CAMERON M. CLARK

CURRICULUM VITAE

CONTACT INFORMATION

Phone: 403.816.9525

Email: cam@sharpthinking.org

Post: 130-4520 16th Ave. NW Calgary, T3B 0M6

CURRENT POSITION

Clinical Neuropsychologist / Founder 2018 - present

sharpthinking.org

Founder of Memory On Hand 2020 - present

wearable technology startup for memory augmentation

memoryonhand.org

PREVIOUS CLINICAL EXPERIENCE

Clinical Neuropsychologist 2018 – 2020

CBI Health Group

EDUCATION AND TRAINING

Postdoctoral Fellow in the Laboratory of Human 2017 - 2018

Cerebrovascular Physiology, Hotchkiss Brain Institute,

Cumming School of Medicine,

University of Calgary, Calgary, Alberta

Supervisor: Dr. Marc J. Poulin

Ph.D. in Clinical Psychology 2012 - 2017

University of Calgary, Calgary, Alberta

Supervisor: Dr. Vina M. Goghari

Pre-doctoral residency in clinical neuropsychology 2015 - 2016

and cognitive health at Baycrest Health Sciences. Specializing in neuropsychological assessment, clinical rehabilitation, and memory intervention

M.Sc. in Clinical Psychology 2010 - 2012

University of Calgary, Calgary, Alberta

B.A. (Hons.) (First Class Honours) in Psychology with a Minor in Philosophy Simon Fraser University, Burnaby, BC	2003 - 2008
ACADEMIC AWARDS, SCHOLARSHIPS, AND GRANTS	
T. Chen Fong Postdoctoral Fellowship in Medical Imaging Science	2017
Donald Burns and Louise Berlin Postdoctoral Fellowship in Dementia Research	2017
Cumming School of Medicine (University of Calgary) Postdoctoral Scholarship	2017
T. Chen Fong Doctoral Research Excellence Scholarship In Medical Imaging Science	2013
Canadian Psychological Association Certificate of Academic Excellence in recognition of an outstanding M.Sc. thesis	2013
Vanier Canada Graduate Scholarship per year, for three years	2012 - 2015
Alberta Gambling Research Institute (AGRI) Small Research Grant	2012
T. Chen Fong Doctoral Entrance Scholarship in Medical Imaging Science	2012
Alberta Innovates Health Solutions Studentship	2010 - 2016
Dr. S.K. Littman Graduate Award – Calgary Chapter of the Schizophrenia Society of Alberta	2011
Selected as Valedictorian for Simon Fraser University's 2008 Convocation ceremony	2008
Gordon M. Shrum National Entrance Scholarship from Simon Fraser University	2003
Simmons Citizenship Award – from the Institute for the Humanities at Simon Fraser University	2007
Open Scholarship – Simon Fraser University	2007 - 2008

PUBLICATIONS AND PRESENTATIONS

Articles published or accepted in refereed journals:

- Kruger, R.L., Clark, C.M., Dyck, A.M., Anderson, T.J., Clement, F., Hanly, P.J., Hanson, H.M.,...Poulin, M.J. (2021). The Brain in Motion II Study: Protocol for a randomized controlled trial of an aerobic intervention for older adults at increased risk of dementia. *BMC Trials*. doi:10.21203/rs.3.rs-52142/v1
- Lawlor-Savage, L., Kusi, M., Clark, C.M., & Goghari, V.M. (2021). No evidence for an effect of a working memory training program on white matter microstructure. *Intelligence*, *86*, 101541.
- Wong, T.S., Goghari, V.M., Sanford, N., Lim., R., Clark, C.M., Metzak, P.D., Rossell, S.L., Menon M., & Woodward, T.S. (2020). Functional brain networks involved in lexical decision. *Brain and Cognition, 138*. doi: 10.1016/j.bandc.2019.103631
- Clark, C.M., Guadagni, V., Mazerolle, E.L., Hill, M., Hogan, D.B., Pike, G.B., & Poulin, M.J. (2019). Effect of aerobic exercise on white matter microstructure in the aging brain. *Behavioral Brain Research*, *375*(5). doi: 10.1016/j.bbr.2019.112042
- Hall, S.E., Adetutu, O., Clark, C.M., Tyndall, A.V., Hill, M.D., Sajobi, T.T. & Poulin, M.J. (2019). Novel approach to quantify and characterize heterogeneity in an exercise intervention. *Medicine & Science in Sports & Exercise*, *51*(7), 1506-1516. doi: 10.1249/MSS.0000000000001909
- Lawlor-Savage, L, Clark, C.M. & Goghari, V.M. (2019). No evidence that working memory training alters gray matter structure: A surface-based analysis. *Behavioural Brain Research*, *360*, 323-340. doi: 10.1016/j.bbr.2018.12.008.
- Guadagni, V., Clark, C.M., Tyndall, A.V., Raneri, J.K., Parboosingh, J.S., Hogan, D.B., Hanly, P.J. & Poulin, M.J. (2018). Effects of six-month aerobic exercise intervention on sleep in healthy older adults in the Brain in Motion study: A pilot study. *Journal of Alzheimer's Disease Reports*, 2(1), 229-238. doi: 10.3233/ADR-180079
- Tyndall, A.V., Clark, C.M., Anderson, T.J., Hogan, D.B., Hill, M.D., Longman, R.S., & Poulin, M.J. (2018). Protective effects of exercise on cognition and brain health in older adults. *Exercise and Sport Science Reviews, 46*(4), 215-223. doi: 10.1249/JES.000000000000161
- Clark, C.M., Lawlor-Savage, S., & Goghari, V.M. (2017). Functional brain activation associated with working memory training and transfer. Behavioural Brain Research, 334, 34-49. doi: 10.1016/j.bbr.2017.07.030

- Clark, C.M., Lawlor-Savage, S., & Goghari, V.M. (2017). Comparing brain activations associated with working memory and fluid intelligence. *Intelligence*, 63, 66-77. doi: doi.org/10.1016/j.intell.2017.06.001
- Clark, C.M., Lawlor-Savage, S., & Goghari, V.M. (2017). Working memory training in healthy young adults: Support for the null from a randomized comparison to active and passive control groups. *PLOS ONE.* doi: 10.1371/journal.pone.0177707
- Clark, C.M., Lawlor-Savage, L., & Goghari, V.M. (2016). The Flynn Effect: A quantitative commentary on modernity and human intelligence.

 Measurement: Interdisciplinary Research and Perspectives. doi: 10.1080/15366367.2016.1156910
- Clark, C.M. (2016). Psychosocial treatments for schizophrenia: An evaluation of theoretically divergent treatment paradigms, and their efficacy. Clinical Schizophrenia & Related Psychoses 10(1), 41-50. doi: 10.3371/csrp.CL.061213
- Yakovenko, I., Clark, C.M., Hodgins, D., & Goghari, V.M. (2016). A qualitative analysis of the effects of a comorbid disordered gambling diagnosis with Schizophrenia. *Schizophrenia Research* 171(1-3), 50-55. doi: 10.1016/j.schres.2015.12.008.
- Clark, C.M., Chiu, C.G., Diaz, R.L., & Goghari, V.M. (2014). Intact anger recognition in depression despite aberrant visual facial information usage. *Journal of Affective Disorders, 165*, 196-202. doi: 10.1016/j.jad.2014.04.065
- Clark, C.M. (2013). Irreducibly human encounters: Therapeutic alliance and treatment outcome in child and adolescent psychotherapy. *Journal of Infant, Child, and Adolescent Psychotherapy, 12*(3), 228-243. doi: 10.1080/15289168.2013.822751
- Clark, C.M., Gosselin, F., & Goghari, V.M. (2013). Aberrant patterns of visual facial information usage in schizophrenia. *Journal of Abnormal Psychology*, 122(2), 513-519. doi: 10.1037/a0031944
- Beshai, S., Clark, C.M., & Dobson, K.S. (2013). Conceptual and pragmatic considerations in the use of cognitive behavioural therapy with Muslim clients. *Cognitive Therapy and Research*, *37*(1), 197-206. doi: 10.1007/s10608-012-9450-y
- Clark, C.M. (2012). Individual moralities and institutional ethics: Implications for the Canadian Code of Ethics for Psychologists. *Psychotherapy and Politics International*, 10(3), 187-204. doi: 10.1002/ppi.1272.

- Clark, C.M. (2012). The nature of nurture: A reconciliation of intuition and empirical findings regarding the long term effects of parenting on child outcome. *Canadian Psychological Association, MindPad*.
- Clark, C.M. (2009). Beyond belief: The modern denial of irrational thought. Journal of the Institute for Humanities, 4, 133-146.

Chapters in edited books:

Troyer, A.K., Vandermorris, S., Clark, C.M. (2017). Lifestyle and memory. In A.K. Troyer & S. Vandermorris (Eds.), *Clinical guide to the Memory and Aging Program.*

Other relevant published works:

Clark, C.M. (2016). Innovations in cognitive health and aging. Canadian Psychological Association Psychologists in Hospitals and Healthcare Centres Newsletter, 3(3) Winter, 2016.

Published and refereed conference abstracts:

- Clark, C.M., Goghari, V.M., & Gosselin, F. (2013). Aberrant patterns of visual facial information usage in schizophrenia. *Schizophrenia Bulletin* 39(Suppl. 1), S258-259.
- Goghari, V., Clark, C.M., Prentice, J., Liu, I., & Moir, A. (2013). Functional neuroimaging family study of emotion processing deficits in schizophrenia. *Schizophrenia Bulletin, 39*(Suppl 1), S156.
- Clark, C.M., Goghari, V.M., & Gosselin, F. (2012). Emotion Recognition and Social Functioning Deficits in Schizophrenia. *Schizophrenia Research*, 136, S1, S176-177.
- Clark, C.M., Goghari, V.M. (2011). Analysis of face gaze in schizophrenia: Use of facial features and spatial frequencies. Program No. 607.07. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.

Conference posters and presentations:

Lawlor-Savage, L., Clark, C.M., & Goghari, V.M. (May, 2019). Working memory training does not significantly alter gray matter structure: An MRI surface-based analysis. Presented at the 80th Annual National Convention of the Canadian Psychological Association, Halifax, Nova Scotia.

- Lawlor-Savage, L., Clark, C.M., & Goghari, V.M. (May, 2019). Working memory training does not support white matter structural integrity: A diffusion tensor imaging study. Presented at the 80th Annual National Convention of the Canadian Psychological Association, Halifax, Nova Scotia.
- Guadagni, V., Clark, C.M., Tyndall, A.V., Raneri, J.K., Parboosingh, J.S., Hogan, D.B., Hanly, P.J., Poulin, M.J. (September, 2018). Effects of six-month exercise intervention on sleep in healthy older adults in the Brain in Motion Study. Presented at the 24th Congress of European Sleep Research Society, Basel, Switzerland.
- Clark, C.M., Hall, S., Guadagni, V., Longman, R.S., Eskes, G., McDonough, M., Hanson, H., Hill, M.D., Hogan, D.B., Sajobi, T., & Poulin, M.J. (June, 2018). The Brain in Motion II randomized controlled trial: An aerobic exercise intervention for older adults at increased risk of dementia. Presented at the Campus Alberta Neuroscience International Dementia Conference, Banff, Alberta.
- Guadagni, V., Clark, C.M., Tyndall, A.V., Raneri, J.K., Parboosingh, J.S., Hanly, P.J., Poulin, M.J. (June, 2018). Effects of six-month exercise intervention on sleep in healthy older adults. Presented at the Campus Alberta Neuroscience International Dementia Conference, Banff, Alberta.
- Guadagni, V., Clark, C.M., Tyndall, A.V., Raneri, J.K., Parboosingh, J.S., Hanly, P.J., Poulin, M.J. (October, 2017). Effects of six-month exercise intervention on sleep in healthy older adults from the Brain in Motion study. Presented at the Brenda Strafford Centre on Aging's 'Resilience in Aging: Exploring People, Places, and Policies' event, Calgary, Alberta.
- Clark, C.M., Guadagni, V., Mazerolle, E.L., Tyndall, A.V., Hill, M., Hogan, D.B., Pike, B., & Poulin, M.J. (October, 2017). Grey matter microstructure and aerobic exercise in the aging brain: How does exercise affect brain health? Presented at the Campus Alberta Neuroscience Symposium, Calgary, Alberta.
- Guadagni, V., Clark, C.M., Tyndall, A.V., Raneri, J.K., Parboosingh, J.S., Hanly, P.J., Poulin, M.J. (October, 2017). Effects of six-month exercise intervention on sleep in healthy older adults from the Brain in Motion study. Presented at the Campus Alberta Neuroscience Symposium, Calgary, Alberta.
- Clark, C.M., Mazerolle, E.L., Hill, M., Hogan, D.B., Pike, B., & Poulin, M.J. (September, 2017). Aerobic exercise and white matter integrity in the aging brain. Presented at the Canadian Stroke Congress, Calgary, Alberta.

- Lawlor-Savage, L., Clark, C.M., & Goghari, V.M. (March, 2016). Does brain training change the brain? A neuroanatomical investigation of working memory training in healthy adults. Presented at the McMaster University Department of Psychiatry and Behavioural Neurosciences Annual Research Day, Hamilton, Ontario.
- Clark, C.M., Lawlor-Savage, L., & Goghari, V.M. (March, 2016). Functional activation overlap of working memory and fluid intelligence. Presented at the Dalhousie Crossroads Health Conference, Halifax, Nova Scotia.
- Clark, C.M. (2015, May). Neural correlates of working-memory training. 'Rapid-fire' talk presented at the 2015 Alberta Imaging Symposium, Calgary, Alberta.
- Clark, C.M., Spilka, M.J., Lawlor-Savage, L., & Goghari V.M. (November, 2014). Neural mechanisms of working memory training and transfer: How does cognitive training change brain functioning. Poster session presented at the Royal Society's Commonwealth Science Conference, Bengaluru, India.
- Yakovenko, I., Clark, C.M., Hodgins, D., & Goghari, V.M. (September, 2014).

 Phenomenology of gambling addiction in individuals with schizophrenia.

 Poster session presented at the University of Calgary's Student-Run Clinic Addiction Symposium, Calgary, Alberta.
- Yakovenko, I., Clark, C.M., Hodgins, D., & Goghari, V.M. (April, 2014). Schizophrenia and disordered gambling: Qualitative features of dual diagnosis. Poster session presented at the 4th Biennial Meeting of the Schizophrenia International Research Society, Florence, Italy.
- Yakovenko, I., Clark, C.M., Hodgins, D., & Goghari, V.M. (April, 2014).

 Disordered gambling and schizophrenia: Qualitative features of dual diagnosis. Poster session presented at the Alberta Gambling Research Institute's 13th Annual Conference, Banff, Alberta.
- Yakovenko, I., Clark, C.M., Hodgins, D., & Goghari, V.M. (March, 2014).

 Disordered gambling and schizophrenia: Phenomenology and clinical implications. Presented at the Sebastian Littman Research Day, Calgary, Alberta.
- Chiu, C.G., Clark, C.M., Diaz, R.L. & Goghari, V.M. (2013, June). Recognition of anger facial expressions in depression. Poster session presented at the Canadian Society for Brain, Behaviour and Cognitive Science annual meeting, Calgary, Alberta.

- Chiu, C.G., Clark, C.M., Diaz, R.L. & Goghari, V.M. (2013, June). *Differentiating between angry and neutral faces in depression*. Poster session presented at the Canadian Psychological Association's 74th Annual Convention, Quebec City, Quebec.
- Clark, C.M., Goghari, V.M. & Gosselin, F. (2013, April). *Aberrant patterns of visual facial information usage in schizophrenia*. Poster session presented at the 14th International Congress on Schizophrenia Research, Orlando, Florida.
- Goghari, V., Clark, C.M., Prentice, J., Liu, I., & Moir, A. (2013, April). Functional neuroimaging family study of emotion processing deficits in schizophrenia. Poster session presented at the 14th International Congress on Schizophrenia Research, Orlando, Florida.
- Clark, C.M., Goghari, V.M., & Gosselin, F. (2012, April) Emotion recognition and social functioning deficits in schizophrenia. Poster session presented at the 3rd Biennial Meeting of the Schizophrenia International Research Society, Florence, Italy.
- Clark, C.M., Chan, L.E., Sponheim, S.R., & Goghari, V.M. (2011, November). Appraising faces: Emotion and age judgments in schizophrenia and bipolar disorder. Poster session presented at Neuroscience 2011, Washington, DC.
- Clark, C.M. (2008, April). It's time to detect cheater detection: Alternative evidence for a domain specific cheater detection module in humans. Poster session presented at the 10th Annual Psychology Undergraduate Conference, Vancouver BC.

Invited presentations:

- Clark, C.M. (2022, February). Memory and the Brain. Presented via webinar for the Calgary Women's Fellowship Group. Calgary, Alberta.
- Clark, C.M. (2021, May). Memory and Brain Health Over 50. Presented via webinar for Imperial Oil. Calgary, Alberta.
- Clark, C.M. (2021, March). Brain Fog and COVID-19. Presented via webinar for ABI Wellness. Calgary, Alberta.
- Clark, C.M. (2021, February). Strategies for Better Memory. Presented via webinar for the Town of Cochrane. Cochrane, Alberta.
- Clark, C.M. (2021, January). Memory and the Aging Brain. Presented via webinar for carya. Calgary, Alberta.

- Clark, C.M. (2020, August). Memory, and how it changes with age. Presented via webinar for the Kirby Centre for the 55+. Calgary, Alberta.
- Clark, C.M. (2019, April). How memory changes with age, and what we can do about it. Presented to the Lifelong Learners Association of Calgary. Calgary, Alberta.
- Clark, C.M. (2018, April). Reducing risk factors for dementia. Rural Alberta Dean's Talk Event presented in collaboration with the University of Calgary Cumming School of Medicine. Bassano, Alberta.
- Clark, C.M. (2018, April). Memory, and how it changes with age. Presented in collaboration with the Branda Strafford Foundation to family members of patients with dementia, Bow View Manor, Calgary, Alberta.
- Clark, C.M. (2018, April). What is dementia? Presented in collaboration with the Branda Strafford Foundation to high school students. Okotoks, Alberta.
- Clark, C.M. (2017, November). Aerobic exercise for cognitive health and dementia prevention in aging: Current evidence and future directions. Lecture presented to a graduate clinical neuropsychology class, University of Calgary, Calgary, Alberta.
- Clark, C.M. (2015, March). Cognitive Behavioral Therapy: An introduction.

 Lecture presented in an undergraduate clinical psychology class, Red

 Deer College, Red Deer, Alberta.
- Clark, C.M. (2014, April). *Clinical Neuropsychology: An introduction*. Lecture presented in an undergraduate clinical psychology class, University of Calgary, Calgary, Alberta.
- Clark, C.M. (2013, October). *Introduction to the Structured Clinical Interview for the DSM-IV*. Lecture presented to a graduate level psychological assessment class, University of Calgary, Calgary, Alberta.
- Clark, C.M. (2013, February). *Emotion perception deficits in schizophrenia*. Lecture presented at Mind and Brain Public Health Perspectives Workshop, Calgary, Alberta.
- Clark, C.M. (2012, November). *Psychosocial treatments for schizophrenia*. Lecture presented in an undergraduate abnormal psychology class, University of Calgary, Calgary, Alberta.
- Clark, C.M. (2012, November). *Introduction to the Structured Clinical Interview for the DSM-IV*. Lecture presented to a graduate level psychological assessment class, University of Calgary, Calgary, Alberta.

- Clark, C.M. (2012, September). Aberrant patterns of visual facial information usage in schizophrenia. Presented at the 'Graduate Research Achievement Day', University of Calgary, Calgary, Alberta.
- Clark, C.M. (2012, June). Aberrant face gaze in schizophrenia. Presented at the Alberta Innovates Health Solutions Making Connections Conference, Jasper, AB.
- Clark, C.M. (2007, November). Beyond belief: The modern denial of irrational thought. Presented at the Simons Student Citizenship Program Presentation, Vancouver, British Colombia.

CLINICAL TRAINING AND ACCREDITATIONS

Clinical neuropsychology specialty rotation at Baycrest Health Sciences, Toronto – supervised by Dr. Kathryn Stokes and Dr. Gillian Rowe	2016
Memory intervention specialty rotation at Baycrest Health Sciences, Toronto – supervised by Dr. Susan Vandermorris, and Dr. Eva Svoboda	2015 - 2016
Clinical rehabilitation specialty rotation at Baycrest Health Sciences, Toronto – supervised by Dr. Dmytro Rewilak, Dr. Sabrina Lombardi, and Dr. Sharon Jankey	2015 - 2016
PhD III clinical practicum in Neurorehabilitation at Foothills Medical Centre, Calgary – supervised by Dr. Odette Pettem and Dr. Risha Joffe	2014 - 2015
PhD II clinical practicum at the Neuropsychology Clinic within Psychological Services (Allied Health) at South Health Campus, Calgary – supervised by Dr. Kim Goddard	2013 - 2014
PhD I clinical practicum at the Neuropsychology Clinic within the Senior's Health Clinic at Rockyview General Hospital, Calgary – supervised by Dr. Ashli Watt	2012 - 2013
Psychodiagnostic interviewing for a research project with the Structured Clinical Interview for the DSM-IV (SCID), Positive and Negative Syndrome Scale (PANSS), Structured Interview for Schizotypy (SIS), Wechsler Abbreviated Scale of Intelligence (WASI), and the Social Functioning Scale (SFS)	2011 - 2013
Certified to use the Positive and Negative Syndrome Scale (PANSS) by the PANSS Institute	2011

Summer practicum placement at the Alberta Children's Hospital in both the Pediatric Oncology Unit, and the Pediatric Neurosciences Unit supervised by Dr. Fiona Schulte, and Dr. Jennifer Crawford	2011
Single-day practicum at the Forensic Adolescent Program under the supervision of Dr. Ryan Day	2010

PROFESSIONAL ACADEMIC EXPERIENCE

Ad hoc reviewer for the following journals:

Ata Journal of Psychotherapy Clinical Schizophrenia and Related Psychoses International Journal of Psychophysiology Journal of Abnormal Psychology Journal of Gerontology: Psychological Sciences Psychological Reports Psychopathology Schizophrenia Research

ADDITIONAL EDUCATION AND COURSWORK

Campus Alberta Neuroscience Workshop on Neuroimaging Techniques for the Study of Brain Activation and Brain Networks	2015
Graduate course in Neurobiology of Mental Illness, offered via the Medical Sciences program at the University of Calgary	2014
Neurometrika course in fMRI data analysis (SPM8)	2012
National Academy of Neuropsychology course in neuroanatomy	2012

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

Member: College of Alberta Psychologists	2017 - present
Member: Canadian Psychological Association	2011 - present
Member: National Academy of Neuropsychology	2012 - 2014
Member: Society for Neuroscience	2011

since 2009

ENTREPRENEURIAL ENDEAVORS

Founder of Memory On Hand – a startup devoted to innovating and producing wearable technology to augment memory	2020 - present
2 nd place finish in the 2020 Neuro Nexus health innovation competition at the University of Calgary valued at \$5,000 to support startup formation and intellectual property protection	2020
COMMUNITY & CULTURAL ENGAGEMENT	
Branch Out Neurological Foundation Leadership and Planning Committee Member for the 2022 Branch Our Bike Tour (foundation fundraiser)	2022
University of Calgary Psychology Clinic Community Advisory Committee Member	2019 - present
Branch Out Neurological Foundation Scientific Review Panel Member	2019 - 2021
Board Member for Foundation 33 – a non-profit charity benefiting children and families affected by cancer	2015 - 2020
Public Fellow for Calgary's inaugural Spur Festival "Canada's national festival of politics, art, and ideas"	2014
Five-time rider in the Ride to Conquer Cancer – personally raising over \$10,000 for cancer research	2009 - 2019