. 2019 Feb;49(2):456-465. doi: 10.1002/jmri.26197. Epub 2018 Sep 17. PMID: 30635988.

Belleville S, Moussard A, Ansaldo AI, Belchior P, Bherer L, Bier N, Bohbot VD, Bruneau MA, Cuddy LL, Gilbert B, Jokel R, Mahalingam K, McGilton K, Murphy KJ, Naglie G, Rochon E, Troyer AK, Anderson ND. Rationale and protocol of the ENGAGE study: a double-blind randomized controlled preference trial using a comprehensive cohort design to measure the effect of a cognitive and leisure-based intervention in older adults with a memory complaint. *Trials*. 2019 May 22;20(1):282. doi: 10.1186/s13063-019-3250-6. PMID: 31118095; PMCID: PMC6532200.

Belleville S, Fouquet C, Hudon C, Zomahoun HTV, Croteau J; Consortium for the Early Identification of Alzheimer's disease-Quebec. Neuropsychological Measures that Predict Progression from Mild Cognitive Impairment to Alzheimer's type dementia in Older Adults: a Systematic Review and Meta-Analysis. *Neuropsychol Rev.* 2017 Dec;27(4):328-353. doi: 10.1007/s11065-017-9361-5. Epub 2017 Oct 10. PMID: 29019061; PMCID: PMC5754432.

Belleville S, Fouquet C, Duchesne S, Collins DL, Hudon C. Detecting early preclinical Alzheimer's disease via cognition, neuropsychiatry, and neuroimaging: qualitative review and recommendations for testing. *J Alzheimers Dis.* 2014;42 Suppl 4:S375-82. doi: 10.3233/JAD-141470. PMID: 25190629.