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EDUCATION

- Ph.D. Department of Human Genetics, McGill University, 2012
Dissertation: *Impact of genetic and nutritional disturbances in one-carbon metabolism on brain function and structure in mice*
- M.Sc. Department of Neuroscience, University of Lethbridge, 2008
- B.Sc. Department of Neuroscience, University of Lethbridge, 2006

PROFESSIONAL APPOINTMENTS & EXPERIENCE

- 2019 – present Assistant Professor, College of Graduate Studies, College of Veterinary Medicine, Midwestern University
- 2019 – present Research Assistant Professor, Carleton University
- 2018 – 2019 Associate Scientist, Ottawa Research Hospital Research Institute, University of Ottawa
- 2015 – 2018 Postdoctorate, Department of Neuroscience, Carleton University
Department of Cellular and Molecular Medicine, University of Ottawa
- 2016 – 2018 Research Lead, Bowen & Associates
- 2013 – 2014 Postdoctorate, Department of Experimental Neurology, German Center for Neurodegenerative Diseases, Partner Site Berlin, Charité University Medicine

RESEARCH ACTIVITIES

Peer-Reviewed Publications (h-index = 15)

Graduate and undergraduate trainees are *italicized*, *denotes corresponding author, +denotes shared first authorship, IF = impact factor

- 2021 Rando HM, Wellhausen N Ghosh, Dattoli AA, Hu F, Lee AJ, Rafizadeh DN, Byrd JB, Qi Y, S Y, Field JM, Guebila MB, **Jadavji NM**, Lordan R, Shelly AN, Brueffer C, Wang J, Goel RR, Park YS COVID-19 Review Consortium, Boca SM, Gitter A, Greene CS. (under review at *mSystems*, mSystem00233-21) Identification and Development of Therapeutics for COVID-19.
- 2021 Auer S, Haelterman NA, Weissgerber TL, Erlich JC, Susilaradeya D, Julkowska M, Gazda MA, Reproducibility for Everyone Team, Schwessinger B*, **Jadavji NM*** Reproducibility for everyone: a community-led initiative with global reach in reproducible research training. *eLife*: https://elifesciences.org/articles/64719?fbclid=IwAR0VM94vkMqJldb26rJvjGmj7DQ-ifr0gds1cC1YNu-Pq74F42HUeCON6_I#content (IF = 7.080)
- 2021 Bennett C, Green J, Ciancio M, Goral J, Pitstick L, Pytynia M, Meyer A, Kwatra N, **Jadavji NM***. Dietary folic acid deficiency impacts hippocampal morphology and cortical acetylcholine metabolism in adult male and female mice. *Nutritional Neuroscience: In Press*. DOI: 10.1080/1028415X.2021.1932242 (IF = 4.994)
- 2021 Sarabipour S, Hainer SJ, Arslan FN, Winde CM, Furlong E, Bielczyk N, **Jadavji NM**, Shah AP, Davla S, Asby N: Building and sustaining mentor interactions as a mentee. *The FEBS Journal*: DOI: 10.1111/febs.15823 (IF = 4.267) PMID: 33818917
- 2021 Yahn GB, Leoncio J, **Jadavji NM*** The role of dietary supplementation of one-carbon metabolism on stroke outcome. *Current Opinion in Clinical Nutrition and Metabolic Care*: doi: 10.1097/MCO.0000000000000743 (IF = 1.521) (invited) PMID: 33631772.
- 2021 Sarabipour S⁺, Hainer SJ⁺, Furlong E⁺, **Jadavji NM⁺**, de Winde CM, Bielczyk N, Shah AP. Writing an effective and supportive recommendation letter. *The FEBS Journal*. <https://doi.org/10.1111/febs.15757> (IF = 4.267) PMID: 33665964
- 2021 de Winde CM, Sarabipour S, Carignano H, Davla D, Eccles D, Hainer SJ, Haidar M, Iiangovan V, **Jadavji NM**, Kritsiligkou, Lee TY Olafsdottir, Symmons O. Towards inclusive funding practices for early career researchers. *Journal of Science Policy and Governance*, 18(1): <https://doi.org/10.38126/JSPG180105>.

- 2021 *Yahn GB, Abato JE, **Jadavji NM****. Role of vitamin B12 deficiency in ischemic stroke risk and outcome. *Neural Regen Res.*16(3):470-474. (IF = 5.135). PMID: 32985467. PMCID: PMC79986019.
- 2021 *Al Rubaye H, Adamson C, **Jadavji NM****. The role of maternal diet on offspring gut microbiota development. *Journal of Neuroscience Research.* 99:284-93 (IF = 4.139). PMID: 32112450
- 2020 *Burgess K, Bennett C, Mosnier H, Kwatra N, Bethel B, **Jadavji NM****. The antioxidant role of one-carbon metabolism on stroke. *Antioxidants.* 9(11):1141 (IF=5.014) (invited) (IF = 6.312) PMID: 33212887. PMCID: PMC7698340.
- 2020 *Fernandes JD, Sarabipor A, Smith CT, Niemi NM, **Jadavji NM**, Kozik AJ, Holehouse AS, Pejaver V, Symmons O, Filho AWB, Haage A.* Research Culture: A survey-based analysis of the academic job market. *eLife.* 9: e54097 (IF = 7.551) PMID: 32530420. PMCID: PMC7360372.
- 2020 *Abato JE, Mofstah M, Cron GO, Smith PD, **Jadavji NM****. Methylenetetrahydrofolate reductase deficiency alters cellular response after ischemic stroke in male mice. *Nutritional Neuroscience.* <https://doi.org/10.1080/1028415X.2020.1769412> (IF = 4.994): PMID: 32448097
- 2020 *Van Benthem K, Corker C, Inoue J, Adi MN, **Jadavji NM****, The changing postdoc and key predictors of satisfaction with professional training. *Studies in Graduate and Postdoctoral Research.* 11:123-142.
- 2019 ***Jadavji NM***, Mosnier H, Kelly E, Lawrence K, Cruickshank S, Stacey S, McCall A, Dhatt S, Arning E, Bottiglieri T, Smith PD.* One-carbon metabolism supplementation improves outcome after stroke in aged male MTHFR-deficient mice. *Neurobiology of Disease.* 132: 104613. (IF = 5.227). PMID: 31525435
- 2019 *Wilson LA, Murphy MSQ, Ducharme R, Denize K, **Jadavji NM**, Potter B, Little J, Chakraborty P, Hawken S, Wilson K (2019)* Postnatal gestational age estimation via newborn screening analysis: application and potential. *Expert Review of Proteomics.* 16:727-31. (IF = 3.489). PMID: 31422714. PMCID:PMC6816481. (invited)
- 2019 *Kroenberg G, Gertz K, Uhlemann R, Kirste I, An J, **Jadavji NM**, Schott BH, Endres M, Hellweg R, Harms C (2019)* Reduced hippocampal neurogenesis in mice deficient in apoptosis repressor with caspase recruitment domain (ARC). *Neuroscience.* <https://doi.org/10.1016/j.neuroscience.2019.07.032> (IF = 3.502). PMID: 31356897.
- 2019 *Murray LK, **Jadavji NM**** (2019). The role of B-vitamin metabolism in Parkinson's disease onset, pathology, and mechanisms. *Nutrition Research Reviews.* 32: 218-230. (IF = 4.586). PMID: 31303188.

- 2019 **Moftah M, Jadavji NM*** The role of behavioral training in reducing functional impairments after stroke. *Neural Regeneration Research*. 14:1507-08. (IF = 5.135). (invited). PMID: 31089041.PMCID:PMC 6557093.
- 2019 **Jadavji NM***, Murray LK, Emmerson JT, Rudyk CA, Hayley S, Smith PD. A genetic deficiency in one-carbon metabolism increases oxidative stress in a mouse model of Parkinson's disease. *Toxicological Sciences*. 169:25-33. (IF = 4.398). PMID: 22521626. PMCID: PMC6484892.
- 2019 **Prieur E, Jadavji NM***. Assessing spatial working memory using the spontaneous y-maze alternation test in mice. *Bio Protocols*, 9:1-10. PMID: 33654968. PMCID: PMC7854095.
- 2018 **Jadavji NM***, Emmerson JT, Shanmugalingam U, Willmore WG, MacFarlane AJ, Smith P. MTHFR-deficiency increases vulnerability to stroke: *in vitro* and *in vivo*. *Experimental Neurology*. 309:14-22. (IF = 4.483). PMID: 30055159.
- 2018 **Murray LK, Smith MJ, Jadavji NM***. Maternal over supplementation with folic acid and its impact on neurodevelopment of offspring. *Nutrition Reviews*. 76:708-721. (IF = 5.54). PMID: 30010929.
- 2018 **Zhang M[†], Jadavji NM^{†*}, Yoo HS, Smith PD**. Human GDF-11 counteracts age-related short-term memory impairments in middle-aged mice. *Behavioural Brain Research*, 341:45-49. (IF = 3.002). PMID: 29253511.
- 2017 **Jadavji NM***. The integrated stress response is not a target for diffuse white matter injury in premature infants. *Journal of Neuroscience*, 37: 11772-1173. (IF = 5.924). PMID: 29212946.
- 2017 **Prieur EAK, Pjetri E, Ziesel S, Jadavji NM***. BHMT-deficiency results in brain atrophy and impairs memory in mice. *Applied Physiology, Nutrition, and Metabolism*, 42:1228-1231. (IF = 3.445). PMID: 28715642.
- 2017 **Emmerson JT, Murray LK, Jadavji NM***. Impact of one-carbon metabolism on neural recovery. *Neural Regeneration*,12: 1-2. (IF = 5.135). PMID: 28852387. (invited). PMCID: PMC5558484.
- 2017 **Jadavji NM***, Emmerson JE, Willmore WG, MacFarlane AJ, Smith PD. B-vitamin and choline supplementation increases neuroplasticity and recovery after stroke. *Neurobiology of Disease*, 103:89-100. (IF = 5.624). PMID: 28396257.
- 2017 **Bahous R, Jadavji NM**, Deng L, Cosin-Tomas M, Lu J, Malysheva O, Leung KY, Ho MK, Pallas M, Kaliman P, Greene NDE, Bedell BJ, Caudill MA, Rozen R. High dietary folate in pregnant mice leads to pseudo-MTHFR deficiency and altered methyl metabolism, with embryonic growth delay and short-term memory

- impairment in offspring. *Human Molecular Genetics*, 26:888-900. (IF = 5.571). PMID: 28069796. PMCID: PMC5409086.
- 2017 *Dam K, Füchtemeier M, Farr TD, Boehm-Strum P, Foddiss M, Dirnagl U, **Jadavji NM****. Deficiencies in methylenetetrahydrofolate reductase and dietary folic acid alter choline metabolism during chronic hypoperfusion. *Behavioral Brain Research*, 321:201-208 (IF = 3.002). PMID: 28087280.
- 2016 *Koturbash I, **Jadavji NM**, Kutanzi K, Rodriguez-Juarez R, Kogosov D, Metz G, Kovalchuk, O*. Fractionated low-dose exposure to ionizing Radiation Leads to DNA Damage, Epigenetic Dysregulation, and Behavioral Impairment. *Environmental Epigenetics*, 2:1-13. PMID: 29492301. PMCID: PMC5804539.
- 2016 *Grummisch JA, **Jadavji NM**, Smith PD*. The pleiotropic effects of tissue plasminogen activator (tPA) in the brain: implications for stroke recovery. *Neural Regeneration Research*, 11: 1401-2. (IF = 5.135). PMID: 27482209. PMCID: PMC5090832. (invited).
- 2016 *Emmerson JT, **Jadavji NM****. Impact of maternal folic acid deficiencies on early childhood neurological development. *Journal of Pediatric Reviews*, 4: e6174 (invited).
- 2016 *Shanmugalingam U, **Jadavji NM**, Smith PD*. Role of granulocyte macrophage colony stimulating factor in regeneration of the central nervous system. *Neural Regeneration Research*, 11: 902-903. (IF = 5.135). PMID: 27482209. PMCID: PMC4962578. (invited).
- 2016 *Grummisch JA, **Jadavji NM**, Smith PD*. Tissue plasminogen activator promotes cell survival *in vitro* during early postnatal neuronal development via Janus kinase 2- and mammalian target of rapamycin-dependent mechanisms. *Cellular and Molecular Neuroscience*, 74: 25-33. (IF = 3.843). PMID: 26995507.
- 2016 *Theoret JK⁺, **Jadavji NM***, Zhang M, Smith PD*. Stroke-induced expression of GM-CSF receptor following white matter damage: implications for targeted stroke therapy via activation of mTOR signaling pathway. *European Journal of Neuroscience*, 43:17-24. (IF = 3.753). PMID: 26474338.
- 2015 ***Jadavji NM**, Malysheva O, Caudill MA, Rozen R*. MTHFR deficiency or reduced intake of folate or choline in pregnant mice results in impaired short-term memory and increased apoptosis in hippocampus in wild-type offspring. *Neuroscience*, 300: 1-9. (IF = 3.327) PMID: 25956258.
- 2015 ***Jadavji NM***, Wieske F, Dirnagl U, Winter C*. Methylenetetrahydrofolate reductase deficiency alters levels of monoamine neurotransmitters, glutamate and gamma aminobutyric acid in brain tissue. *Molecular Genetics and Metabolism and Genetics Reports*, 3:1-4. PMID: 26937386. PMCID: PMC4750636.

- 2015 **Jadavji NM***, Farr TD, Lips L, *Khalil A*, Boehm-Sturm P, Harms C, Foddiss M, Füchtemeier M, Dirnagl. Elevated levels of homocysteine, deficiencies in folic acid and uracil-DNA glycosylase impair learning in a mouse model of vascular cognitive impairment. *Behavioural Brain Research*, 283: 215-226. (IF = 3.002). PMID: 2565513.
- 2014 **Jadavji NM**, *Bahous R*, Deng L, Wang XL, Malysheva O, Caudill MA, Bedell BJ, Rozen R. A mouse model for genetic variation in methionine synthase reductase exhibits mild hyperhomocysteinemia, short-term memory impairment and biochemical changes in hippocampus. *Biochemical Journal*, 461:205-12. (IF = 4.396). PMID: 24800750.
- 2012 **Jadavji NM**, Deng L, Leclerc D, Malysheva O, Caudill MA, Bedell BJ, Rozen R. Methylene tetrahydrofolate reductase deficiency in mice impairs motor and cognitive function, with morphological and neurobiochemical changes in cerebellum and hippocampus. *Molecular Genetics and Metabolism*, 106:149-159 (IF = 3.774). PMID: 22521626.
- 2011 **Jadavji NM**, *Supina RD*, Metz GA. Blocking glucocorticoid and mineralocorticoid receptors neutralizes motor function impairment associated with stress. *Neuroendocrinology*, 94:278-90. (IF = 4.373). PMID:22024815.
- 2009 Zucchi FCR, Kirkland SW, **Jadavji NM**, van Waes L, Klein A, Supina R, Metz GA. Predictable stress versus unpredictable stress: a comparison in a rodent model of stroke. *Behavioral Brain Research*, 205:67-75. (IF = 3.002). PMID: 19573561.
- 2009 **Jadavji NM**, Metz GA. Both pre- and post-treatment with experiential therapy is beneficial in 6-OHDA dopamine-depleted rat. *Neuroscience*, 158:373-86. (IF = 3.327). PMID: 19032978.
- 2008 **Jadavji NM**, Metz GA. Sex differences on skilled reaching task in response to stress and recovery from stress. *Behavioral Brain Research*, 195:251-9. (IF = 3.002). PMID: 18840472. PMCID: PMC5222625.
- 2008 Smith LK, **Jadavji NM**, Colwell KL, Pehudoff SK Metz GA. Stress and glucocorticoids accelerate dopaminergic apoptosis and exaggerate motor symptoms in a rat model of Parkinson's disease. *European Journal of Neuroscience*, 27: 2133-2146. (IF = 3.753). PMID: 18412632.
- 2007 **Jadavji NM**, Metz GA. Experiential therapy for Parkinson's disease. *University of Lethbridge Graduate Student Association Conference Proceedings*. 1:62-68.
- 2006 **Jadavji NM**, Kolb B and Metz GA. Enriched environment improves motor function in intact and dopamine-depleted rats: implications for Parkinson's disease. *Neuroscience*, 140: 1127-1138. (IF = 3.327). PMID: 1667892.

- 2005 Metz GA, **Jadavji NM** and Smith LK. Modulation of motor function by stress: a novel concept of the effects of stress and corticosterone on behavior. *European Journal of Neuroscience*, 22: 1190-1200. (IF = 3.753). PMID: 16176362.

Edited Book

- 2020 **Jadavji NM**, editor. The Role of Nutrition during Aging: A Handbook for Nutritional Neuroscience. London, UK: Brain & Life Publishing. Paperback ISBN 9781912533053, eBook ISBN 9781912533060. <https://www.amazon.com/-/e/B083TGR3L5>

Book chapters

- 2021 *Clementson M, Jauhal J, **Jadavji NM**** Dietary B-vitamins deficiencies and maternal over supplementation on neurodevelopment: an updated narrative. *Vitamins and Minerals in Neurological Disorders*. Editor: Colin Martin, Vinood Patel, and Victor Preedy. Elsevier. (invited).
- 2019 *Moftah M, Emmerson JT, **Jadavji NM**** Linking homocysteine, B-vitamins, and choline to ischemic stroke risk. *Molecular Nutrition Vitamins*. Editor: Vinood Patel. Elsevier. (invited).
- 2017 *Murray LK, Emmerson JT, **Jadavji NM****. Roles of Folate in Neurological Function. In *Folic Acid: Sources, Health Effects, and Role in Disease*. Nova Publishers Science Inc. p81-104. (invited).
- 2014 **Jadavji NM***. Betaine and the brain. *Horizons in Neuroscience Research*. Volume 15. Editors: Andreas Costa and Eugenio Villalba. Nova Science Publishers Inc. p225-231 (invited).

Preprints

- 2021 *Yahn GB, Wasek B, Bottiglieri T, Malysheva O, Caudill MA, **Jadavji NM*** (submitted to *Neurobiology of disease*) A dietary vitamin B12 deficiency impairs motor function and changes neuronal survival and choline metabolism after ischemic stroke to the sensorimotor cortex in middle aged male and female mice. <https://www.biorxiv.org/content/10.1101/2021.08.17.456684v1>
- 2021 Rando HM, Wellhausen N Ghosh, Dattoli AA, Hu F, Lee AJ, Rafizadeh DN, Byrd JB, Qi Y, S Y, Field JM, Guebila MB, **Jadavji NM**, Lordan R, Shelly AN, Brueffer C, Wang J, Goel RR, Park YS COVID-19 Review Consortium, Boca SM, Gitter A, Greene CS. Identification and Development of Prophylactics and Therapeutics for COVID-19. PMID: 33688554. PMC7941644. <https://arxiv.org/abs/2103.02723>

- 2021 *Bennett C, Green J, Ciancio M, Goral J, Pitstick L, Pytynia M, Meyer A, Kwatra N, **Jadavji NM****. Dietary folic acid deficiency impacts hippocampal morphology and cortical acetylcholine metabolism in adult male and female mice. <https://www.biorxiv.org/content/10.1101/2020.12.13.422535v1>
- 2020 *Auer S, Haelterman NA, Weissgerber TL, Erlich JC, Susilaradeya D, Julkowska M, Gazda MA, Reproducibility for Everyone Team, Schwessinger B#, **Jadavji NM****. Reproducibility for everyone: a community-led initiative with global reach in reproducible research training. <https://osf.io/dxw67/>
- 2020 de Winde CM, Sarabipour S, Carignano H, Davla D, Eccles D, Hainer SJ, Haidar M, Ilangovan V, **Jadavji NM**, Kritsiligkou, Lee TY Olafsdottir,. Towards inclusive funding practices for early career researchers. <https://doi.org/10.31219/osf.io/9sfm8>
- 2019 *Abato JE, Moftah M, Cron GO, Smith PD, **Jadavji NM***. Methylenetetrahydrofolate reductase deficiency alters cellular ischemic stroke in male mice. <https://www.biorxiv.org/content/10.1101/857938v2>
- 2019 *Fernandes JD, Sarabipor A, Smith CT, Niemi NM, **Jadavji NM**, Kozik AJ, Holehouse AS, Pejaver V, Symmons O, Filho AWB, Haage A*. Insights from a survey-based analysis of the academic job market. <https://www.biorxiv.org/content/10.1101/796466v1>

Technical reports

- 2016 **Jadavji NM**, Adi MN, Corkery TC, Inoue J, Van Benthem, K. The 2016 Canadian National Postdoctoral Survey Report: An Emerging Shadow Workforce. Canadian Association of Postdoctoral Scholars-L'Association Canadienne de Stagiaires Post-doctoraux.

Undergraduate Peer Review Publications

- 2019 *Danef MA, **Jadavji NM*** The role of synaptic plasticity in the pathophysiology of cocaine addiction. *Journal of Young Investigators*. 37:33-38. doi:10.22186/jyi.37.4.33-38. *Nominated Best of JYI.
- 2019 *Radhakrishnan A, **Jadavji NM**** The effects of vascular cognitive impairment on the thickness of the granular cell layer of the dentate gyrus within the hippocampus in a mouse model. *Journal of Student Science, and Technology*. 11: 16-21. doi: 10.13034/jsst.v11i1.273
- 2019 *Keerthi P, **Jadavji NM***. B-vitamin and choline supplementation changes the ischemic brain. *Journal of Young Investigators*.36: 44-49. *Nominated Best of JYI.

- 2018 **Lam K, Jadavji NM.** Seeking Happiness: Understanding the mechanism of mixing music and drugs. *Journal of Young Investigators.* 34(5): 31-38. doi:10.22186/jyi.34.5.31-38
- 2017 **El Koussy M, Jadavji NM.** Therapeutic potential of optogenetic treatment for Individuals with Multiple Sclerosis. *Journal of Young Investigators.* 33(4); 15-20. doi: 10.22186/jyi.33.4.77-82 *Nominated Best of JYI.
- 2017 **Milani CM, Jadavji NM.** Chronic traumatic encephalopathy: connecting mechanisms to diagnosis and treatment. *Journal of Young Investigators.* 33(4); 21-23. doi: 10.22186/jyi.33.4.83-86. *Nominated Best of JYI.
- 2017 **Mau KJ, Jadavji NM.** A new perspective on Parkinson's disease: pathology begins in the gastrointestinal tract. *Journal of Young Investigators.* 33(4); 1-8. doi:10.22186/jyi.33.4.64-70.
- 2017 **McIntosh A, Jadavji NM.** Application of neuroscience principles for evidence-based design in architectural education. *Journal of Young Investigators.* 33(4); 9-14. doi:10.22186.33.4.71-76.
- 2016 **Owens G, Smith PD, Jadavji NM*.** Neurogenesis Unchanged by MTHFR Deficiency in Three-Week-Old Mice. *Journal of Young Investigators.* 31(6); 39-43. doi: 10.22186/jyi.31.6.39.
- 2006 **Jadavji NM*, Armstrong-Esther Chris.** A 21st century epidemic: childhood obesity in north America. *Journal of Young Investigators.* 15 (2): E-publication.
- 2006 **Jadavji NM*, Foroud A, Wishaw IQ, Metz GA.** Silencing Huntington's chorea: is RNA interference a potential cure? *Impulse an Undergraduate Journal for Neuroscience.* 1: 1-13.

Papers under review

Yahn GB, Wasek B, Bottiglieri T, Malysheva O, Caudill MA, Jadavji NM (under review, *Journal of Nutrition*, JN-2021-1056) A dietary vitamin B12 deficiency impairs motor function and changes neuronal survival and choline metabolism after ischemic stroke to the sensorimotor cortex in middle aged male and female mice

Sarabipor A, Smith CT, Niemi NM, , Kozik AJ, Holehouse AS, Pejaver V, Symmons O, Filho AWB Fernandes JD, Jadavji NM, Haage A. (*Science*, abg4520) Recommendations for improving faculty hiring practices.

Shanmugalingam U, Jadavji NM, Smith PD (under revision, *Molecular and Cellular Neuroscience*, YMCNE_2020_56) Developmental decline in the expression of glycosylated neuronal pentraxin 2: implications for enhancing neurite growth. (IF = 4.550)

Extramural Funding

- 2020-2021 Project: "Identification of developmental factors involved in ischemic stroke outcomes in adulthood and old age," American Heart Association Research Enhancement Award (AIREA), Principal Applicant, \$152, 735 USD
Grant Number: 20AIREA35050015
- 2016-17 Project: "Canadian Association of Postdoctoral Scholars 2016 National Survey Grant," Burrough's Wellcome Fund, Principal Applicant, \$5000 USD

Intramural Funding

- 2020-21 Project: "Identification of developmental factors involved in ischemic stroke outcomes in adulthood and old age," Arizona Alzheimer's Consortium. Principal Applicant, \$8510 USD.
- 2015-17 Project: "Impact of methylenetetrahydrofolate reductase deficiency on vulnerability to stroke in a mouse model," Carleton University Development Grant, Co-Applicant, \$9600 CDN

Trainee Funding

- 2017-18 Project: "The impact of methylenetetrahydrofolate reductase (MTHFR) deficiency in a mouse model of Parkinson's disease," Canadian Institutes of Health Research (CIHR) Master's Award, Co-Supervisor, \$17,500 CDN
- 2017 Project: "Impact of MTHFR deficiency on cell viability and oxidative stress in astrocytes," Natural Sciences and Engineering Research Council (NSERC): Undergraduate Student Research Award, Undergraduate, Principal Applicant, \$4500 CDN
- 2016 Project: "Impact of MTHFR deficiency on neuronal mechanisms," Natural Sciences and Engineering Research Council (NSERC) Undergraduate Student Research Award, Principal Applicant, \$4500 CDN

Fellowship Funding

- 2015-17 Project: "Impact of MTHFR deficiency on neuronal and astrocyte mechanism," National Science & Engineering Research Council (NSERC), Principal Applicant, \$90,000 CDN. *Application Ranked 4/69 for Cellular and Molecular Biology Competition

- 2016-17 Project: “Impact of genetic and dietary deficiencies in folate metabolism on stroke in a female mouse model”, Council of Ontario Universities Postdoctoral Women’s Health Scholars Fellowship, Principal Applicant, \$45000 CDN
- 2013-16 Project: “Evaluation of folate metabolism on functional behavioural assessment and mechanism in a animal model of Vascular Cognitive Impairment,” Fonds de la recherch  en sant  Qu bec (FRSQ), Principal Applicant, \$135,000 CDN

RECOGNITIONS & HONOURS

- 2019 Publons Top Reviewer in Neuroscience and Behavior 2018-19
- 2018 2nd Place Aging and Chronic Disease, Emerging Leaders in Nutrition Science Poster Competition, American Society for Nutrition Meeting, \$200 USD
- 2018 Finalist, Postdoctoral Competition, American Society for Nutrition Meeting, \$250 USD
- 2016 Howard Hughes Medical Institute Fellowship: Cold Spring Harbor Scientific Writing Course, \$700 USD
- 2016 Best Poster Presentation Award (postdoctoral level), FASEB Folic Acid, Vitamin B12, and One-Carbon Metabolism Meeting, Steamboat Springs, \$500 USD
- 2015 Young Investigator Award, 10th International Nutrition and Diagnostics Conference, Prague, CZ
- 2015 Best Poster Award, Post-doctoral Association, Postdoctoral Research Day, University of Ottawa, Faculty of Medicine, \$100 CDN
- 2011 Honourable Mention, Canadian Institutes of Health Research National Poster Competition
- 2007 1st place poster award, Graduate Student Association Multidisciplinary Conference, University of Lethbridge, \$100 CDN

Travel awards

- 2017 Canadian Institutes of Health Research: Institutes of Aging: \$1000 CDN
- 2017 University of Ottawa, Postdoctoral Conference: \$550 CDN
- 2015 Neurowind: \$1000 EUR
- 2014 International Brain Research Organization: \$1000 EUR
- 2013 Neurowind: 2014: \$1500 EUR
- 2013 A.T. Kearney Scholarship: \$200 EUR
- 2012 McGill University Department of Human Genetics: \$2,500 CDN
- 2011 Canadian Student Health Research Forum: \$500 CDN
- 2010 Montreal Children’s Hospital Research Institute Travel Award: \$1000 CDN
- 2007 Canadian Association for Neuroscience Young Neuroscientist Travel Award: \$500 CDN
- 2006 Province of Alberta International Student Projects Award: \$500 CDN

Invited Seminars

- 2021 Bugs, Germs, and Genomes. Youth First Career Panel. Virtual Meeting.
- 2021 Enriched Environment improved motor function in intact and unilateral dopamine depleted rats. American Society of Neurorehabilitation. Virtual Meeting.
- 2021 Does nutrition impact ischemic stroke outcome? The role of one-carbon metabolism deficiencies in a photothrombosis mouse model. City University of New York (CUNY) Neuroscience Seminar.
- 2021 How Nutrition Changes the Aging Brain. Midwestern University Community Lectures
- 2020 Investigating the impact of one-carbon metabolism on ischemic stroke outcome. Faculty of Medicine. Arizona State University. Virtual Seminar.
- 2020 How a genetic MTHFR deficiency and diet impacts onset and progression of ischemic stroke. Perspectives of early-mid career level researchers: Nutrient-gene interactions research interest section forum. Virtual Seminar. <https://nutrition.org/nutrient-gene-interactions-in-complex-diseases/>
- 2020 Investigating the impact of one-carbon metabolism on ischemic stroke outcome. Faculty of Medicine. Arizona State University. *cancelled due to COVID-19
- 2020 How Nutrition Changes the Aging Brain. Midwestern University Community Lectures *cancelled due to COVID-19
- 2020 Investigating the impact of one carbon metabolism on ischemic stroke. Behavioral Neuroscience Seminar. Arizona State University.
- 2019 Women in Science. Highland lakes school. US.
- 2019 Does nutrition impact ischemic stroke outcome? The role of one-carbon metabolism in animal models. Midwestern University Downers Grove Campus. US.
- 2019 Understanding the role of one-carbon metabolism in the onset and progression of ischemic stroke. Translational Neurotrauma Research Program. College of Medicine Phoenix. University of Arizona.
- 2019 Introduction to Reproducibility Webinar. *eLife* Ambassador Program. Worldwide. Online

- 2019 Journal of Young Investigators Career Webinar. *Journal of Young Investigators*. Worldwide. Online.
- 2019 Folic Acid and the Brain. Skype a Scientist. John Polanyi Collegiate Institute. Canada.
- 2019 Academic Job Market Webinar. Graduate Women in Science. US.
- 2019 Presenting Your Data at Scientific Meetings Webinar. Canadian Society for Molecular Biosciences. Canada.
- 2019 Does nutrition impact ischemic stroke outcome? Understanding the role of one-carbon metabolism using a mouse model. Department of Behavioral Health and Nutrition. University of Delaware. US.
- 2019 How nutrition changes the aging brain. +50 Active Jewish Adults. Ottawa. Canada.
- 2018 Keeping your brain young. Nutrition makes a difference. Canadian Federation of University Women – Ottawa Chapter. Canada.
- 2018 Understanding the role of one-carbon metabolism in the onset and progression of ischemic stroke. Division of Biomedical Sciences. Midwestern University.
- 2018 Does nutrition impact ischemic stroke outcome? Understanding the role of one-carbon metabolism. Department of Nutrition. University of Memphis.
- 2018 The role of folic acid on neurological function over the lifespan. Pint of Science, Ottawa, Canada.
- 2018 Does nutrition impact stroke outcome? Understanding the role of one-carbon metabolism in ischemic stroke. Department of Chemistry and Biochemistry. University of Windsor, Canada.
- 2018 How does nutrition impact the onset of Parkinson's disease (PD)? Understanding the role of folic acid deficiency in an environmental toxin mouse model of PD. Faculty of Medicine Postdoctoral Association. University of Ottawa.
- 2018 How does nutrition impact stroke outcome? Understanding the role of one-carbon metabolism in a mouse model of stroke. Penn State University.
- 2018 How does nutrition impact stroke outcome? Understanding the role of one-carbon metabolism in ischemic stroke. Memorial University, Canada.
- 2018 How does nutrition impact stroke outcome? Understanding the role of one-carbon metabolism in ischemic stroke using mouse models. Western University, Canada.

- 2019 The aging brain. Department of Pharmacology and Therapeutics, University of Manitoba, Canada.
- 2017 The aging brain and diet. Department of Veterinary Biomedical Sciences, University of Saskatchewan, Canada.
- 2017 Stroke and Homocysteine is there a link? Faculty of Medicine Postdoctoral Association. University of Ottawa, Canada.
- 2017 Impact of Folates and Neurological Function. Department of Nutrition Seminar. University of California, Davis. USA.
- 2016 How folic acid affects the stroke brain in mice. Neurorestoration Seminar. King's College London.
- 2015 Folic Acid and the Brain. Science Café. Carleton University, Ottawa.
- 2015 The impact of genetic deficiencies in folate metabolism on neurodegeneration and stroke in a mouse model. Faculty of Medicine Postdoctoral Association. University of Ottawa.
- 2015 How do deficiencies in folate metabolism affect the brain and behaviour during neurodegeneration and stroke? Health Canada, Bureau of Nutritional Science. Ottawa, Canada.
- 2015 The impact of deficiencies in folate metabolism on neurodegeneration and stroke in a mouse model. Réunion scientifique de l'Axe Neurosciences. Centre hospitalier de l'Université de Montréal.
- 2015 STEM mentorship Mentoring Circles – WISE Transitions and Women in leadership'ful Choices. Women in Science and Engineering Mentorship Program.
- 2015 Impact of elevated levels of plasma homocysteine via deficiencies in folate metabolism in a mouse model of vascular cognitive impairment. Department of Neuroscience Colloquium, Carleton University, Ottawa, Canada.
- 2014 Deficiencies in folic acid and UNG result in learning deficits, and decreased MMP-9 levels in a mouse model of vascular dementia. NeuroCure Seminar, Charité University Medicine, Berlin, Germany.
- 2009 Interactions of Stress and Skilled Motor System Function. Max Planck Institute for Neurological Research. Cologne, Germany.
- 2008 Interactions of Stress and Motor System Function. Université de Montréal.

2007 To Be Enriched or Not to Be? Experiential Therapy Improves Motor Function in Intact and Unilateral Dopamine-Depleted Rats. Montreal Neurological Institute McGill University.

Oral Presentations *selected from abstracts

2021 *Yahn GB, Wasek B, Bottiglieri T, Malysheva O, Caudill MA, **Jadavji NM** (2021)* A dietary vitamin B12 deficiency impairs motor function, neuronal survival, and choline metabolism after ischemic stroke to the sensorimotor cortex in adult male and female mice. 13th International Conference One-Carbon Metabolism, B Vitamins and Homocysteine. Hybrid.

2018 **Jadavji NM, Murray LK, Rudyk C, Hayley S, Smith PD.** MTHFR deficiency increases vulnerability to environmental toxin model of Parkinson's disease. American Society for Nutrition. Boston, USA. *Finalist for Postdoctoral Research Award Competition

2016 *Bahous RH, **Jadavji NM**, Cosín-Tomás M, Deng L, Lu J, Malysheva O, Pallàs M, Kaliman P, Caudill MA, Rozen R.* High dietary folate during pregnancy leads to pseudo-MTHFR deficiency, changes in choline metabolites, altered gene expression and short-term memory impairment in offspring. FASEB Folic Acid, Vitamin B12, and One-Carbon Metabolism Meeting, Steamboat Springs, USA.

2015 **Jadavji NM, Khalil AA, Harms C, Farr TD, Boehm-Sturm P, Lips J, Foddìs M, Dam K, Fùchtemeier M, Malysheva O, Caudill MA, Dirnagl U.** Using a mouse model of vascular cognitive impairment to determine whether elevated levels of homocysteine affect onset and progression. International Nutrition and Diagnostics Conference. Prague, CZECH REPUBLIC. *Young Investigator Award

2015 **Jadavji NM, Khalil AA, Harms C, Farr TD, Boehm-Sturm P, Lips J, Foddìs M, Dam K, Fùchtemeier M, Malysheva O, Caudill MA, Dirnagl U.** Impact of elevated levels of plasma homocysteine and impaired DNA repair in a mouse model of vascular cognitive impairment. 10th Conference on One Carbon Metabolism, Vitamins B and Homocysteine. Nancy, FRANCE.

2012 **Jadavji NM, Deng L, Malysheva O, Grand'Maison M, Bedell BJ, Caudill MA, Rozen R.** Methionine synthase reductase deficiency in mice results in mild hyperhomocysteinemia, short-term memory impairment and biochemical changes in hippocampus. FASEB Folic Acid, Vitamin B12, and One-Carbon Metabolism Meeting, Crete, GREECE.

2011 **Jadavji NM, Deng L, Wang XL, Malysheva O, Caudill MA, Bedell BJ, Rozen R.** Genetic and nutritional folate deficiency alter cerebellar morphology and cerebellar-related behaviour in mice. Gordon Research Conference Cerebellum Health.

Selected abstracts of poster presentations from past 5 years

- 2020 *Mosnier H, Kelly E, Lawrence K, Cruickshank S, Stacey S, McCall A, Dhatt S, Arning E, Bottiglieri T, Smith PD, **Jadavji NM****. The role of one-carbon metabolism after ischemic stroke in an aged mouse model. American Society for Nutrition. Seattle.
- 2020 *Abato J, Yahn GB, **Jadavji NM***. The role of vitamin B12 deficiency on ischemic stroke risk and outcome. Kenneth A. Suarez Research Day. Midwestern University. Glendale. *Abstract accepted and published, research day cancelled due to COVID-19
- 2020 Sarabipor A, Fernandes JD, Smith CT, Niemi NM, **Jadavji NM**, Kozik AJ, Holehouse AS, Pejaver V, Symmons O, Filho AWB, Haage A. Insights from a survey-based analysis of the academic job market. American Society for Microbiology. Chicago.
- 2019 *Mosnier H, Kelly E, Lawrence K, Cruickshank S, Stacey S, McCall A, Dhatt S, Arning E, Bottiglieri T, Smith PD, **Jadavji NM***. One-carbon metabolism supplementation improves outcome after stroke in aged male MTHFR-deficient mice. AZ Physiological Society. Tempe.
- 2019 Fernandes JD, Sarabipor A, Smith CT, Niemi NM, **Jadavji NM**, Kozik AJ, Holehouse AS, Pejaver V, Symmons O, Filho AWB, Haage A. Insights from a survey-based analysis of the academic job market. American Society for Cell Biology. Washington.
- 2019 *Moftah M, Cron GO, Emmerson JT, Willmore WG, Smith PD, **Jadavji NM***. MTHFR-deficiency increases ischemic damage through reduced neuronal and astrocytes viability and changes in the cellular response. American Society for Nutrition. Baltimore.
- 2018 **Jadavji NM, Murray LK, Rudyk C, Hayley S, Smith PD**. MTHFR deficiency increases vulnerability to environmental toxin model of Parkinson's disease. American Society for Nutrition. Boston. *Finalist for Emerging Leaders in Nutrition Science Poster Competition
- 2018 *Veeraj S, Gosatyla M, **Jadavji NM**, Niewijk G, Mikhael P, Parrino A, Pernik M, Sarmiento N, Sychia A, Waseem MH*. An opportunity for undergraduates to publish in a peer review journal: The Journal of Young Investigators. International Society of Managing and Technical Editors (ISMTE). Maryland.
- 2018 *Murray LK, **Jadavji NM**, Rudyk CA, Hayley S, Smith PD*. The impact of methylenetetrahydrofolate reductase (MTHFR) deficiency in a paraquat mouse model of Parkinson's disease. Brain Health Research Day. Ottawa.

- 2018 *Tawil N, Magnus N, Meehan B, Choi D, Croul S, **Jadavji NM**, Rak J.* Molecular and vascular determinants of escape from dormancy in experimental glioma. American Association for Cancer Research: Cancer Dormancy. Montreal.
- 2018 *Murray LK, **Jadavji NM**, Rudyk CA, Hayley S, Smith PD.* The impact of methylenetetrahydrofolate reductase (MTHFR) deficiency in a paraquat mouse model of Parkinson's disease. 12th Annual Canadian Association for Neuroscience Meeting. Vancouver
- 2018 **Jadavji NM, Prieur EAK, Pjetri E, Ziesel S.** Reduced brain volume and impaired memory in betaine homocysteine S-methyltransferase knockout mice. American Society for Nutrition. Boston.
- 2018 *Shanmugalingam U, **Jadavji NM**, Smith PD.* The role of neuronal pentraxin 2 in retinal ganglion cell growth. EMBO Molecular Neurobiology, Heraklion, Greece.
- 2017 *Shanmugalingam U, Morris A, **Jadavji NM**, Smith PD.* Age-dependent post-translational modification of neuronal activity-regulated pentraxin (NARP) in the mouse retina. Brain Health Research Day. University of Ottawa.
- 2017 **Jadavji NM, Emmerson JT, MacFarlane AJ, Willmore WG, Smith PD.** One carbon metabolism supplementation results in plasticity after ischemic damage in a mouse model. Brain Health Research Day. University of Ottawa.
- 2017 *Mau KJ, **Jadavji NM**.* A new perspective on Parkinson's disease: pathology begins in the gastrointestinal tract. Life Sciences Research Day. Carleton University, Ottawa.
- 2017 *Mau KJ, **Jadavji NM**.* A new perspective on Parkinson's disease: pathology begins in the gastrointestinal tract. Brain Health Research Day. University of Ottawa.
- 2017 **Jadavji NM, Emmerson JT, Willmore WG, MacFarlane AJ, Smith PD.** A genetic deficiency in folate metabolism increases vulnerability and impairment in an aged mouse model of stroke. Postdoctoral Research day. University of Ottawa.
- 2017 **Jadavji NM, Emmerson JT, MacFarlane AJ, Willmore WG, Smith PD.** MTHFR deficiency increases vulnerability and impairment in an aged mouse model of stroke. 11th Conference on One Carbon Metabolism, Vitamins B and Homocysteine. Aarhus, DENMARK.
- 2017 *Emmerson JT, **Jadavji NM**, Smith PD.* Aged MTHFR mice show increased vulnerability to neurodegeneration and motor impairments after ischemic damage to the sensorimotor cortex. 11th Annual Canadian Association for Neuroscience Meeting. Montreal.

- 2016 *Emmerson JT, **Jadavji NM**, Smith PD.* Aged methylenetetrahydrofolate reductase deficient mice show increased susceptibility to behavioural motor deficits after ischemic damage to sensorimotor cortex Brain Health Research Day. Carleton University, Ottawa.
- 2016 **Jadavji NM**, *Emmerson JT*, MacFarlane AJ, Willmore WG, Smith PD. Genetic deficiency in folate metabolism increases susceptibility to neurodegeneration and supplementation results in plasticity after ischemic damage in a mouse model. FASEB Folic Acid, Vitamin B12, and One-Carbon Metabolism Meeting, Steamboat Springs, USA and Brain Health Research Day, Ottawa.
- 2016 **Jadavji NM**, Willmore WG, Smith PD. MTHFR deficiency increases susceptibility to neurodegeneration through p53 activation after hypoxia. Canadian Nutrition Society Meeting, Gatineau, QC.
- 2016 *Murray LK, **Jadavji NM**, Smith PD.* GM-CSFR α expression is increased in photothrombosis mouse model of ischemic stroke. Science Research Day Carleton University and Brain Health Research Day, Ottawa.
- 2016 **Jadavji NM**, Willmore WG, Smith PD. MTHFR deficiency increases susceptibility to neurodegeneration through p53 activation after hypoxia. University of Ottawa Postdoctoral Research Day. Ottawa.
- 2016 *Zhang M, **Jadavji NM**, Smith PD.* Human rGDF-11 counteracts age-related short-term memory impairment in middle-aged mice. 10th Annual Canadian Association for Neuroscience Meeting. Toronto.
- 2015 **Jadavji NM**, *Khalil AA*, Harms A, Farr TD, Boehm-Sturm P, Lips J, Foddiss M, *Dam K*, Füchtemeier M, Malysheva O, Caudill MA, Dirnagl U. Impact of elevated levels of plasma homocysteine and impaired DNA repair in a mouse model of vascular cognitive impairment. Post-doctoral Research Day University of Ottawa.
- 2015 *Bahous RH, **Jadavji NM**, Deng L, Malysheva O, Caudill MA, Rozen R.* High dietary folate during pregnancy leads to pseudo-MTHFR deficiency and short-term memory impairment in murine offspring. Canadian Human Genetics Conference. Vancouver.
- 2014 **Jadavji NM**, Farr TD, Boehm-Strum P, Foddiss M, *Dam K*, Dirnagl U, Füchtemeier M. Impact of methylenetetrahydrofolate reductase and dietary folic acid deficiencies in a mouse model of vascular cognitive impairment. FASEB Folic Acid, Vitamin B12, and One-Carbon Metabolism Meeting, Steamboat Springs.
- 2014 **Jadavji NM**, Farr TD, Lips J, *Khalil AA*, Boehm-Strum P, Harms C, Foddiss M, Füchtemeier M, Dirnagl U. Deficiencies in folic acid and UNG result in learning deficits, and decreased MMP-9 levels in a mouse model of vascular dementia. Berlin Neuroscience Forum. Berlin, GERMANY.

- 2014 **Jadavji NM**, Farr TD, Lips J, *Khalil AA*, Boehm-Strum P, Harms C, Foddiss M, Füchtemeier M, Dirnagl U. Folic acid deficiency increases plasma homocysteine and results in learning deficits in a mouse model of chronic hypoperfusion. 8th Symposium on Neuroprotection and Neurorepair. Magdeburg, GERMANY.
- 2013 **Jadavji NM**, Farr TD, Lips J, *Khalil AA*, Bohm-Strum P, Harms C, Foddiss M, Füchtemeier M, Dirnagl U. Impact of impaired DNA repair and folic acid deficiency in an animal model of neurodegeneration. Federation of Neuroscience Local protein synthesis in axons and dendrites school. Crete, GREECE.

Science Communication

- 2021 Surviving my second year on the tenure track during a global pandemic. *Jadavji laboratory Blog*. <https://www.jadavjilab.com/blog/surviving-my-second-year-on-the-tenure-track-during-a-global-pandemic>
- 2021 Mannam S. Interview with Dr. Jadavji. Journal of Young Investigators. <https://www.jyi.org/2021-june/2021/6/8/interview-with-dr-nafisa-jadavji>
- 2020 Interview Narrative: Nafisa Jadavji, Assistant Professor. McGill University. Track Report Connect Exchange. <http://tracemcgill.com/nafisa-jadavji/>
- 2020 Powell K. Daunting but doable: Job searching after a postdoc. *Science Magazine*. <https://www.sciencemag.org/features/2020/08/daunting-doable-job-searching-after-postdoc#>
- 2020 Reflections on the first year of a tenure track job: learning to embrace chaos. *Jadavji laboratory Blog*. <https://www.jadavjilab.com/blog/reflections-on-the-first-year-of-a-tenure-track-job-learning-to-embracing-chaos>
- 2020 Kwarta N, Jadavji NM. How changes in our genes impact outcome after stroke. *Atlas of Science*. <https://atlasofscience.org/how-changes-in-our-genes-impact-outcome-after-stroke/>
- 2020 Using social media to enhance your scientific training and reducing social isolation. *Jadavji Lab Blog*. <https://www.jadavjilab.com/blog/archives/04-2020>
- 2021 Learning to teach in academia. *Jadavji Lab Blog*. <https://www.jadavjilab.com/blog/archives/12-2019>
- 2019 Bullying in academia: Tales from victims and a call to action. *ecrLife*. <https://ecrlife.org/bullying-in-academia-tales-from-victims-and-a-call-to-action/>
- 2019 Importance of building a network during postdoctorate training. *Jadavji Lab Blog*. <https://www.jadavjilab.com/blog/archives/09-2019>

- 2019 Respect the hustle: landing a tenure track job in 2019. *Jadavji Lab Blog*. <https://www.jadavjilab.com/blog/respect-the-hustle-landing-a-tenure-track-job-in-2019>
- 2019 CSMB-SCMB Slack Career Profile. New Principal Investigator
- 2019 Twitter Curating: STEM Squad, <https://thestemsquad.org/>
- 2019 Nutrition & Parkinson's disease: is there a link? *American Nutrition Society Blog*. <https://nutrition.org/nutrition-parkinsons-disease-is-there-a-link/>
- 2018 What role does nutrition play on vascular dementia? *American Nutrition Society Blog*. <https://nutrition.org/what-role-does-nutrition-play-on-vascular-dementia/>
- 2018 The role of maternal folic acid supplementation on offspring neurodevelopment. *American Nutrition Society Blog*. <https://nutrition.org/the-role-of-maternal-folic-acid-supplementation-on-offspring-neurodevelopment/>
- 2018 How what you eat affects your brain. *The Addictive Brain*. <https://www.facebook.com/notes/the-addictive-brain/how-what-you-eat-affects-your-brain-nafisa-jadavji/1977391632292770/>
- 2018 Nafisa's top ten tips for oral and poster presentations. *Journal of Young Investigators Blog*. <https://www.jyi.org/blog/2018/6/11/nafisas-top-ten-tips-for-oral-and-poster-presentations>
- 2018 How to choose a postdoc lab. *Graduate Women in Science EMPOWER*. <https://mailchi.mp/gwis/how-to-choose-a-postdoc-lab?e=744f87f042>
- 2018 How does nutrition impact stroke outcome? *American Nutrition Society Blog*. <https://nutrition.org/how-does-nutrition-impact-stroke-outcome/>
- 2018 Visitor of the Week: Nafisa Jadavji. *Current Exchange: A blog by Cold Spring Harbor Laboratory Meetings and Courses*. <https://currentexchange.cshl.edu/blog/2018/4/visitor-of-the-week-53>
- 2018 Folic acid during early brain development is important, but too much is not good. <https://brainandlife.net/2018/03/22/folic-acid-during-early-brain-development-is-important-but-too-much-is-not-good/>
- 2018 Inside the Petri Dish. *Animal Testing Podcast*. <http://itpd.mprw.co.uk/2018/02/>
- 2018 Women in S.T.E.M. Nafisa Jadavji, PhD: Her Careers and a few lessons learned. <https://femstem.com/blog/2018/2/24/nafisa-jadavji-phd-her-career-and-a-few-lessons-learned-nafisa-jadavji>

- 2017 Tip Box Team ABCam. 96 Tips. <https://tipbox.abcam.com/>
- 2017 Folic acid during early neurodevelopment is important, but too much is not good. <https://womaninscienceblog.wordpress.com/2017/11/07/folic-acid-during-early-neurodevelopment-is-important-but-too-much-is-not-good/>
- 2017 Food for thought. Canadian Institutes of Health Research celebrates Canada 150. <http://www.cihr-irsc.gc.ca/e/50395.html>
- 2017 Twitter Curating:
RealScientists, May. <http://realscientists.org/2017/05/28/food-for-thought-literally-with-nafisa-jadavji/>
Neurotweeps, April. <https://neurotweeps.wordpress.com/2017/04/>
Biotweeps, October. <https://biotweep.wordpress.com/2017/10/08/091017-nafisajadavji/>
- 2017 Homocysteine and Dementia: Impact of Nutrition on Neurodegeneration. *AlzScience Bog*. <https://alzscience.wordpress.com/2017/04/22/homocysteine-and-dementia-impact-of-nutrition-on-neurodegeneration/#comments>
- 2017 Women in STEM Profile. <https://laurendrogos.wordpress.com/2017/03/14/nafisa-m-jadavji/>
- 2007 Metz GA, **Jadavji NM**, Colwell KL, Pehudoff SK, Smith LK Stress accelerates neuronal degeneration and exaggerates motor symptoms in the rat model of Parkinson's disease. *Society for Neuroscience: Neuroscience 2007 Press Book*
- 2007 Ali F, Jadavji NM, Ong W, Pandey KR, Patananan AN, Parbhala HK, Yang CHT. Supporting Undergraduate Research. *Science*, 317: 42
- 2005 **Jadavji NM**, Kolb B, and Metz GA. Environmental enrichment modulates motor symptoms in a rat model of Parkinson's disease. *The Melorist*, p. 3.
- 2004 **Jadavji NM**, Kolb B, Diaz Heijtz R, Metz GA. Environmental enrichment modulates motor symptoms in a rat model of Parkinson's disease. *Society for Neuroscience: Neuroscience 2004 Press Book*.

TEACHING AND SUPERVISION

Midwestern University, Team Taught Courses

- Molecular Cell Biology (Fall 2019, n = 5 lectures)
- Molecular Cell Biology (Fall 2020, n = 7 lectures)
- Molecular Cell Biology (Fall 2021, n = 7 lectures)
- Graduate Student Seminar (Fall 2019)
- Graduate Student Seminar (Fall 2020)

Graduate Student Seminar (Fall 2021)
Neuroscience (Spring 2020, n = 5 lectures)
Neuroscience (Spring 2021, n = 8 lectures)

Public Health and Nutrition Content (Summer 2021, n = 1 lecture)
Research Methods (Fall 2021, n = 1 lecture)

Carleton University, Sole Instructor

NEUR 1202 Introduction to the Neuroscience of Psychiatric Diseases
The Human Microbiome and How It Affects Health, Learning in Retirement
NEUR 4905 Honours Workshop, Department of Neuroscience
What is the brain, how does it work and what goes wrong when it gets sick? Enrichment Programs
How Nutrition Changes the Aging Brain, Learning in Retirement
Ontario Online Research CO-OP
Impact of Vitamins and Nutrients on Neurological Function, Learning in Retirement
NEUR 4907 Honours Thesis, Department of Neuroscience
How what we eat affects our brain, Enrichment Programs
The Brain, Stress and Disease, Learning in Retirement
Nutrients on Neurological Function, Learning in Retirement

University of Ottawa, Sole Instructor

Medical Research Grant Workshop, Centre for University Teaching

Charité Medical University Berlin, Sole Instructor

Homocysteine and Neurological Function

McGill University, Laboratory Instructor

Principles of Organismal Biology, Fall 2012
Cell and Molecular Biology, Winter 2011 and 2012

Teaching Assistant

McGill University and University of Lethbridge

Neural Basis of Behaviour, Fall 2011
Essential Biology, Fall 2009 and 2010
Basic Genetics, Winter 2009
Brain, Psychiatric and Neurological Diseases, Spring 2008
Contemporary Problems in Brain and Behaviour and Cognitive Science, Fall/Spring 2008
Child Development, Fall 2007
Introduction in Biology, Spring 2007
Research Methods in Neuroscience, Fall 2006

Supervisory Experience

High school students, n = 11

Undergraduates, n = 27

Graduate Students

- 2020 – present Mr. Jesse Jahual, B.Sc., Master of Biomedical Sciences
- 2019 - 2021 Ms. Gyllian Yahn, BSc., Master of Biomedical Sciences
- 2016 - 2019 Mrs. Annemarie Wolff, BSc., PhD Student
- 2015 - 2019 Ms. Usha Shanmugalingam, M.Sc., Doctoral student
- 2017 - 2018 Ms. Melissa Marquez, M.Sc.
- 2015 - 2018 Ms. Lauren Murray, M.Sc., Thesis: The impact of methylenetetrahydrofolate reductase (MTHFR) deficiency in a paraquat mouse model of Parkinson's disease
- 2015-17 Mr. Josh Emmerson, M.Sc., Thesis: Impact of a MTHFR-deficiency on focal ischemic damage to the sensorimotor cortex in aged mice *Currently PhD student at McGill University
- 2015-16 Mr. Min Zhang, M.Sc. Master of Science Student, Thesis: Human rGDF-11 counteracts age-related short-term memory impairments in middle-aged mice
- 2015-16 Ms. Julia Grummisch, M.Sc., Thesis Tissue plasminogen activator promotes postnatal cortical neuron survival in vitro via JAK2-and mTOR-Dependent mechanisms
- 2014 Mr. Kevin Dam, M.Sc., Thesis: The effect of chronic hypoperfusion and folic acid deficiency in a murine model of methylenetetrahydrofolate reductase deficiency
- 2013 Ms. Abinaya Ravishankar, M.Sc., Thesis: Effects of folic acid deficiency induced hyperhomocysteinemia in a mouse model of chronic hypoperfusion.
- 2013 Mr. Ahmed Khalil, M.Sc., Thesis: The effect of chronic global cerebral hypoperfusion and folic acid deficiency on uracil DNA glycosylase knockout mice
*Currently a PhD student at the Charité Medical University, Berlin, Germany
- 2013 Mr. Neemanja Milicevic, M.Sc., Thesis: Depletion of apoptosis repressor with caspase recruitment domain (ARC) decreases whole brain and cerebellar, but not hippocampal volume
*Currently a PhD student at Academisch Medisch Centrum, Amsterdam, Netherlands
- 2015 Ms. Tiwa Lawal, B.Eng, M.Eng. *Currently works at Johnson Control
- 2012 Ms. Renata Bahous, PhD *Currently MD student at Sherbrooke University

Postdoctorates

- 2016 Dr. Kathleen Van Benthem, PhD, Canadian National Postdoctoral Survey Report: An Emerging Shadow Workforce. Canadian Association of Postdoctoral Scholars-L'Association Canadienne de Stagiaires Post-doctoraux.

Teaching Professional Development

- 2019 – present Teaching and Learning Seminar Series, Midwestern University
- 2015 – 2019 Teacher Training workshops, University of Ottawa
- 2015 Certificate in University Teaching, Education Development Center, Carleton University
- 2010 McGill University Learning to Teach Day workshop Attendance

- 2008 McGill University Tomlinson Project in University-Level Science Education (T-PULSE) workshop
- 2006 – 08 University of Lethbridge Centre for Advancement of Excellence in Teaching and Learning

SERVICE TO PROFESSION

Academic service

Associate Editor

- Frontiers in Nutrition and Brain Health (2020 – present)
Bio-protocols (2019 – present)

Review Editor

- Frontiers in Neuroenergetics, Nutrition and Brain Health (2018 – present)
Frontiers in Nutrition and Brain Health (2020 – present)
Metabolites (2020 – present)
Journal of Integrative Neuroscience (2020 – present)

Journal Reviewer

Neuroscience; Journal of Cerebral Blood Flow and Metabolism; Journal of Molecular Medicine; Neurotoxicity Research; International Journal of Pediatrics; Cellular and Molecular Neurobiology; Neural Regeneration Research; Science Reports; Journal of Advances in Biotechnology; Therapeutics and Clinical Risk Management; The Scientific Pages of Translational Neuroscience; Vessel Plus; Neuropsychiatric Disease and Treatment, Nutrition Research, Behavioral Brain Research, Nutritional Neuroscience; Neurological Disorders and Stroke; Brain Research Bulletin; Nutrients; PLoS One; Current Eye Research, Clinical Interventions in Aging; Toxicology Mechanisms and Methods; Naunyn-Schmiedeberg's Archives of Pharmacology, Bio-Protocols (protocols), Journal of Neuroscience, FASEB, Cancer Letters, The Open Journal of Biology, Science Magazine

Preprint

bioRxiv (affiliate member)

Grant reviewer

National Institutes of Health, Early Career Researcher Program: 2020
National Sciences Foundation: 2020, 2021
La Caixa Banking Foundation: Health Research Proposals: 2020, 2021
National Science Centre Poland: 2019
Graduate Women in Science Fellowship: 2019, 2020, 2021
Centre for Aging + Brain Health Innovation: 2017, 2018, 2019

Abstract Reviewer

American Nutrition Society Annual Meetings: 2016, 2017, 2018, 2019, 2020, 2021
University of Ottawa, Scinapse Undergraduate Science Case Competition: 2018, 2019

Board Memberships

Reproducibility for Everyone (R4E)

Chair, 2020 - present

Journal of Young Investigators (JYI), Board of Director (BoD), 2011 - present

Board Member

Chair, 2014 - present

Vice Chair 2013-14

Canadian Society for Molecular Biosciences, 2017 - 2019

Board Member

Chair of Trainee Committee

Member of Canadian Association of Neuroscience Advocacy Committee

Canadian Association of Postdoctoral Scholars, 2015 - present

Vice President External, 2015-17

Chair of 2016 National Postdoctoral Survey, 2015 – 17

Community Leader, 2017 – present

Scientific Board, European Students' Conference, 2014-15

Board member

University of Lethbridge, Board member, 2007-08

Board of Directors

Science Outreach

ASAPBio Fellow: 2021

Faculty Job Market Survey: 2019 - present

Skype a Scientist: 2019 – present

Letters to Pre-Scientist: 2019 – 2020

eLife ECRLife Taskforce: 2020

eLife Community Ambassador: 2019 - 2020

Canadian Society for Nutrition, Mentor: 2019, 2020, 2021

American Society for Nutrition Emerging Leaders Poster Session Judge: 2019

The New York Academy of Sciences, 1000 Girls, 1000 Futures: 2019, 2020

American Society for Nutrition, Blogger; Mentor; Member, Nutrient, and Gene Research Interest Group, 2018 - 19

Society for Neuroscience: Brain Awareness Week Presenter: 2011, 2015, 2016, 2017

Let's Talk Science McGill University Chapter, Mentorship Coordinator, 2008-11

Committee work

Institutional Animal Care and Use Committee, Midwestern University: 2020 – present

Admission Committee, Biomedical Sciences, Midwestern University: 2019 - present

Graduate Women in Science, Media Committee Member, 2018 – present, Fellowship Committee, 2018

Elsevier Advisory Panel, 2014 - present

Vivarium User Committee Member, Carleton University, 2017 - 18

Graduate Student Buddy System Mentor University of Ottawa, 2016 – 19

University of Ottawa Postdoctoral Association, Vice President External, Conference Organizing Committee, 2015-17

Mendeley Advisor, 2015 - present

International Consortium of Research Staff Associations Outreach Committee Member, 2015-16

Berlin Institute of Health Young Science Initiative, Member, 2014-15

NeurOnLine, Society of Neuroscience, Champion of Behavioural Neuroscience, 2011–15

Montreal Children's Hospital Research Institute, Student Seminar Coordinator, 2010-12

McGill University Human Genetics Student Society, Vice-President Communications, 2009-11; Chair of Human Genetics Organizing Committee (2010)

McGill University Post Graduate Student Society, Council Graduate Student Support, Committee Member, 2008-11

University of Lethbridge, Graduate Students' Association President, Board of Governors Member, 2007-08

Community service

Volunteer, LiveWorkPlay! Ottawa, 2015 - 19

Service Awards

Let's Talk Science Volunteer of the Month Award, 2008

Journal of Young Investigators Staff Member of the Month, 2008

Media Coverage of Research

- 2020 Getting your professorship.
<https://www.thenakedscientists.com/articles/interviews/getting-your-professorship?fbclid=IwAR2BiN5brm-zDjdDBX6hLsGYRm6nxC782fkf0ZpkPYWoqRSub8I1DF-0vKk>
- 2020 Powell K. Daunting but doable: job searching after a postdoc.
https://www.sciencemag.org/features/2020/08/daunting-doable-job-searching-after-postdoc?fbclid=IwAR2kb3SIRyQML-n6OHcxJ8DeUF3buWQthAo8zMUx_IIVHEIq-qI2xU0psoA
- 2020 Notman N and Woolston. Fifteen to one: how many applications it can take to land a single academic job offer. https://www.nature.com/articles/d41586-020-02224-5?fbclid=IwAR0v93PIuW_cOjZuV4TN9Y81Y19rZDpLrATTToKejRH7ijMpvxFY0bHfzdyM
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Professional Organization Memberships

Midwestern University Alzheimer's Advisory Committee
Arizona Physiological Society
Full Member, Sigma XI (invited)
American Heart Association
American Society for Nutrition
Canadian Association for Neuroscience
Canadian Society in Molecular Biosciences
Canadian Nutrition Society
Graduate Women in Science
The New York Academy of Sciences
Organization for the Study of Sex Differences
Society for Neuroscience
World Stroke Organization