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University of Lethbridge
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EMPLOYMENT/APPOINTMENTS

University of Lethbridge

Assistant Professor (July, 2014 to present)
Emmy Droog Chair in Complementary and Alternative Health Care
Faculty of Health Sciences

University of Technology Sydney

International Complementary Medicine Research Leadership and Capacity Building Program Fellow, Visiting Research Fellow (September, 2014 to present)
Australian Research Centre in Complementary and Integrative Medicine (ARCCIM) Faculty of Health

University of Calgary

Adjunct Assistant Professor (November, 2013 to present) – Community Health Sciences, Faculty of Medicine

EDUCATION

Doctor of Philosophy (Ph.D.), Epidemiology, Community Health Sciences –2012

University of Calgary (Calgary, AB)
Dissertation: The Role of Micronutrients in Maternal Mental Health and Child Neurodevelopment

Master of Science (M.Sc.), Health Research, Community Health Sciences – 2006

University of Calgary (Calgary, AB)
Thesis: The use of naturopathic medicine in children under age 15

Doctor of Naturopathic Medicine (N.D.) – 1998

Canadian College of Naturopathic Medicine (Toronto, Ontario)

AWARDS

Project Grants

- **B. Leung (PI)**, R. Bell, N. Letourneau, G. Giesbrecht, C. Field, A. Deane. *The link between gestational diabetes and perinatal depression: the role of nutrient status*. Diabetes Obesity Nutrition-SCN, Alberta Health Services. April 2016- 2017, funding: \$10,000
- **Leung B (PI)** & Takeda W. *A pilot study of acupuncture treatment of pediatric anxiety*. Canadian CAM Research Fund. December, 2015, funding: \$5000 for one year.
- Vohra S (PI), Boon H, Balneaves L, Yiu V, Rutledge R, **Leung B**, et al. *Integrative Medicine Patient-ORiented TTranslational and TTreatment EValuation NNetwork (IMPORTTEN)*. CIHR-SPOR, LOI approved for team development, March, 2015, funding: \$50,000
- **Leung B (PI)** & Vohra S. Campus Alberta Health Outcomes and Public Health meeting grant, awarded October, 2014, funding: \$5,000/6 months.
- **Leung, B.** (PI) *Investigating the link between maternal dietary intake patterns during pregnancy and maternal metabolic dysregulation on maternal mood and child neurodevelopment*. Faculty of Health Sciences, University of Lethbridge, awarded September, 2014, funding: \$40,000 over two years.

- Kaplan BJ (PI), **Leung B (co-PI)**, Dewey D, Field C, OBeirne M, Johnston D, Tough S, Mandhane P. *A KT Initiative for Policymakers on the Importance of Cohort Research*. Alberta Innovates – Health Solutions KT/Innovation Research Grant, awarded December, 2011, funding: \$25,000 for one year.
- Seely D (PI), **Leung B (co-PI)**, Parmar G, Ghazali J, Balneaves L, Wong R, Sagar S, Herman P. *Adjuvant localized hyperthermia for advanced local pancreatic cancer: a randomized clinical trial*. Hecht Foundation, awarded January, 2011, funding: \$350,000 over 4 years.
- **Leung B (PI)**, Adair C, McKenzie K, Lurie, S. KTE for Diversity in Mental Health. Alberta Heritage Foundation for Medical Research, awarded October, 2009, funding of \$10,000 for one year.
- **Leung B (PI)**, Seely D, Cooley K. Naturopathic Clinical Outcomes Study. Lotte & John Hecht Memorial Foundation, awarded December, 2008, funding of \$255,000 for two years.
- **Leung B (PI)**, Damonte J. A pilot study on the efficacy of the Bowen Technique for the management of sciatica. IN-CAM Pilot Research Funding Competition, awarded October, 2008, funding of \$5,000 for one year.
- **Leung B (PI)**, Kaplan B, Field C, Tough S, Eliasziw M. Nutrient Intake and Status during Pregnancy as Predictors of Maternal Mental Health. Danone Institute of Canada, awarded May, 2008, funding of \$75,000 for two years.

Personal Support (last 10 years)

- University of Lethbridge Travel Grant, 2014
- Alberta Centre for Community, Family, and Child Research, 2011, 2012
- CIHR Training Program in Genetics, Child Development and Health 2010
- Alberta Heritage Foundation for Medical Research, 2007, 2008, 2009
- Graduate Research Scholarship (GRS), January and November, 2006
- CIHR / NHPD IN-CAM Studentship Award, September, 2005
- Hospital for Sick Children Foundation studentship grant, May, 2005
- Alberta Graduate Student Scholarship from Alberta Learning, April, 2005
- University of Calgary Open Scholarship, January, 2005

Other Awards

- New Investigator Forum (NIF) by CIHR Institute of Infection and Immunity, Le Manoir du Lac Delage near Quebec City, May 29 to 31, 2015.
- Bursary to attend the 2012 Summer Program in Data Analysis (SPIDA) at the Institute for Social Research, York University (<http://www.isr.yorku.ca/spida2012/index.html>), May 24 to June 1, 2012.
- RTNA Sponsorship to attend the 2011 RTNA KT Conference: Reimaging Health Through KT, Edmonton, AB October 12 – 14, 2011.
- Bursary to attend the Epigenomics of Common Diseases, Wellcome Trust, Cambridge, UK, September 13-16, 2011.
- CIHR award to attend the CIHR Cross-disciplinary symposia on “Epigenetics and Neuroscience and Mental Health”, University of Manitoba, Winnipeg, MB, June 9, 2011.
- Award to attend the Public Health Intervention Research Network Summer Institute 2010, "Strengthening a community of practice in PHIR", held in collaboration with the National Collaborating Center for Public Health, Winnipeg, MB, June 27 – 30, 2010.
- Placement award to attend the KT Canada Summer Institute, CIHR and Canadian Foundation for Innovation, Toronto, ON, August 18 - 20, 2009

PUBLICATIONS & PRESENTATIONS

Peer reviewed articles (last 6 years)

- Yan Zhang, Matthew J Leach, Felicity Bishop, **Brenda Leung**. *A comparison of the characteristics of acupuncture-preferred consumers and non-acupuncture preferred consumers: a secondary analysis of NHIS 2012 data*. Journal of Alternative and Complementary Medicine. Feb. 2016

- **Brenda M.Y. Leung**, Gerald F. Giesbrecht, Nicole Letourneau, Catherine J. Field, Rhonda C. Bell, Deborah Dewey and the APrON Study Team. *Perinatal nutrition in maternal mental health and child development: birth of a pregnancy cohort*. Early Human Development. November, 2015. DOI: 10.1016/j.earlhumdev.2015.11.007
- Stefan Grzybowski, John Fahey, Barbara Lai, Sharon Zhang, Nancy Aelicks, **Brenda M Leung**, Kathrin Stoll, Rebecca Attenborough. *The safety of Canadian rural maternity services: a multi-jurisdictional cohort analysis*. BMC Health Services Research. 2015, 15:410. doi:10.1186/s12913-015-1034-6
- **Leung BMY**, McDonald S, Giesbrecht G, Kaplan BJ, Tough, S. Comparison of sample characteristics in two pregnancy cohorts and their community-based versus population-based recruitment methods. *BMC Medical Research & Methods*. Dec, 2013, 13:149.
- Kaplan BJ, **Leung BM**, Giesbrecht GF, Field CJ, Bernier FP, Tough S, Cui X, Dewey D, and the APrON Study Team. Increasing the quality of life from womb to grave: The importance of pregnancy and birth cohorts. *Appl Physiol Nutr Metab*, January 2013, 38(1):85-89. DOI:10.1139/apnm-2012-0080.
- **Leung MY Brenda**, Kaplan J Bonnie, Field J Catherine, Tough Suzanne, Eliasziw Misha, Gomez Fajer Mariel, McCargar J Linda, Gagnon Lisa, and the APrON Study Team. Prenatal micronutrient supplementation and postpartum depressive symptoms in a pregnancy cohort. *BMC Pregnancy and Childbirth*. 2013, 13:2. DOI: 10.1186/1471-2393-13-2.
- Farzaneh Osati, **Brenda MY Leung**, Chris Hergesheimer, Patricia Wolfe, Sarah Beasleigh, Karrin Fairman-Young. A Cross-sectional study of Patient Satisfaction and Patient Retention in a Canadian naturopathic teaching clinic. *International Journal of Naturopathic Medicine*. Mar, 2013, 6(1).
- **Leung BMY**, Flower G, Cooley K, Habib C, Gowan M, Podgrabinski S, Seely D. Assessing the utility of an electronic research database to capture whole systems practice at two naturopathic outpatient teaching clinics. *Journal of Evidence Based Complementary & Alternative Medicine*. Published online 26 December 2012. DOI: 10.1177/2156587212470139.
- Kaplan BJ, Geisbrecht GF, **Leung BMY**, Field CJ, Dewey D, Bell RC, Manca DP, O'Beirne M, Johnston DW, Pop VJ, Singhal N, Gagnon L, Bernier FP, Eliasziw M, McCargar LJ, Kooistra L, Farmer A, Cantell M, Goonewardene L, Casey LM, Letourneau N, Martin JW. (July 17 2012). The Alberta Pregnancy Outcomes and Nutrition (APrON) cohort study: Rationale and Methods. *Maternal and Child Nutrition*, doi: 10.1111/j.1740-8709.2012.00433.x. [Epub ahead of print]
- Kaplan B, Leung B. Multi-micronutrient supplementation for the treatment of psychiatric symptoms. *Integrative Medicine: A Clinician's Journal*, 10(3), Jun-Jul 2011.
- **Leung BMY**, Wiens KP, Kaplan BJ. Does prenatal micronutrient supplementation improve children's mental development? A systematic review. *BMC Pregnancy and Childbirth* 2011, 11:12 (3 February, 2011)
- **Leung BM**, Catallo C, Riediger ND, Cahill NE, Kastner M. What DO we know about developing an end-of-grant KT plan? The trainees' perspective. Meeting report. *Implementation Science*. Implementation Science 2010, 5:78.
- Mehl-Madrona L, **Leung BM**, Kennedy C, Paul S, Kaplan B. Micronutrients versus standard medication management in autism: A naturalistic case-control study. *Journal of Child and Adolescent Psychopharmacology*. 2010. 20(2): 95-103.
- **Leung BM**, Kaplan, B. Perinatal Depression: prevalence, risks and nutrition – a review of the literature; *Journal of the American Dietetics Association*, 2009. 109: 1566-1575. *Highly cited*
- **Leung B**, Seeley, D. Guidelines to case report writing for naturopathic doctors. *International Journal of Naturopathic Medicine*. June, 2009. 4(1): 50-54.

Under review

- **Brenda M. Leung**, Tara Anderson, Donna Manca, Maeve O'Beirne, Nalini Singhal. *Maternal factors associated with caesarean sections and NICU admissions in a pregnancy cohort*. *Maternal and Child Health Journal*
- **Leung BM**, Letourneau N, Giesbrecht G, and the APrON Team. *Prevalence of concurrent postpartum depression in mothers and fathers from the APrON pregnancy cohort*. *Community Mental Health Journal*

- Amie Steel, Holger Cramer, **Brenda Leung**, Romy Lauche, Jon Adams, Jost Langhorst, Gustav Dobos: *Characteristics of homeopathy users among internal medicine patients in Germany*. 'Forschende Komplementärmedizin / Research in Complementary Medicine.
- Amie Steel, PhD; **Brenda Leung, PhD**; Matthew Leach, PhD; Jonathan Adams, PhD. *Developing the implementation science of complementary and alternative medicine practice: opportunities and challenges for an emerging field*. BMC Complementary and Alternative Medicine

Other publications

- **Leung B**, Kaplan B, Dewey D, Field C, O’Bierne M, Farmer A, Johnston D. Moving knowledge from the lab to the people – the APRON experience in KT. *Interdisciplinary Teams – Making Research Make a Difference*. Alberta Innovates – Health Solutions KT Casebook, Volume 2, 2011.
- **Leung B**, Adair C, McKenzie K, Lurie S. Advancing KT for Diverse Populations and Mental Health. *Bridging the Gap, Knowledge Translation in Alberta*. Alberta Innovates – Health Solutions KT Casebook, Volume 1, 2010.

Presentations (last 3 years)

- **Brenda Leung**. “Potential buffering effect of selenium for postpartum depression”. Oral presentation: Canadian Association of Naturopathic Doctors – Health Fusion 2015, Calgary, AB, June 27, 2015.
- **Brenda Leung**, Sunita Vohra. Developing a pan-Alberta plan for patient-oriented research in integrative therapies and chronic diseases. Oral presentation. Campus Alberta – Health Outcomes and Public Health. Edmonton, AB, May, 13, 2015.
- **Brenda Leung**, Gillian Flower, Kieran Cooley, Matt Gowan, Dugald Seely. “Assessing the Utility of an Electronic Patient Database to Capture Whole Systems Practice at Two Naturopathic Outpatient Teaching Clinics”. Oral Presentation. 2014 IN-CAM Research Symposium. Calgary, AB, Nov 6 – 8, 2014.
- **Brenda Leung**, Nicole Letourneau. “APrON Pregnancy Cohort: Following the trajectory of foetal and child development”. Invited speaker, Department of Cancer Epidemiology and Prevention Research, CancerControl, Alberta Health Services. Calgary, AB, June 11, 2014.
- Lisa Gagnon, **Brenda MY Leung**, Bonnie J Kaplan, and the APRON Study Team. “A Broader Look at Perinatal Mental Health: Screening DSM IV Axis I Disorders in Pregnant and Postpartum Period”. Poster presentation at the Women’s Mental Health Day Conference. Calgary, AB, May 10, 2013.
- **Brenda MY Leung**, Bonnie J Kaplan, Catherine Field, Suzanne Tough, Misha Eliasziw, Mariel Fajer Gomez, Linda McCargar, Lisa Gagnon, and the APRON Study Team. “Prenatal micronutrient supplementation and postpartum depressive symptoms in a pregnancy cohort”. Poster presentation at the Women’s Mental Health Day Conference. Calgary, AB, May 10, 2013.
- **Brenda MY Leung**. Alberta Pregnancy Outcomes and Nutrition (APrON) study. Oral presentation at the 5th World Congress on Women’s Mental Health. Lima, Peru, March 4 – 7, 2013.
- **Brenda MY Leung**, Bonnie J Kaplan, Catherine Field, Suzanne Tough, Misha Eliasziw, Mariel Fajer Gomez, Linda McCargar, Lisa Gagnon, and the APRON Study Team. “Prenatal micronutrient supplementation and postpartum depressive symptoms in a pregnancy cohort”. Poster presentation at the 5th World Congress on Women’s Mental Health. Lima, Peru, March 4 – 7, 2013.
- **Leung BMY**, Kaplan BJ, Field CJ, Eliasziw M, Tough S, Fajer-Gomez M, McCargar L, Gagnon L, and the APRON Team. "Social and nutritional predictors of postpartum depression" Poster presentation at the CIHR - Institute of Nutrition, Metabolism and Diabetes Meeting, Calgary, AB, May 14, 2012
- **Leung BMY**, Kaplan BJ, Field CJ, Eliasziw M, Tough S, Fajer-Gomez M, McCargar L, Gagnon L, and the APRON Team. "Social and nutritional predictors of postpartum depression". Poster presentation at the Behaviour and the Developing Brain Research Theme Group 2nd Annual Research Symposium on Brain, Development and Neurodevelopmental Disorders, Calgary, AB, May 10, 2012.
- **Leung BMY**, Kaplan BJ, Field CJ, Eliasziw M, Tough S, Fajer-Gomez M, McCargar L, Gagnon L, and the APRON Team. "Social and nutritional predictors of postpartum depression". Poster presentation at the 2012 ACHRI Research Symposium, Theme: Epigenetics, Calgary, AB, April 11, 2012.

- **Leung, B.** “Moving Knowledge from the Lab to the People – The APrON Experience in KT”. Abstract presentation at the 2011 RTNA KT Conference: Reimaging Health Through KT, Edmonton, AB October 12 – 14, 2011
- Giesbrecht, G., Dewey, D., **Leung, B.**, Kaplan, B. J., Campbell, T. S., Letourneau, N. & the APrON Study Team. “Fetal Programming of Infant State Regulation”. Poster presented at the DOHaD conference, Portland, OR, Sept 17 - 19, 2011.
- BJ Kaplan, **B Leung**, G Giesbrecht and the APrON Study Team. “The importance of longitudinal cohorts for the investigation of epigenetic effects”. Epigenomics of Common Diseases conference, Wellcome Trust, Cambridge, UK, Sept 13 – 16, 2011.
- BJ Kaplan, **B Leung**, G Giesbrecht and the APrON Study Team. “The importance of longitudinal cohorts for the investigation of epigenetic effects”. CIHR Research Poster Presentation, the Canadian Student Health Research Forum, Winnipeg, June 8, 2011.
- Giesbrecht, G., Dewey, D., **Leung, B.**, Kaplan, B. J., Campbell, T. S., Letourneau, N. & the APrON Study Team. “Fetal Programming of Infant State Regulation”. Poster presented at the Alberta Children’s Hospital Research Institute for Child and Maternal Health: Behaviour and the Developing Brain Research Theme Group Symposium, Calgary, AB, May 19, 2011.
- BJ Kaplan, **B Leung**, G Giesbrecht and the APrON Study Team. “The importance of longitudinal cohorts for the investigation of epigenetic effects”. Poster at the Behaviour and the Developing Brain Research Theme Group, “Exploring the Source-Seeing the Potential” symposium, ACHRI, Calgary, AB. May 19, 2011.
- E Mcphail, D Johnston, BJ Kaplan, **B Leung**. “Correlations between Maternal Anxiety and Depression Symptoms and Perceived Social Support in the Prenatal and Postnatal Periods”. Poster at the ACHRI Symposium, Calgary, AB. Apr. 18 – 19, 2011.
- BJ Kaplan, **B Leung**, G Giesbrecht and the APrON Study Team. “The importance of longitudinal cohorts for the investigation of epigenetic effects”. Poster at Environmental Epigenomics and Disease Susceptibility, a Keystone Symposium on Molecular and Cellular Biology, March 27-April 1, 2011, Asheville, North Carolina
- E Mcphail, D Johnston, BJ Kaplan, **B Leung**. “Correlations between Maternal Anxiety and Depression Symptoms and Perceived Social Support in the Prenatal and Postnatal Periods”. Poster at the Western Prenatal Research Meeting, Banff, AB. Feb. 17-20, 2011.

MEMBERSHIP & AFFILIATIONS

- Integrative Health Institute (IHI), University of Alberta, 2015 – Present
- Institute of Public Health (IPH), University of Calgary, 2014 – present
- International Society for Nutrition in Psychiatry Research (ISNPR), 2012 – present
- Alberta Children’s Hospital Research Institute (ACHRI), 2010 – present
- Health Research Transfer Network of Alberta (RTNA), 2010 – present; Planning committee member for the 2012 KT Conference
- Naturopathic Physicians Research Network (NPRN), 2010 – present; Steering committee member
- Knowledge Translation (KT) Canada, 2009 – present
- Canadian Interdisciplinary network for CAM research (IN-CAM), 2003 – present
- Canadian Pediatrics and CAM network (PedCAM), 2004 – present

STUDENT SUPERVISION

- Gavin McAtee, MEd, supervisor, Thesis: Exploration of Orhtorexia Nervosa in Bodybuilders and Recreational Fitness Participants, January, 2016 to present
- Joel Mader, MSc, Counselling, Thesis: *Are the Pathways Model Typologies Predictive of Performance on Decision-Making Tasks?* July, 2015 to present
- Katelyn Ryan, Independent study, University of Lethbridge, Spring semester (Jan – Apr), 2015
- Emma Lynch, BHSc, Health Sciences, University of Calgary Sept, 2014 to April, 2015

External Examiner

- Jane Elizabeth Frawley, PhD thesis: *Women's use of complementary and alternative medicine products and services during pregnancy: insights for safe, informed maternal care*. Graduate Research School, University of Technology, Sydney, Australia, March, 2015

SERVICE/COMMITTEES

University of Lethbridge

- Search committee for AVP-Research, September – December, 2015
- Search committee for Therapeutic Recreations Program, January, 2015 -- 2016
- ULFA Rep for the GFC Dean of Health Sciences Appointment Committee, Spring 2015
- Search committee for AIHS Translational Chair in Rural Health, Fall, 2014
- FoHS representative on Faculty of Arts & Science Council, 2014 – 2015
- Provincial Advisory Committee of the Alberta SPOR SUPPORT Unit, Career Development in Methods and Health Services Research Platform, 2015 – present
- Steering committee for Canada-India Maternal-Child Health Collaboration, 2015 – present

Outreach (Invited presentations)

- President Mahon's invitation to speak at the Annual Paul Lewis Retirees Luncheon: "Complementary and Alternative Medicine – Shifting the Healthcare Paradigm", May 6, 2015
- Invited speaker at the Wellness Centre's Lunch and Learn series: "Food, diet fads and nutrition myths", June 3, 2015.
- Alberta Family Centre AGM presentation, September 24, 2015

Peer Reviewer (last 5 years)

- Journal: BJOG. "The effect of fish-oil supplementation on antenatal and postpartum depression: a randomized controlled trial". July, 2015.
- Journal: *Environment Research*. Prenatal Polycyclic Aromatic Hydrocarbon (PAH) Exposure, Antioxidant Levels and Behavioral Development of Children Ages 6-9. September, 2014
- Journal: *Journal of Psychiatric Research*. Article: Relationships of maternal folate and vitamin B12 status during pregnancy with perinatal depression: the GUSTO study. March, 2014
- Journal: *BioScience Trends*. Article: Depressive symptoms and omega-3 polyunsaturated fatty acids in pregnant Japanese women. December, 2013.
- Journal: *BJOG: An International Journal of Obstetrics and Gynaecology*. Article: Intake of dairy products and calcium and prevalence of depressive symptoms during pregnancy in Japan. November, 2013
- Journal: *Public Health Nutrition*. Article: Dietary patterns during early pregnancy and pregnancy-related anxiety: data from the China-Anhui Birth Cohort Study (C-ABCS). June, 2012
- Journal: *Dietary Lipids - Sources, Function and Metabolism*. Review article: Benefits of DHA, folic acid, Vitamin D and iodine on foetal and infant brain development and function following maternal supplementation during pregnancy and lactation. June, 2012
- Journal: *Journal of Affective Disorder*, Article: Nutrient intakes and the common mental disorders in women, December, 2011
- Journal: *Nutrition Research Review*. Article: Nutrition and the Psychoneuroimmunology of Postpartum Depression, August, 2011
- Journal: *Psychiatry Research*. Article: Vitamin B6, B9, and B12 intake and major depression, April, 2011
- Journal: *The Journal of Child Psychology and Psychiatry*. Article: Intake of selected food items and fatty acids and behavioral problems in children. Results from the GINI-plus and LISA-plus Studies, March, 2011.