AMY A. KIRKHAM, PHD

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POSITIONS

Assistant Professor, Clinical Cardiovascular Health, 2020-present

Faculty of Kinesiology and Physical Education

University of Toronto, Toronto, ON

Postdoctoral Research Fellow, MR Imaging for Quantification of Health, 2016-2020

Department of Biomedical Engineering, Faculty of Medicine & Dentistry,

University of Alberta, Edmonton, AB

Supervisor: Richard Thompson, PhD; Co-supervisor: D Ian Paterson, MD

Awards (\$772,000 CAD total):

- 1. Canadian Institutes of Health Research Banting Fellowship (2019-2021): \$140,000
- 2. Best Clinical Research Poster, Cardiac Sciences Research Day, University of Alberta (2019)
- 3. Institute of Cancer Research (CIHR) Travel Award (2019): \$1,500
- 4. Susan G. Komen Postdoctoral Fellow Grant (2017-2020): \$180,000 USD (\$242,00 CAD)
- 5. Semi-Finalist, Susan G. Komen Breast Cancer Challenge (early career researchers) (2017)
- 6. Canadian Institutes of Health Research Fellowship (2016-2019): \$165,000
- 7. Alberta Innovates Health Solutions Clinician Fellowship (2016-2019): \$225,000

EDUCATION

PhD, Cardiovascular & Exercise Oncology, Sep 2010-Feb 2016 (medical LOA 09/11-08/12)

Rehabilitation Sciences, Department of Physical Therapy, Faculty of Medicine

University of British Columbia, Vancouver, BC

Thesis title: Exercise cardio-protection from chemotherapy for breast cancer

Supervisor: Kristin Campbell, BSc PT, PhD

Awards (\$143,200 CAD total):

- 8. Mary Adele Norman Postgraduate Award in Medical Research (2016): \$2800
- 9. Canadian Institutes of Health Research Canada Graduate Scholarships Doctoral Award (2010-2011, 2012-2014): \$105,000
- 10. UBC Four Year Doctoral Fellowship (2010-2011, 2012-2015): \$20,000
- 11. Canadian Institutes of Health Research Canada Graduate Scholarships Michael Smith Foreign Study Supplement (2014): \$6,000
- 12. UBC Urban Poling Activator Award (2014): \$2,000
- 13. American College of Sports Medicine Foundation Doctoral Student Research Grant (2013): \$5,000 USD (first recipient from outside the US)
- 14. American College of Sports Medicine Annual Meeting Cancer Interest Group Karen Hornbostel Memorial Trainee Award (2013): \$250 USD
- 15. Canadian Cancer Society Travel Award (2013): \$1100

Masters of Science, Clinical Exercise Prescription & Physiology, Sep 2008- Oct 2010

School of Human Kinetics, University of British Columbia, Vancouver, BC

Thesis title: Comparison of aerobic exercise intensity prescription methods in breast cancer patients and survivors

Supervisor: Don McKenzie, MD, PhD

MSc Awards (\$58,183 CAD total):

- 16. UBC Faculty of Education Graduate Student Research Grant (2010): \$883
- 17. Canadian Institutes of Health Research Master's Award (2009): \$17,500
- 18. Michael Smith Foundation for Health Research Junior Graduate Studentship (2009): \$22,500
- 19. UBC University Graduate Fellowship (2009, declined): \$16,000
- 20. UBC Faculty of Education Award (2008): \$1300

Bachelor of Science Cum Laude – Kinesiology, 2003-2008

Certificate - Athletic Therapy, 2004-2007

School of Kinesiology and Health Science, Faculty of Health, York University, Toronto, ON **Awards** (\$23,500 CAD total):

- 21. York Kinesiology and Health Science Honour Award (2007): \$500
- 22. York Dean's Honour Roll (2003/04, 2004/05, 2006/07, 2007/08)
- 23. York Kinesiology Robert Munroe Menzies Award (2006): \$500
- 24. Canadian Interuniversity Sports Academic All-Canadian (2005/06, 2007/08)
- 25. York University Sport and Academic Excellence Award (2004-2008): \$10,500 total
- 26. Koch Industries Inc. Achievement Award (2003-2006): \$6,000 total
- 27. York University Entrance Scholarship (2003): \$2,000
- 28. York University Faculty of Pure & Applied Science Scholarship (2003): \$4,000

OPERATING GRANTS

- 1. Canadian Cancer Society & Canadian Institutes of Health Research Innovation Grant (National). "Maximizing metastatic breast cancer patient outcomes using diet and exercise." \$200,000. 2018-2021; Role: Additional author. PI: Carla Prado. Co-PI: Richard Thompson. Co-investigators: Ian Paterson, John Mackey, Kerry Courneya, Edith Pituskin. Status: Active.
 - o While my official title is 'additional author' due my non-Faculty status, I conceived of and wrote this application and am leading this study.
- 2. Susan G. Komen (International) Postdoctoral Research Fellowship Grant (direct operating costs). "Short-term lifestyle interventions for cardio-protection from anthracyclines." \$180,000 USD (\$242,000 CAD); 2017-2020. Role: PI. Co-investigators: Richard Thompson, Ian Paterson, John Mackey, Carla Prado, Edith Pituskin, Kerry Courneya. Status: Active.
- 3. Anita Cochrane Memorial Endowment Fund Award, British Columbia Cancer Foundation (Provincial). "The effects of exercise before doxorubicin infusion on cardiac function in breast cancer patients" (PhD thesis); \$6,840; 2014. Role: Co-I. PI: Karen Gelmon. Co-Investigators: Kristin Campbell, Don McKenzie, Sean Virani. Status: completed.
- 4. American College of Sports Medicine Foundation (International) Doctoral Student Research Grant. "Cardio-protective effects of exercise during chemotherapy" (PhD thesis); \$5,000; 2013. Role: PI. Co-Investigators: Kristin Campbell, Don McKenzie, Sean Virani. Status: completed.
- 5. UBC (Institutional) Faculty of Education Graduate Student Research Grant. "Comparison of aerobic exercise intensity prescription methods among breast cancer patients during and after chemotherapy" (MSc thesis); \$883; 2010. Role: PI. Co-I: Don McKenzie. Status: completed.

Note: Trainees for whom I played a substantial supervision/mentorship role are underlined

Peer-reviewed manuscripts

Accepted

- 1. Norris C, Yip C, Nerenberg K, Clavel MA, Pacheco C, Foulds H, Hardy M, Gonsalves C, Jaffer S, Parry M, Colella TJF, Dhukai A, Grewal J, Price J, Levinsson A, Hart D, Harvey P, Van Spall H, Sarfi H, Sedlak T, Ahmed S, Baer C, Coutinho T, Edwards J, Green C, **Kirkham AA**, Srivaratharajah K, Dumanski S, Keeping-Burke L, Lappa N, Reid R, Robert H, Smith G, Martin-Rhee M, Mulvagh S. State of the science in women's cardiovascular disease: a Canadian perspective on the influence of sex and gender. Journal of the American Heart Association. 2020;9(4): e015634. Impact factor: 4.7.
- 2. **Kirkham AA**, <u>Beka V</u>, Prado CM. The effect of caloric restriction on blood pressure and cardiovascular function: A systematic review and meta-analysis of randomized controlled trials. Clinical Nutrition. Accepted, June 26, 2020. Impact factor: 6.4.
- 3. **Kirkham AA**, Paterson DI, Haykowsky MJ, Beaudry R, Mackey JR, Pituskin E, Grenier JG, Thompson RB. Aerobic fitness is related to myocardial fibrosis post-anthracycline therapy. Medicine & Science in Sports & Exercise. Accepted July 13, 2020. Impact factor: 4.5.
- 4. **Kirkham AA,** Virani SA, <u>Bland KA</u>, McKenzie DC, Gelmon KA, Warburton DER, Campbell KL. Exercise training affects hemodynamics not cardiac function during chemotherapy. Breast Cancer Research and Treatment. Impact factor: 3.4.
- 5. **Kirkham AA**, Gelmon KA, Van Patten CL, <u>Bland KA</u>, <u>Wollmann H</u>, McKenzie DC, <u>Landry T</u>, Campbell KL. Impact of exercise on chemotherapy tolerance and survival in early stage breast cancer: A Nonrandomized Controlled Trial. Journal of the National Comprehensive Cancer Network; in press. Impact factor: 7.5.
- 6. Balneaves LG, Truant T, Van Patten CL, **Kirkham AA**, Waters E, Campbell KL. Physician referrals to a lifestyle intervention program for breast cancer patients: The experiences of patients and oncologists. Journal of Clinical Medicine; Accepted Aug 27, 2020. Impact factor: 3.3.
- 7. **Kirkham AA**, Pituskin E, Neil-Sztramko SE. Age-dependent increased odds of cardiovascular risk factors in cancer survivors: Canadian Longitudinal Study on Aging cohort. Current Oncology;27(4):e368-76. Impact factor: 2.0.
- 8. Larhart IM, Weller SK, **Kirkham AA**. Rising to the challenge: Designing, implementing, and reporting exercise oncology trials in understudied populations [Invited Editorial]. British Journal of Cancer 2020;123:173-175. Impact factor: 5.4.
- 9. Beaudry RI, **Kirkham AA (co-first author)**, Thompson RB, Grenier JG, Mackey JR, Haykowsky MJ. Impaired exercise tolerance in anthracycline-treated breast cancer survivors: The role of skeletal muscle bioenergetics, oxygenation, and composition. The Oncologist 2020;25(5):e852-e860. Impact factor: 5.3.
- 10. **Kirkham AA.** Supervised, multi-modal exercise: the chemotherapy supportive therapy that almost does it all. The Oncologist [Invited Commentary]. 2020;25(1):3-5. Impact factor: 5.3.
- 11. **Kirkham AA**, <u>Bland KA</u>, Zucker DS, Bovard J, Shenkier T, McKenzie DC, Davis MK, Gelmon KA, Campbell KL. 'Chemotherapy-periodized' exercise to accommodate for cyclical variation in fatigue. Medicine & Science in Sports & Exercise 2020;52(2):278-286. Impact factor: 4.5.
- 12. Pituskin E, **Kirkham AA**, Cox-Kennett N, Dimitry R, Dimitry J, Paterson DI, Gyenes G. Rehabilitation needs in anti-cancer treatment-related cardiotoxicity [Invited Review]. Seminars in Oncology Nursing 2020;36(1):doi.org/10.1016/j.soncn.2020.150986 Impact factor: 1.4.

- 13. <u>Bland KA</u>, **Kirkham AA**, Bovard J, Shenkier T, Zucker D, McKenzie DC, Davis MK, Gelmon KA, Campbell KL. Effect of exercise on taxane chemotherapy-induced peripheral neuropathy in women with breast cancer: A randomized control trial. Clinical Breast Cancer. 2019;19(6):411-422. Impact factor: 2.8.
- 14. **Kirkham AA**, Beaudry RI, Paterson DI, Mackey JR, Haykowsky MJ. Curing breast cancer and killing the heart: A novel model to explain elevated cardiovascular disease and mortality risk among women with early stage breast cancer [Invited Review]. Progress in Cardiovascular Diseases 2019;62(2):116-26. Impact factor: 6.2.
- 15. **Kirkham AA**, <u>Bland KA</u>, <u>Wollmann H</u>, Bonsignore A, McKenzie DC, Gelmon KA, Van Patten CL, Campbell KL. Maintenance of fitness and quality of life benefits from supervised exercise offered as supportive care for breast cancer. Journal of the National Comprehensive Cancer Network 2019;17(6)1-8. Impact factor: 7.6.
- 16. **Kirkham AA**, <u>Lloyd MG</u>, Claydon VE, Gelmon KA, McKenzie DC, Campbell KL. A longitudinal study of the association of clinical indices of cardiovascular autonomic function with breast cancer treatment and exercise training. The Oncologist 2019;24(2):273-84. Impact factor: 5.3.
- 17. Yang E, **Kirkham AA**, Thompson RB. Measurement and correction of the bulk magnetic susceptibly effects of fat: application in venous oxygen saturation imaging. Magnetic Resonance in Medicine 2019;81(5):3124-37. Impact factor: 4.1.
- 18. **Kirkham AA**, Pituskin E, Paterson DI. Does cancer affect cardiac function prior to cancer therapy exposure? [Invited Commentary]. Canadian Journal of Cardiology 2018; 34(3):234-5. Impact factor: 5.6.
- 19. **Kirkham AA**, Paterson DI, Prado CM, Mackey JR, Courneya KS, Pituskin E, Thompson RB. Rationale and Design of the <u>Caloric Restriction and Exercise protection from Anthracycline Toxic Effects (CREATE) Study: A 3-arm Parallel Group Phase II Randomized Controlled Trial in Early Breast Cancer. BMC Cancer 2018;18:864. Impact factor: 3.4.</u>
- 20. **Kirkham AA**, Eves ND, Shave RE, <u>Bland KA</u>, <u>Bovard J</u>, Gelmon KA, Virani SA, McKenzie DC, Stöhr EJ, Warburton DER, Campbell KL. The effect of an aerobic exercise session 24 h prior to each doxorubicin treatment for breast cancer on markers of cardiotoxicity and treatment symptoms: a RCT. Breast Cancer Research and Treatment 2018;167(3):719-29. Impact factor: 3.5.
- 21. **Kirkham AA,** Van Patten C, Gelmon KA, McKenzie DC, Bonsignore A, <u>Bland KA</u>, Campbell KL. Effectiveness of oncologist-referred exercise and healthy eating programming as a part of supportive adjuvant care for early breast cancer. The Oncologist 2018; 23:105-115. Impact factor: 5.3.
- 22. **Kirkham AA**, Bonsignore A, <u>Bland KA</u>, McKenzie DC, Gelmon KA, Van Patten C, Campbell KL. Exercise prescription and adherence for breast cancer: One size does not FITT all. Medicine & Science in Sports & Exercise 2018;50(2):177-86. Impact factor: 4.5.
- 23. <u>Bland KA</u>, Neil-Sztramko SE, **Kirkham AA**, Bonsignore A, Van Patten CL, McKenzie DC, Gelmon KA, Campbell KL. Predictors of attendance to an oncologist-referred exercise program for women with breast cancer. Supportive Care in Cancer 2018;26(9):3297-3306. Impact factor: 2.8.
- 24. Campbell KL, Kam JWY, Neil-Sztramko SE, Liu Ambrose T, Handy TC, Lim H, Hayden S, Hsu L, **Kirkham AA**, Gotay CC, McKenzie DC, Boyd LA. Effect of aerobic exercise on cancer-associated cognitive impairment: A proof-of-concept RCT. Psycho-Oncology 2018;27(1):53-60. Impact factor: 3.4.

- 25. **Kirkham AA,** Shave RE, <u>Bland KA, Bovard JM,</u> Eves ND, Gelmon KA, McKenzie DC, Virani SA, Stöhr EJ, Warburton DER, Campbell KL. Protective effects of acute exercise prior to doxorubicin on cardiac function of breast cancer patients: A proof-of-concept RCT. International Journal of Cardiology 2017; 245:263-70. Impact factor: 3.5.
- 26. **Kirkham AA**, Klika RJ, Ballard TM, Downey P, Campbell KL. Effective translation of research to practice: Hospital-based rehabilitation program improves health-related physical fitness and quality of life of cancer survivors. Journal of the National Comprehensive Cancer Network 2016;14(12):1555-62. Impact factor: 7.6.
- 27. **Kirkham AA**, <u>Bland KA</u>, <u>Sayyari S</u>, Campbell KL, Davis MK. Clinically Relevant Physical Benefits of Exercise Interventions in Breast Cancer Survivors [invited review]. Current Oncology Reports 2016; 18(2):12. Impact factor: 3.9.
- 28. **Kirkham AA**, Neil-Sztramko SE, Morgan J, Hodson S, Weller SK, McRae T, Campbell KL. Fee-for-service cancer rehabilitation programs improve health-related quality of life. Current Oncology 2016; 23(4):233-40. Impact factor: 2.0.
- 29. **Kirkham AA**, Neil SE, Morgan J, Hodson S, Weller SK, McRae T, Campbell KL. Health-related physical fitness assessment in a community-based cancer rehabilitation setting. Supportive Care in Cancer 2015; 23(9):2525-33. Impact factor: 2.8.
- 30. **Kirkham AA**, Davis MK. Exercise prevention of cardiovascular disease in breast cancer survivors [review]. Journal of Oncology, special issue: "Cancer and Cardiovascular Disease: The Complex Labyrinth" 2015; Article ID 917606. Impact factor: 2.6.
- 31. **Kirkham AA**, Virani SA, Campbell KL. The utility of cardiac stress testing for detection of cardiovascular disease in breast cancer survivors: A systematic review [review]. International Journal of Women's Health 2015;7:127-140. Impact factor: 2.6.
- 32. **Kirkham AA**, <u>Pauhl KE</u>, <u>Elliot RM</u>, <u>Scott JA</u>, <u>Doria SC</u>, <u>Davidson HK</u>, Neil-Sztramko SE, Campbell KL, Camp PG. Utility of equations to estimate peak oxygen uptake and work rate from a six-minute walk test in patients with COPD in a clinical setting. Journal of Cardiopulmonary Rehabilitation and Prevention 2015; 35(6):431-8. Impact factor: 1.6.
- 33. Neil SE, **Kirkham AA**, <u>Hung SH, Niksirat N</u>, Nishikawa K, Campbell KL. Aerobic capacity and upper limb strength are reduced in women diagnosed with breast cancer: A systematic review. Journal of Physiotherapy 2014;60(4):189-200. Impact factor: 5.6.
- 34. Takacs J, **Kirkham AA**, <u>Brown J, Marriot E, Monkman D, Havey J, Hung S</u>, Campbell KL, Hunt MH. Lateral trunk lean gait modification increases the energy cost of treadmill walking in those with knee osteoarthritis. Osteoarthritis and Cartilage 2014;22(2):203-9. Impact factor: 4.9.
- 35. **Kirkham AA**, Campbell KL, McKenzie DC. Comparison of aerobic exercise intensity prescription methods in breast cancer. Medicine & Science in Sports & Exercise 2013;45(8):1443-50. Impact factor: 4.5.
- 36. Campbell KL, Van Patten CL, Neil SE, **Kirkham AA**, Gotay CC, Gelmon KA, McKenzie DC. Feasibility of a lifestyle intervention on body weight and serum biomarkers in breast cancer survivors with overweight and obesity. Journal of the Academy of Nutrition and Dietetics 2012;112(4): 559-67. Impact factor: 4.1.

Under Review

37. **Kirkham AA**, Pituskin E, Thompson RB, Mackey JR, Koshman S, Jassal D, Pitz M, Haykowsky MJ, Pagano JJ, Chow K, Tsui AK, Ezekowitz JA, Oudit GY, Paterson DI. Cardiac and Cardiometabolic Phenotyping of Trastuzumab-Mediated Cardiotoxicity: a

- Secondary Analysis of the MANTICORE trial. European Heart Journal, revised and resubmitted Sep 2020. Impact factor: 22.7.
- 38. **Kirkham AA**, Haykowsky MJ, Beaudry RI, Grenier JG, Mackey JR, Paterson DI, Pituskin E, Thompson RB. Cardiac and skeletal muscle impairments associated with cardiorespiratory fitness post anthracycline chemotherapy for breast cancer: A comprehensive MRI study. JAMA Oncology, under review. Impact factor: 24.8
- 39. **Kirkham AA**, <u>Goonasekera MV</u>, <u>Mattiello B</u>, Grenier JG, Thompson RB. Reliability and reproducibility of peak exercise cardiac MRI quantification of peak exercise function with long-axis views. PlosOne, under review. Impact factor: 2.7.

Book chapters

1. Campbell KL, **Kirkham AA**. Exercise During Infusion Therapy. In: Schmitz KH, ed. Exercise Oncology: Prescribing Physical Activity Before and After a Cancer Diagnosis. New York, NY: Springer; 2020.

Published conference abstracts

- 1. **Kirkham AA**, <u>Doroshuk M, Goonasekera M, Mattiello B</u>, Haykowsky MJ, Beaudry RI, Mackey JR, Paterson DI, Pituskin E, Grenier JG, Thompson RB. Myocardial fibrosis impairs exercise capacity by limiting cardiac output among anthracycline-treated women with breast cancer. Med Sci Sports Exerc 2020; 52(7S Suppl 1):331. Conference presentation cancelled due to COVID-19.
- 2. **Kirkham AA**, <u>Doroshuk M</u>, <u>Goonasekera M</u>, <u>Mattiello B</u>, Grenier J, Thompson RB. Accelerated real-time free-breathing peak-exercise CMR with long axis views. International Society for Magnetic Resonance in Medicine (ISMRM) Proceedings. Conference presentation cancelled due to COVID-19.
- 3. <u>Mattiello BC</u>, Thompson RB, Prado CM, Paterson DI, Mackey JR, Courneya KS, Pituskin R, Grenier JG, **Kirkham AA**. Caloric Restriction and Exercise protection from Anthracycline Toxic Effects (CREATE) study: Preliminary effects on secondary cardiovascular outcomes. Appl Physiol Nutr Metab 2019; 44(10 (Suppl 2)). Oral presentation at Canadian Society of Exercise Physiology Annual General Meeting, Kelowna, BC, November 2019.
- 4. **Kirkham AA**, <u>Bland KA</u>, Gelmon KA, McKenzie DC. Exercise as supportive care has selective benefits for chemotherapy tolerance and weight gain. Med Sci Sports Exerc 2019; 51(5S Suppl 1). Poster presented at American College of Sports Medicine Annual General Meeting, Orlando, FL, June 2019.
- 5. <u>Bland KA</u>, **Kirkham AA**, Bovard J, McKenzie DC, Davis MK, Shenkier T, Gelmon KA, Zucker D, Campbell KL. Effect of exercise during versus after chemotherapy for breast cancer on fatigue and quality of life. Med Sci Sports Exerc 2019; 51(5S Suppl 1). Poster presented at American College of Sports Medicine Annual General Meeting, Orlando, FL, June 2019.
- 6. Zadravec K, <u>Bland KA</u>, **Kirkham AA**, Bovard J, McKenzie DC, Davis MK, Shenkier T, Gelmon KA, Zucker D, Campbell KL. Participant adherence during versus post-chemotherapy in the Exercise Influence on Taxane side effects study: A RCT. Med Sci Sports Exerc 2019; 51(5S Suppl 1). Poster presented at American College of Sports Medicine Annual General Meeting, Orlando, FL, June 2019.
- 7. Van Patten C, **Kirkham A**, <u>Bland K</u>, Bonsignore A, McKenzie D, Gelmon K, Campbell K. Weight trends among women engaging in exercise and nutritional counselling as supportive care during adjuvant breast cancer treatment. Support Care Cancer 2019; 27(2 Suppl). Poster

- presented at Multinational Association of Supportive Care in Cancer Annual Meeting, San Francisco, CA, June 2019.
- 8. **Kirkham AA**, Paterson DI, Pituksin E, Grenier J, Yang E, Thompson RB. Skeletal muscle blood flow, oxygen extraction and consumption in women receiving chemotherapy for breast cancer. Med Sci Sports Exerc 2018; 50(5S Suppl 1). Poster presented at American College of Sports Medicine Annual General Meeting, Minneapolis, MN, June 2018.
- Bland KA, Kirkham AA, Bovard J, Shenkier T, Zucker D, Davis MK, McKenzie DC, Gelmon KA, Campbell KL. Exercise influence on chemotherapy-induced peripheral neuropathy symptoms in women with breast cancer: A proof-of-concept RCT. Med Sci Sports Exerc 2018; 50(5S Suppl 1):384. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Minneapolis, MN, June 2018.
- 10. <u>Bland KA</u>, Lloyd MG, Borrel D, Bovard J, **Kirkham AA**, Shenkier T, Davis MK, McKenzie DC, Claydon VE, Zucker D, Gelmon KA, Campbell KL. Exercise during taxane chemotherapy improves indices of cardiovascular autonomic function in women with breast cancer. Oral presentation at the Exercise Sport Science Australia Annual Meeting, Brisbane, Australia, March 28, 2018.
- 11. **Kirkham AA**, <u>Bland KA</u>, McKenzie DC, Eves ND, Campbell KL. "Showing up" to exercise program is most important factor in mitigating chemotherapy-related deterioration in VO₂peak in women with breast cancer. Appl Physiol Nutr Metab 2017; 42(10 (Suppl 2):S82. Poster presentation at Canadian Society of Exercise Physiology Annual General Meeting, Winnipeg, MB, October 2017.
- 12. <u>Bland KA</u>, **Kirkham AA**, Bovard J, <u>Lloyd M</u>, Shenkier T, Davis MK, Zucker D, Claydon VE, Gelmon KA, McKenzie DC, Campbell KL. "Chemotherapy-periodized" aerobic exercise for women with breast cancer: A novel exercise prescription to account for fluctuations in fatigue. Appl Physiol Nutr Metab 2017; 42(10 (Suppl 2):S61. Oral presentation at Canadian Society of Exercise Physiology Annual General Meeting, Winnipeg, MB, October 2017.
- 13. Yang EH, **Kirkham AA**, Thompson RB. Measurement and correction for the magnetic susceptibility effects of fat in venous oximetry: Application in the quantification of muscle oxygen consumption (VO₂) with plantar flexion exercise. International Society for Magnetic Resonance in Medicine (ISMRM) Proceedings. Poster presented at the ISMRM Annual Meeting, Honolulu, HI, May 2017.
- 14. **Kirkham AA**, Campbell KL, McKenzie DC. Breast cancer- and metabolic-related predictors of VO_{2peak} amongst active post-menopausal women. Med Sci Sports Exerc 2017; 49(5S Suppl 1):272. Poster presented at American College of Sports Medicine Annual General Meeting, Denver, CO, June 2017.
- 15. <u>Rowe S</u>, **Kirkham AA**, <u>Bland KA</u>, Van Patten CL, Bonsignore A, McKenzie DC, Gelmon KA, Campbell KL. Feasibility of supervised aerobic interval exercise training following treatment for breast cancer. Med Sci Sports Exerc 2017; 49(5S Suppl 1):271. Poster presented at American College of Sports Medicine Annual General Meeting, Denver, CO. June 2017.
- 16. <u>Bland KA</u>, **Kirkham AA**, Van Patten CL, <u>Wollmann H</u>, Bonsignore A, McKenzie DC, Gelmon KA, Campbell KL. Supervised exercise as supportive care for breast cancer patients: Improvements in physical fitness. Med Sci Sports Exerc 2017; 49(5S Suppl 1):334-335. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Denver, CO. June 2017.
- 17. Wollmann HM, Kirkham AA, Van Patten CL, Bland KA, Bonsignore A, McKenzie DC, Gelmon KA, Campbell KL. Does supervised exercise programming at diagnosis impact future physical activity levels in breast cancer survivors? Med Sci Sports Exerc 2017; 49(5S Suppl

- 1):896. Poster presented at American College of Sports Medicine Annual General Meeting, Denver, CO. June 2017.
- 18. **Kirkham AA**, Shave RE, Eves ND, McKenzie DC, Gelmon K, Warburton DER, Virani SA, Campbell KL. Moderate exercise training prevents doxorubicin-related deterioration of subclinical marker of cardiac dysfunction in breast cancer. Appl Physiol Nutr Metab 2016 41(9 Suppl 4):S367. Poster presented at Canadian Society of Exercise Physiology Annual General Meeting, Victoria, BC, October 14, 2016.
- 19. <u>Bland KA</u>, **Kirkham AA**, van Patten CL, Bonsignore A, McKenzie DC, Gelmon KA, Campbell KL. Changes in quality of life among women engaging in exercise programming as a part of supportive care during and post adjuvant breast cancer treatment. Appl Physiol Nutr Metab 2016 41(9 Suppl 4):S343. Poster presented at Canadian Society of Exercise Physiology Annual General Meeting, Victoria, BC, October 14, 2016.
- 20. Wollmann HM, Kirkham AA, van Patten CL, Bonsignore A, McKenzie DC, Gelmon KA, Campbell KL. Comparison of strength improvements during and post adjuvant breast cancer treatment. Appl Physiol Nutr Metab 2016 41(9 Suppl 4):S397. Poster presented at Canadian Society of Exercise Physiology Annual General Meeting, Victoria, BC, October 13, 2016.
- 21. Kirkham AA, Shave R, Stöhr E, Gelmon K, Eves ND, McKenzie DC, Warburton DER, Virani SA, Campbell KL. The effect of exercise 24 hours before chemotherapy on cardiac function and symptoms in breast cancer. Med Sci Sports Exerc 2016; 48(5S Suppl 1):831. Poster presented at American College of Sports Medicine Annual General Meeting, Boston, MA. June 3, 2016.
- 22. <u>Bland KA</u>, **Kirkham AA**, van Patten CL, Neil-Sztramko SE, Bonsignore A, Gelmon KA, McKenzie DC, Campbell KL. Patient-reported Barriers to Exercise and Predictors of Exercise Adherence During Adjuvant Chemotherapy for Breast Cancer. Med Sci Sports Exerc 2016; 48(5S Suppl 1):333. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Boston, MA. June 2, 2016.
- 23. <u>Rafn BS</u>, **Kirkham A**, Klika R, Downey P, Ballard T, Campbell KL. The effect of a clinical cancer rehabilitation program on arm function and quality of life in breast cancer survivors. Support Care Cancer 2015; 23(Suppl 1):300. Poster presented at International Annual Meeting on Supportive Care in Cancer, Copenhagen, Denmark, June 27, 2015.
- 24. Klika R, **Kirkham A**, Campbell K, Downey P, Ballard T. Evaluation of the Strides to StrengthTM cancer rehabilitation program. Med Sci Sports Exerc 2015; 47(5S):315-316. Poster presented at American College of Sports Medicine Annual General Meeting, San Diego, CA. May 28, 2015.
- 25. **Kirkham AA**, Morgan J, Hodson S, McRae T, Campbell KL. Assessment of a series of physical fitness tests in a community-based cancer rehabilitation setting. Med Sci Sports Exerc 2014;46(5 Suppl):127. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Orlando FL; May 28, 2014.
- 26. <u>Hung SH</u>, Neil SE, **Kirkham AA**, Niksirat N, Campbell, KL. Physical function in breast cancer survivors: A systematic review and comparison to healthy normative data. Med Sci Sports Exerc 2014;46(5 Suppl):382. Poster presented at American College of Sports Medicine World Congress on Exercise is Medicine, Orlando FL; May 29, 2014.
- 27. **Kirkham AA**, Morgan J, Hodson S, McRae T, Campbell KL. Urban cancer-specific community exercise programs: Who enrolls and what changes occur? Med Sci Sports Exerc 2014;46(5 Suppl):366. Poster presented at American College of Sports Medicine World Congress on Exercise is Medicine, Orlando FL; May 29, 2014.

- 28. Campbell KL, Kam J, Boyd LA, Handy TC, Lim H, Hayden S, Hsu L, Neil SE, **Kirkham AA**, Gotay CC, McKenzie DC, Liu-Ambrose T. Effect of exercise on cancer-associated cognitive dysfunction: A proof-of-concept randomized controlled trial. J Clin Oncol 32(15 Suppl):9583. Poster presented at the Annual Meeting of the American Society of Clinical Oncology, Chicago USA, May 30-June 3, 2014.
- 29. Tacaks J, **Kirkham AA**, Campbell KL, Hunt M. Lateral trunk lean gait modification increases the energy cost of walking in those with knee osteoarthritis. International Society for Gait and Posture Annual Meeting Proceedings. Poster presented at the International Society for Gait and Posture Annual Meeting, Vancouver, Canada, June 29, 2014.
- 30. **Kirkham, AA**, Virani SA, Campbell KL. The utility of exercise or pharmacological stress in identifying cardiac damage in breast cancer survivors. Med Sci Sports Exerc 2013;45(5 Suppl 1):215. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Indianapolis, IN; May 30, 2013.
- 31. Campbell KL, Kam JWY, Hayden S, Neil SE, **Kirkham AA**, Handy TC, Boyd LA, Lui-Ambrose TYL. Does cardiorespiratory fitness influence cognitive function in breast cancer survivors reporting cancer-related cognitive changes? Med Sci Sports Exerc 2013;45(5 Suppl 1):213. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Indianapolis, IN; May 30, 2013.
- 32. **Kirkham AA**, Campbell KL, McKenzie DC. Comparison of aerobic intensity prescription methods in breast cancer patients and survivors. Med Sci Sports Exerc 2011;43(5 Suppl):S7. Thematic poster presented at American College of Sports Medicine Annual General Meeting, Denver, CO; June 2011.
- 33. **Kirkham AA**, Neil SE, Campbell KL, McKenzie DC. An easy method for adjusting heart rate targets to account for training adaptations throughout exercise interventions with breast cancer survivors. Appl Physiol Nutr Metab 2010;35(S1). Poster presented at Canadian Society of Exercise Physiology Annual General Meeting, Toronto, ON; Nov. 2010.
- 34. Feehan L, Li LC, MacIntyre D, Harris S, **Kirkham A** and the Osteo-Fx Review Team. Exercise program elements deemed important by physiotherapists in exercise prescription following osteoporotic fracture. Arthritis and Rheumatism, 2010;60(10 Suppl):1882. Poster presented at American College of Rheumatology & Association of Rheumatology Health Professionals Annual Scientific Meeting, Atlanta, GA Nov, 2010.
- 35. **Kirkham AA**, Campbell KL, Jespersen DK and McKenzie DC. Exercise intensity prescription for women with breast cancer undergoing chemotherapy. Appl Physiol Nutr Metab 2009;34(S1):S48-S49. Oral presentation at Canadian Society of Exercise Physiology Annual General Meeting, Vancouver, BC: Nov. 2009.

<u>Unpublished conference presentations</u>

- 36. Mattiello BC, Thompson RB, Prado CM, Paterson DI, Mackey JR, Courneya KS, Pituskin R, Grenier JG, **Kirkham AA**. Caloric Restriction and Exercise protection from Anthracycline Toxic Effects (CREATE) study: Preliminary effects on secondary cardiovascular outcomes. Oral and poster presentation at Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB, Nov 2019.
- 37. <u>Li N</u>, **Kirkham AA**, <u>Brotto A</u>, Stickland M, Pituskin E, Paterson DI. Pulmonary consequences of anthracycline and trastuzumab treatment for early-stage breast cancer. Poster presented at Women and Children's Health Research Institute Research Day, Edmonton, AB. Nov 2019.

- 38. <u>Goonasekera M</u>, Thompson RB, Courneya K, Prado C, Mackey J, Paterson DI, Pituskin E, **Kirkham AA**. A biopsychosocial perspective: Relationships between quality of life, treatment symptoms and cardiorespiratory fitness in women receiving chemotherapy for breast cancer. Poster presented at Women and Children's Health Research Institute Research Day, Edmonton, AB. Nov 2019.
- 39. **Kirkham AA**, Pituskin E, Thompson RB, Mackey JR, Koshman S, Jassal D, Pitz M, Haykowsky MJ, Pagano J, Chow K, Vos LJ, Ghosh S, Oudit G, Ezekowitz JA, Paterson DI. Beta-blockers preserve left ventricular myocardial and right ventricular ejection fraction during trastuzumab for breast cancer relative to ACE-inhibitors and placebo. Oral presentation at University of Alberta Department of Medicine Research Day, Edmonton, AB. June 2019.
- 40. <u>Rickard J</u>, Thompson RB, Haykowsky MJ, Beaudry R, Mackey JR, Paterson DI, Pituskin E, **Kirham AA**. Myocardial fibrosis and reduced resting myocardial function are associated with exercise intolerance in anthracycline-treated breast cancer survivors. Oral presentation at Cardiac Sciences Research Day, Edmonton, AB. June 2019.
- 41. **Kirkham AA**, Xu L, Wang H, Chow K, Pagano J, White J, Haykowsky MJ, Dyck J, Ezekowitz J, Oudit G, Mackey J, Thompson RB, Pituskin E, Paterson DI. Breast cancer diagnosis is associated with relative left ventricular hypertrophy. Poster presented at San Antonio Breast Cancer Symposium, San Antonio, TX, Dec 2018.
- 42. **Kirkham AA**, Paterson DI, Pituksin E, Grenier J, Thompson RB. Changes in skeletal muscle metabolism, mass and strength with receipt of cardiotoxic breast cancer treatments. Poster presented at Okanagan Cardiovascular and Respiratory Symposium, Silver Star, BC, March 2018.
- 43. <u>Bland K, Lloyd M</u>, Borrel D, Bovard J, **Kirkham A**, Shenkier T, Davis M, McKenzie D, Claydon V, Zucker D, Gelmon K, Campbell KL. Exercise during taxane chemotherapy for breast cancer improves indices of cardiovascular autonomic function. Poster presented at Exercise and Sport Science Australia: Research to Practice, Brisbane, AUS, March 2018.
- 44. <u>Doroshuk M</u>, **Kirkham AA**, Paterson DI, Pituskin EN, Thompson RB. Magnetic resonance imaging-derived left ventricular strain changes with cardiotoxic breast cancer treatment. Poster presentation at Research Revealed: Undergraduate Forum for Kinesiology, Exercise Science, Sport Studies and Recreation, Calgary, AB, March, 2018.
- 45. **Kirkham AA**, Paterson DI, Mackey J, Prado, C, Courneya KS, Pituskin E, Thompson RB. Caloric Restriction and Exercise protection from Anthracycline Toxic Effects: (CREATE) Study. Mini-oral and poster presentation at Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB, Nov 2017.
- 46. Neil-Sztramko SE, **Kirkham AA**. Patterns of health lifestyle factors amongst those with cancer, cancer survivors, and those without cancer: findings from the 2013-14 Canadian Community Health Survey. Poster presented at Canadian Cancer Research Conference, Vancouver, BC, November 2017.
- 47. <u>Bland KA</u>, **Kirkham AA**, Bovard J, <u>Lloyd M</u>, Shenkier T, Davis MK, Zucker D, Gelmon KA, McKenzie DC, Claydon VE, Campbell KL. Influence of supervised exercise during versus after taxane chemotherapy for breast cancer on quality of life. Poster presented at Canadian Cancer Research Conference, Vancouver, BC, November 2017.
- 48. <u>Christiansen J</u>, **Kirkham AA**, Pituskin EN, Paterson DI, Thompson RB. The effect of chemotherapy and trastuzumab on skeletal muscle quality of breast cancer patients. Poster presentation at Research Revealed: Undergraduate Forum for Kinesiology, Exercise Science, Sport Studies and Recreation, Edmonton, AB, March, 2017.

- 49. **Kirkham AA**, Eves ND, McKenzie DC, Shave RE, Stöhr EJ, Gelmon K, Warburton DER, Virani SA, Campbell KL. Cardio-protection from a single exercise session performed 24 hours prior to doxorubicin treatment in breast cancer patients. Poster presented at Global Cardio-Oncology Summit, Vancouver, BC, October 2016.
- 50. **Kirkham AA**, <u>Lloyd MG</u>, Gelmon K, Claydon VE, Van Patten C, Campbell KL. Resting heart rate and blood pressure changes during and after chemotherapy for breast cancer concurrent to exercise training. Poster presented at the Global Cardio-Oncology Summit, Nashville, TN, October 2015.
- 51. <u>Lloyd MG</u>, **Kirkham AA**, Claydon VE, Campbell KL. Resting heart rate and blood pressure changes during adjuvant treatment for breast cancer. Poster presented at the International Society for Autonomic Neuroscience, Italy, September 2015.
- 52. Balneaves LG, Truant TLO, Campbell KL, Van Patten C, Waters E, **Kirkham A**. Patients and oncologist' perspectives on physician referrals to a lifestyle intervention program. Poster presentation at the 12th International Conference of the Society for Integrative Oncology. Boston, MA, USA. November 2015.
- 53. **Kirkham AA**, <u>Pauhl KE</u>, <u>Elliot R</u>, <u>Scott JA</u>, <u>Doria S</u>, <u>Davidson HK</u>, Campbell KL, Camp PG. Utility of equations that estimate peak oxygen consumption and work rate from the six-minute walk test in patients with COPD. Poster presented at Heart and Lung Fest, Vancouver, BC, February 2014.

<u>Invited oral presentations</u>

- 1. "Exercise Magnetic Resonance Imaging: A Novel Tool to Uncover Occult Cardiovascular Dysfunction." Cardiovascular Research Centre Seminar, Edmonton, AB, Dec 2019.
- 2. "Exercise and Diet as Protection from Cardiotoxicity." Exercise is Medicine Symposium, Copenhagen, Denmark, Nov 2019
- 3. "Optimizing exercise efficacy: Cancer-specific exercise intervention considerations" (within Symposium titled: Exercise Oncology: Novel Research and Implementation Approaches Spanning Cancer Biology to Public Health; other speakers: Kerry Courneya (AB, CA) and Sarah Neil-Sztramko (ON, CA)). Symposium at Canadian Society of Exercise Physiology Annual Meeting, Kelowna, Canada, Nov 2019
- 4. "Prescribing exercise and diet during chemotherapy: Feasibility and efficacy of short-term interventions that capitalize on the effect of timing relative to treatment." Northern Alberta Breast Cancer Program Retreat, Edmonton, AB, October 2019
- 5. "The Edmonton Cardio-Oncology Clinical Program: Past, Present and Future." Cross Cancer Institute Grand Rounds. Co-presented with Ian Paterson and Edith Pituskin. Sept 2019.
- 6. "Beta-blockers preserve left ventricular myocardial and right ventricular ejection fraction during trastuzumab for breast cancer relative to ACE-inhibitors and placebo." University of Alberta, Department of Medicine Research Day. June 2019
- 7. "Putting it all Together: Designing Clinical Trials to Test the Effect of Exercise on Cancer Response to Therapy" (within 2-hour symposium titled: Exercise is Cancer Medicine: How do we Prove it? Breaking Down the Barriers to Translational Research in Humans; other speakers: Dietmar Siemann (FL, US); Allison Betof Warner (NY, US); Neil Iyengar (NY, US)). Symposium at American College of Sports Medicine Annual Meeting, Orlando, FL, June 1, 2019
- 8. "Emphasizing the 'Multiple' in Multi-disciplinary: Exercise As a Single Tool in the Cancer Care Toolbox" (within 2-hour symposium titled: Is Exercise Enough?: Leveraging Transdisciplinary Approaches to Enhance Cancer Survivorship; other speakers: Wendy Demark-

- Wahnefried (AL, US); Karen Mustian (NY, US); Bonnie Spring (IL, US)). Symposium at American College of Sports Medicine Annual Meeting, Orlando, FL, June 1, 2019
- 9. "Taxane chemotherapy side effects and the role of exercise"; Medical Oncology Rounds, Cross Cancer Institute, Edmonton, AB, October 2018
- 10. "Acute exercise and diet interventions for protecting healthy cells and sensitizing cancer cells: Updates and future directions"; Northern Alberta Breast Cancer Program Retreat, Edmonton, AB, October 2018
- 11. "Effectiveness of exercise programming for cancer survivors in clinical and community settings: How does it compare to randomized trials?" (within 2-hour symposium titled: Exercise for cancer survivors in the real world: Translating research to practice; other speakers: Joachim Wiskermann (Germany), Maike Sweegers (The Netherlands), Anna Campbell (Scotland)); Symposium at American College of Sports Medicine Annual Meeting, Minneapolis, MN, June 1, 2018
- 12. "Exercise in Cardio-Oncology: The relationship between exercise and cancer treatment-related cardiotoxicity"; 50-minute tutorial jointly presented with Mark Haykowsky (USA) at the World Congress on Exercise is Medicine, Minneapolis, MN, May 30, 2018
- 13. "Use of Biomedical Imaging and Nutrition to Increase the Impact of Exercise Oncology Research"; Cancer Special Interest Group Meeting at American College of Sports Medicine Annual Meeting, Minneapolis, MN, May 30, 2018
- 14. "Maximizing the impact of exercise and diet on breast cancer outcomes", Susan G. Komen Breast Cancer Challenge Semi-finalist, Obesity & Cancer Section Meeting at Obesity Week 2017, Washington, DC, November 2017
- 15. "Exercise and diet as adjunct therapy for breast cancer"; Northern Alberta Breast Cancer Program Retreat, Edmonton, AB, October 2017
- 16. "Longitudinal strain imaging by magnetic resonance is a sensitive predictor of cardiotoxicity caused by breast cancer therapies"; Alberta Imaging Symposium, Edmonton, AB, May 2017
- 17. "Good days and bad days: Tailoring aerobic exercise prescription to chemotherapy" (within 2-hour symposium titled: Back to basics: Applying training principles for effective exercise prescription in cancer patients; other speakers: Kathryn Schmitz (USA), Prue Cormie (Australia), Joachim Wiskermann (Germany)); Symposium at American College of Sports Medicine Annual Meeting, Boston, MA, June 2016
- 18. "Exercise therapy for breast cancer treatment side effects"; Pharmaceutical Outcomes & Policy Innovations Seminar, UBC; Vancouver, BC, May 2015
- 19. "The role of acute and chronic exercise in cardio-protection from anthracycline chemotherapy for breast cancer"; Lions Gate Hospital Community Chemotherapy Centre; North Vancouver, BC; September 2014
- 20. "Exercise is medicine: The benefits of exercise during cancer treatment"; Burnaby General Hospital Community Chemotherapy Centre; Burnaby, BC; August 2014
- 21. "Exercise for cancer survivors: What does it look like outside research?"; School of Health and Social Care, University of Surrey (satellite location); Glasgow, Scotland; July 2014
- 22. "Assessment and prescription in exercise oncology"; Cardiac Rehabilitation, Atrium Health Ltd. Centre for Exercise and Health; Coventry, England; July 2014
- 23. "Exercise cardio-protection from chemotherapy for breast cancer"; School of Sport, Cardiff Metropolitan University; Cardiff, Wales; June 2014
- 24. "Exercise cardio-protection from breast cancer anthracycline-induced cardiotoxicity"; British Columbia Cancer Agency Vancouver Centre; Vancouver, BC; May 2014
- 25. "Prescription of exercise intensity in breast cancer and beyond"; StepUp 2013, April 2013

ACADEMIC LEADERSHIP

- Dedicated and experienced supervisor and mentor of students, including independent recruitment and supervision of volunteers, practicum/co-op students, and paid staff (see 'Supervision and Mentorship Experience')
- Leading and training large research staff (paid and volunteer) and student teams:
 - UBC: Responsible for training and maintaining standards for data collection among up to 15 research staff working on a given study to deliver exercise intervention and collect data.
 - o UAlberta: Leading and training staff for intensive MRI acquisitions requiring up to three MR technicians, Research Nurse, a student, and myself.
 - o UAlberta: Coordinated multi-disciplinary assessments for multiple studies between patients and staff for MR Research Centre, Exercise Physiology Labs, Cancer Rehabilitation Clinic, Human Nutrition Research Unit, and the cancer treatment centre.
- Coordination of multi-disciplinary expertise in large research teams:
 - O UBC: Lead and coordinated contributions from Medical Oncologists, Cardiologists, Registered Dietitians, Onco-Physiatrists, Sports Medicine Physicians, and multiple PhDs (Physical Therapy, Cardiac Physiology, Autonomic function) from Vancouver, the United States and the United Kingdom on cardio-oncology and exercise oncology research projects. Lead resulting publications with up to 11 authors.
 - UAlberta: Leading and coordinating contributions from Medical Oncologists, Cardiologists, Nurse Practitioners, Registered Dietitians, and PhDs (Biomedical Engineering, Nutrition, Exercise Oncology, Physical Therapy, Pulmonary Physiology). Will lead numerous resulting publications.
- Enthusiastic teacher of practical skills and theoretical content to undergraduate and graduate students (see 'Teaching Experience')
- Encouraged and facilitated numerous junior students to attend academic conferences by sharing research data for presentation (see second and senior authored conference publications)
- Conceived of symposium (2-hour presentation) and tutorial (50-minute presentation) content for American College of Sports Medicine Annual General Meeting 2018, invited speakers, submitted proposal and executed top-rated sessions at the conference. See 'Invited Presentations'
- Conceived of topics, invited speakers and submitted proposals for two symposium sessions (2-hour presentations) for American College of Sports Medicine Annual General Meeting 2019 that brought new cutting edge content and speakers to this conference. See 'Invited Presentations'
- Served as Communications Officer for the Graduate Student Committee of the Canadian Society of Exercise Physiology for two years, which involved leading a team of graduate students across the country to generate content for a quarterly newsletter sent to all student members.
- Served as expert reviewer for multiple peer-reviewed journals and clinical grant application review (see 'Service').
- Delivery of valuable research content to public via print and television media (see 'Media Coverage of Research')
- Contributor to the Canadian Women's Heart Health Alliance Position Statement (published in 2020 in the Journal of the American Heart Association)

TEACHING

Graduate

- 1. KIN5543 "Lifestye Toxicity and Chronic Disease", Faculty of Kinesiology and Physical Education, University of Toronto (Fall 2020)
- 2. Instructor, PHTH 517 "Exercise and Movement I" (lecture), UBC Department of Physical Therapy (Fall 2015)

- 3. Instructor, PHTH 527 "Exercise and Movement II" (lab), UBC Department of Physical Therapy (Winter 2015)
- 4. Clinical Skills Assistant, PHTH 514 "Clinical Skills I" (emergency care, athletic taping, cardiorespiratory examination, and exercise testing labs), UBC Department of Physical Therapy (Fall 2010-2015)

<u>Undergraduate</u>

- 4. KPE472 "Lifestye Toxicity and Chronic Disease", Faculty of Kinesiology and Physical Education, University of Toronto (Fall 2020)
- 5. Teaching Assistant, International Summer School "Recovery from Injury and Disease" and "Exercise is Medicine" (facilitated labs) UBC Faculty of Medicine (2015)
- 6. Guest Lecturer, KINE 469 "Exercise Prescription"; UBC School of Human Kinetics (2011)
- 7. Teaching Assistant, KINE 103 "Active Health" (Delivered lecture and supervised laboratory sessions), UBC School of Human Kinetics (2010)
- 8. Teaching Assistant, KINE 190 "Anatomy and Physiology I" (Delivered lecture and supervised laboratory sessions), UBC School of Human Kinetics (2008 & 2009)

SUPERVISION AND MENTORSHIP

Primary or significant supervision role

- 1. Supervisor, MSc, Julia Rickard (Sept 2020- present)
- 2. Supervisor, UAlberta Undergraduate Research Initiative Awardee and Kinesiology Human Performance Fund Awardee, Jordan Topolnyski (May-Sept 2020)
- 3. Supervisor, UAlberta Practicum Placement for undergraduate Kinesiology students (full-time for one term):
 - Jordan Topolnyski (Jan-Apr 2020)
 - Brenna Mattiello (Sep-Dec 2019, presented work at local and national conference, co-authored two abstracts and one manuscript)
 - Nicholas Li (May-Aug 2019, presented work at local conference)
 - Julia Rickard (Jan-Apr 2019, presented work at local conference)
 - Jessica Hoskins (Sep-Dec 2018)
 - Gregory Farmer (May-Aug 2018)
 - Kimberly Brennan (Jan-Apr 2018)
 - Marissa Doroshuk (Sep-Dec 2017, presented work at provincial conference)
 - Jillian Christiansen (Jan-Apr 2017, presented work at local conference)
- 4. Supervisor, Research Coordinator, Andre Pelletier (Full-time, May 2019-present)
- 5. Supervisor, Research Technician, Michelle Goonasekera (30-35 h/wk Dec 2018-Jul 2020)
- 6. Supervisor, Research Technician, Marissa Doroshuk (20-37.5 h/wk May 2018-Aug 2019)
- 7. Supervisor, Exercise Physiologist, Andrew Brotto (MSc student in Kinesiology, as needed, October 2017-Dec 2019)
- 8. Supervisor, UAlberta Kinesiology Human Performance Fund Awardee, Brenna Mattiello (competitive award + additional paid work for 30 h/wk total, May-Aug 2019, presenting her work from my lab in national conference)
- 9. Supervisor, UAlberta Post Graduate Work Experience Program (paid), Jenna Wowdzia (Fulltime, Jan-Mar 2019, currently in Kinesiology MSc program)
- 10. Supervisor, UAlberta Graduate Student Internship Program (paid), Sara Nejatinamini (Nutrition PhD candidate, 10 h/wk, May-Dec 2018)

- 11. Supervisor of undergraduate volunteers (range of 3-30 h/wk):
 - Jordan Topolnyski (Kinesiology, UAlberta, Sep 2019-present)
 - Ashley Turner (Science, UAlberta, Oct 2019-present)
 - Vanesa Beka (Nursing, UAlberta, Apr 2017-Sep 2019, co-author on publication)
 - Chiu Tung (Kinesiology, UAlberta, October 2018-Apr 2019)
 - Hanna Hruczowski (Science, UAlberta, May-Nov 2017)
 - Bavenjit Cheema (Kinesiology, UBC, Sept 2014 -Apr 2015, currently in medical school)
 - Savanna Rowe (Kinesiology, UBC, Jan 2015-Apr 2017, presented our work at international conference & currently in Physical Therapy program)
 - Hannah Kapur (Physiology, McGill, May-Aug 2015, currently in medical school)
 - Simran Parmar (Kinesiology, UBC, Sep 2015-Feb 2016, currently in medical school)
- 12. Supervisor, UBC Work Learn Program (10 h/wk of research assistant work):
 - Chris Grellman (Kinesiology, Sep 2014-Apr 2015)
 - Nima Omid-Fard (Kinesiology, Sept 2014-Jun 2015, currently in medical school)
 - Cristina Trasolini (Kinesiology, May 2014-April 2015)
 - Kortni Pelli (Kinesiology, 2013-2014)
- 13. Supervisor, UBC Faculty of Medicine Summer Research Award recipient, Sean Nugent (Kinesiology graduate, Jun-Aug 2014, currently in medical school)
- 14. Supervisor, UBC Masters of Physical Therapy group research projects (guided from conception of project to publication):
 - "Metabolic Cost of Trunk Lean Walking for Arthritis" (2012-2013)
 - "Can the 6-minute Walk Test Predict VO2peak in COPD patients?" (2012-2013)

Formal mentorship

- 15. Mentor, UBC Kinesiology Mentorship Program, Sarah Sayyari, (2014-2015, completed MSc)
- 16. Mentor, UBC Kinesiology Mentorship Program, Shaolin Rahman (2013-2014, currently working in health care)
- 17. Mentor, Tri-council Graduate Student Applications, Rehabilitation Sciences Graduate Program, UBC (2012-2016)

MEDIA COVERAGE OF RESEARCH

- 1. Manuscript "" "Chemotherapy-periodized" Exercise to Accommodate for Cyclical Variation in Fatigue" (MSSE 2020;52(2):278-286) has received more online 'attention' than 94% of the 15 million research outputs tracked by Altmetric (https://wolterskluwer.altmetric.com/details/66181885/news)
- 2. ACSM National Office of Communications & Media Advocacy press release highlighting work from my manuscript ""Chemotherapy-periodized" Exercise to Accommodate for Cyclical Variation in Fatigue," Jan 2020; resulting in including coverage by Medscape: https://www.medscape.com/viewarticle/920302
- 3. "Heart rate, chemotherapy and exercise prescription," Research in Exercise and Cancer Health (REACH) Podcast 60-minute interview (first ever repeat guest), Dec 2018: http://reachformore.libsyn.com/website/ep-51-dr-amy-kirkham-heart-rate-chemotherapy-and-exercise-prescription (also available on iTunes)
- 4. ACSM National Office of Communications & Media Advocacy press release to Newswise highlighting work from my manuscript "Exercise prescription and adherence for breast cancer: One size does not FITT all," Feb 2018.

- 5. My manuscript, "Exercise prescription and adherence for breast cancer: One size does not FITT all" highlighted in Medicine & Science in Sports & Exercise Editorial, Feb 2018.
- 6. Lay summary of my manuscript, "Protective effects of acute exercise prior to doxorubicin on cardiac function of breast cancer patients: A proof-of-concept RCT" highlighted by Canadian Society of Exercise Physiology's 'Knowledge Translation: Advances in Exercise Physiology Research' section of January 2018 Comminqué.
- 7. "Modifying exercise during chemotherapy / protecting against cardiotoxicity", Research in Exercise and Cancer Health (REACH) Podcast 60-minute interview, Oct 2017: https://www.reachbeyondcancer.com/podcast/2017/10/5/ep-24-dr-amy-kirkham-modifying-exercise-during-chemotherapyprotecting-against-cardio-toxicity (also available on iTunes)
- 8. "CTV Edmonton: Protecting cancer patients' hearts", University of Alberta Faculty of Medicine & Dentistry 'FoMD in the News' Sep 2017 newsletter top story: https://www.ualberta.ca/medicine/news/2017/september/fomd-in-the-news
- 9. "Protecting cancer patient's hearts", CTV Edmonton's health correspondent Carmen Leibel reported on my CREATE study, aired Aug 30, 2017 during CTV news, and also promoted on CTV's Twitter and Facebook accounts: http://www.ctvnews.ca/video?clipId=1198427
- 10. "Can heart damage from chemotherapy be prevented through exercise and diet?", University of Alberta Faculty of Medicine & Dentistry website feature story, August 30, 2017: https://www.ualberta.ca/medicine/news/2017/august/can-heart-damage-from-chemotherapy-be-prevented-through-exercise-and-diet
- 11. My manuscript "Protective effects of acute exercise prior to doxorubicin on cardiac function of breast cancer patients: A proof-of-concept RCT" (Int J Cardiol 2017; 245:263-70) has received more online 'attention' than 93% of the 8.5 million research outputs tracked by Altmetric (https://www.altmetric.com/details/21982604#score).
- 12. "Amy Kirkham PhD '16", University of British Columbia Faculty of Medicine Alumni Profile Spotlight, July 2017 E-Newsletter
- 13. "Caloric Restriction and Exercise in Breast Cancer Patients to Protect Against Anthracycline Toxic Effects", Feature Story, Cancer Control Alberta July 11 2017 newsletter and website
- 14. "UBC students explore the impact of exercise on cancer prevention and rehabilitation", UBC Faculty of Medicine June 2015 Communications: http://www.med.ubc.ca/ubc-students-explore-the-impact-of-exercise-on-cancer-prevention-and-rehabilitation/
- 15. "Student profile: Prescription Exercise", Michael Smith Foundation for Health Research June 2010 News: https://www.msfhr.org/news/features/prescription-exercise

ADVANCED ACADEMIC COURSES

- 1. Libin Cardiovascular Institute of Alberta International Trainee Symposium: Research is Better with Sex and Gender (2 days, Banff, Alberta, 2020)
- 2. Career Advancement and Leadership Skills for Women in Healthcare, Harvard Medical School (3 days, Boston, MA, 2018)
- 3. Analyzing Repeated Measures Data: ANOVA And Mixed Model Approaches, The Analysis Factor (8 wk, online, 2016)
- 4. International Intensive Graduate Course In Exercise & Clinical Physiology, Concordia University, (5 days, Montreal, QC, 2010)
- 5. Cardiovascular Ultrasound in Sport and Exercise Sciences, UBC-Okanagan, (5 days, Kelowna, BC, 2010)
- 6. Instructional Skills for Graduate Students, Teaching and Academic Growth (4 days, Vancouver, BC, 2010)
- 7. Publication and Grant Writing Workshop, CIHR Quality of Life Training Program in Rehabilitation Research, (5 days, Vancouver, BC, 2010)

CERTIFICATIONS AND MEMBERSHIPS

- 1. Professional Kinesiologist, Alberta Kinesiology Association (2016-present)
- 2. Professional Kinesiologist, British Columbia Association of Kinesiologists (2014-2015)
- 3. Member, Canadian Society of Exercise Physiology (2009-present)
- 4. Member, American College of Sports Medicine (2009-present)
- 5. Member, Clinical Exercise Physiology Association (2009-present)
- 6. First Aid, CPR, AED Certification, Canadian Red Cross (2004-present)
- 7. Certified First Responder, Canadian Red Cross (2004-2009)
- 8. Certification Candidate, Canadian Athletic Therapists Association (2004-2010)
- 9. Certification Candidate, Ontario Athletic Therapists Association (2004-2010)

ATHLETIC ACHIEVEMENTS

- 1. Bike commuting to work all winter in Northern Alberta (yes, even in -30°C) (2016-2020)
- 2. Several podiums in international Half-Ironman races as a Professional Triathlete (2010)
- 3. Member, British Columbia Elite Long Course Triathlon Team (2009 & 2010)
- 4. 3rd, Elite women, British Columbia Time Trial Provincial Championship (2010)
- 5. Twice represented Canada (2008: 8th, women 20-24; 2009: 19th, women 25-29) at Triathlon World Championships
- 6. 2nd, women 25-29, 4th overall, National Olympic Triathlon Championships (2009)
- 7. 2nd, women 20-24, National Sprint & Olympic Triathlon Championships (2007, 2008)
- 8. 2nd, senior women's team, National Cross Country Championship (2007)
- 9. Ontario University Athletics Cross Country All-Star (2007)
- 10. Varsity Cross Country Team Captain, York University (2006-08)
- 11. Varsity Cross Country MVP, York University (2003-04, 2007-08)
- 12. York Lions Track & Field Achievement Award (2005)
- 13. York University Excalibur's Varsity Athlete-of-the-Year nomination (2004)
- 14.10th, 3000m, Canadian Interuniversity Sport Track National Championship (2004)