Darren G. Candow, PhD; CSEP-CEP Professor

Faculty of Kinesiology & Health Studies 3737 Wascana Parkway, University of Regina Regina SK S4S 0A2

Email: Darren.Candow@uregina.ca

SECTION I APPOINTMENTS and EDUCATION

1.1 ACADEMIC APPOINTMENTS

2015-present

Professor. Faculty of Kinesiology and Health Studies, University of Regina. Regina, SK, Canada.

2010-2015

Associate Professor. Faculty of Kinesiology and Health Studies, University of Regina, Regina, SK, Canada.

2007-2010

Assistant Professor. Faculty of Kinesiology and Health Studies, University of Regina, Regina, SK, Canada.

2005-2007

Assistant Professor. School of Human Kinetics, Laurentian University, Sudbury, ON, Canada.

1.2 ADMINISTRATION APPOINTMENTS

2015-2019

Associate Dean-Graduate Studies and Research. Faculty of Kinesiology and Health Studies, University of Regina. Regina, SK, Canada.

2017

University of Regina internal CIHR and SSHRC Tri-Council Research Mentor

1.3 UNIVERSITY EDUCATION

2005

Ph.D. (Kinesiology), University of Saskatchewan, Saskatoon, SK, Canada.

2001

M.Sc. (Kinesiology), University of Saskatchewan, Saskatoon, SK, Canada.

1999

B.Sc. (Biology), Acadia University, Wolfville, NS, Canada.

SECTION II RESEARCH and SCHOLARLY ACHIEVEMENT

2.1 PEER-REFEREED PUBLICATIONS (106)

- Prokopidis, K., P. Giannos, K. Kechagias, K. Triantafyllidis, S. C. Forbes, and D.G. Candow (in press). Effectiveness of Creatine Supplementation on Memory in Healthy Individuals: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Nutrition Reviews.
- 2. Butchart, S., **D.G. Candow**, S.C. Forbes, C. Mang, J.J. Gordon, J. Ko, D. Deprez, P.D. Chilibeck and D.S. Ditor. (*in press*). Effects of creatine supplementation and progressive resistance training in stroke survivors. *International Journal of Exercise Science*.
- Delpino, F.M., L. M. Figueiredo, S.C. Forbes, **D.G. Candow** and H. O. Santos. (2022). The Influence of Age, Sex, and Type of Exercise on the Efficacy of Creatine Supplementation on Lean Body Mass: A Systematic Review and Metaanalysis of Randomized Clinical Trials. *Nutrition*, 111791.
- 4. Oliveria, E.F., S.C. Forbes, E.Q. Borges, L.F. Machado, **D.G. Candow**, and M.Machado. (2022). Association between dietary creatine and visuospatial short-term memory in older adults. *Nutrition and Health*, doi: 10.1177/02601060221102273.
- 5. Giannos, P., K. Prokopidis, S. C. Forbes, K. Celoch, **D. G. Candow** and J. L. Tartar. (2022). Gene expression changes of murine cortex homeostasis in response to sleep deprivation imply dysregulated aging-like transcriptional responses. *Brain Sciences*, 12: 825.

- 6. **Candow, D.G.**, P.D. Chilibeck, S.C. Forbes, C.M. Fairman, B. Gualano and H. Roschel. (2022). Creatine supplementation for older adults: Focus on sarcopenia, osteoporosis, frailty and cachexia. *Bone*, 116467.
- 7. Cornish, S.M., D.M. Cordingley, K.A. Shaw, S.C. Forbes, T. Leonhardt, A. Bristol, **D.G. Candow** and P.D. Chilibeck. (2022). Effects of Omega-3 supplementation alone and combined with resistance exercise on skeletal muscle in older adults: A systematic review and meta-analysis. *Nutrients*, 14: 2221.
- 8. **Candow, D.G.,** S.C. Forbes, M. D. Roberts, B. D. Roy, J. Antonio, A. Smith-Ryan, E. S Rawson, B. Gualano, and H. Roschel. (2022). Creatine O'Clock: Does Timing of Ingestion Really Influence Muscle Mass and Performance?" *Frontiers in Sports and Active Living, 20 (4): 893714.*
- Mattos, D., C.G.M. Santos, S.C. Forbes, **D.G. Candow**, D. Rosa, R.G. Busnardo, M. D. Ribeiro, D. Paulucio, C. Chester and M. Machado. (2022). Individual responses to creatine supplementation on muscular power is modulated by gene polymorphisms in military recruits. Journal of Science in Sport and Exercise.
- Forbes, S.C., D. M. Cordingley, S.M. Cornish, B. Gualano, H. Roschel, S. M. Ostojic, E. S. Rawson, B. D. Roy, K. Prokopidis, P. Giannos and **D. G. Candow** (2022). Effects of creatine supplementation on brain function and health. Nutrients, 14: 921.
- 11. Arazi, H., S. Aboutalebi, B. Taati, J. M. Cholewa, and **D. G. Candow** (2022). Short-term betaine supplementation improves muscle endurance and indices of endocrine function following acute high-intensity resistance exercise in adolescent handball players. *Journal of the International Society of Sports Nutrition*, 19: 1-6.
- 12. Cordingley, D., S.M. Cornish, and **D.G. Candow** (2022). Anti-inflammatory and Anti-catabolic effects of Creatine Supplementation: A Review. *Nutrients*, 14(3): 544.
- 13. Forbes, S.C., S.M. Ostojic, T.P. Souza-Junior and **D.G. Candow** (2021). A high dose of creatine combined with resistance training appears to be required to augment indices of bone health in older adults. *Annals of Nutrition and Metabolism*, 1-4.
- 14. Ostojic, S.M., S. C. Forbes, and **D.G. Candow**. (2021). Do Pregnant Women Consume Enough Creatine? Evidence from NHANES 2011-2018. *Annals of Nutrition and Metabolism*, 1-3.

- 15. dos Santos, E.E.P., R. Cappato de Araújo, D. G. Candow, S. C. Forbes, J. A. Guijo, C. C. de Almeida Santana, W. L. Prado, and J. P. Botero. (2021). Efficacy of Creatine Supplementation Combined with Resistance Training on Muscle Strength and Muscle Mass in Older Females: A systematic review and meta-analysis. *Nutrients*, 13(11): 3757.
 - 16. Lixandrão, M.E., I. Longobardi, A. E. Leitão, J. V. M. Morais, P. A. Swinton, A. Y. Aihara, P. C. K. Goes, C. Ugrinowitsch, **D. G. Candow**, B. Gualano, and H. Roschel (2021). Daily Leucine Intake Associates with Lower Limb Skeletal Muscle Mass and Strength in Elderly. *Nutrients*, 13(10): 3536.
 - 17. **Candow**, **D.G.**, P.D. Chilibeck, J. J. Gordon, and S. Kontulainen. (2021). Efficacy of creatine supplementation and supervised resistance training on area and density of bone and muscle in older adults. *Medicine and Science in Sports and Exercise*, 1; 53(11): 2388-2395.
 - 18. Forbes, S.C., J. R. Krentz and **D.G. Candow** (2021). Timing of creatine supplementation does not influence the gains in unilateral muscle hypertrophy or strength from resistance training in young adults: A within-subject design. *The Journal of Sports Medicine and Physical Fitness*, 61 (9): 1219-1225.
 - 19. Ruple, B.A., J. S. Godwin, P. H. C. Mesquita, S. C. Osburn, C. G. Vann, D. A. Lamb, C. L. Sexton, M. A. Smith, **D. G. Candow**, S. C. Forbes, K. W. Huggins, A. D. Frugé, A. N. Kavazis, K. C. Young, R. A. Seaborne, A. P. Sharples, and M. D. Roberts. (2021). Resistance training rejuvenates the mitochondrial methylome in aged human skeletal muscle. *FASEB*, 35(9): e21864.
 - 20. Lewgood, J., B. Oliveira, M. Korzepa, S. C. Forbes, J. P. Little, L. Breen, R. Bailie, and **D. G. Candow**. (2021). Efficacy of Dietary and Supplementation Interventions for Individuals with Type 2 Diabetes. *Nutrients*, 12; 13 (7): 2378.
 - 21. Asbaghi, O., D. Ashtary-Larky, R. Bagheri, P. Moosavian, H. P. Olyaei, B. Nazarian, M. R. Kelishadi, A. Wong, **D. G Candow**, F. Dutheil, K. Suzuki and A. A. Naeini. (2021). Folic acid supplementation improves glycemic control for diabetes prevention and management: A systematic review and dose-response meta-analysis of randomized controlled trials. *Nutrients*, 9; 13(7): 2355.
 - 22. Bagheri, R., B. H. Moghadam, **D. G. Candow**, B. T. Elliott, A. Wong, D. Ashtary-Larky, S. C. Forbes, and A. Rashidlamir. (2021). Effects of Icelandic yogurt consumption and resistance training healthy untrained older males. *British Journal of Nutrition*, 14: 1-9.
 - 23. Forbes, S.C., **D.G. Candow**, S.M. Ostojic, M.D. Roberts, and P.D. Chilibeck. (2021). Meta-analysis examining the importance of creatine ingestion strategies on lean tissue mass and strength in older adults. *Nutrients*, 2; 13(6): 1912.

- 24. Lane, G., C. Nisbet, S. Johnson, **D.G. Candow**, P.D. Chilibeck, and H. Vatanparast (2021). Barriers and facilitators to meeting recommended physical activity levels among new immigrant and refugee children in Saskatchewan, Canada. *Applied Physiology, Nutrition and Metabolism*, 46(7): 797-807.
- 25. Karayigit, R. S.C. Forbes, A. Naderi, **D. G. Candow**, U. C. Yildirim, F. Akca, D. Aras, B. C. Yasli, A. Sisman, A. Mor, and M. Kaviani. (2021). Different Doses of Carbohydrate Mouth Rinse Have No Effect on Exercise Performance in Resistance Trained Women. *International Journal of Environmental Research and Public Health*, 18(7): 3463.
- 26. Pakulak, A., **D.G. Candow**. J. Totosy de Zepetnek, S.C. Forbes, and D. Basta. (2021). Effects of Creatine and Caffeine Supplementation During Resistance Training on Body Composition, Strength, Endurance, Rating of Perceived Exertion and Fatigue in Trained Young Adults. *Journal of Dietary Supplements*, 24: 1-16.
- 27. **Candow, D.G.**, S.C. Forbes, B. Kirk and G. Duque. (2021). Current Evidence and Possible Future Applications of Creatine Supplementation for Older Adults. *Nutrients*, 13(3): 745.
- 28. Smith-Ryan, A.E., H.E. Cabre, J.M. Eckerson, and **D.G. Candow**. (2021). Creatine supplementation in women's health: A lifespan perspective. *Nutrients*, 13(3): 877.
- 29. Odgers, J.B., M.C. Zourdos, E.R. Helms, **D.G. Candow**, B. Dahlstrom, P. Bruno and C. A. Sousa. (2021). Rating of perceived exertion and velocity relationships among trained males and females in the front squat and hexagonal bar deadlift. *Journal of Strength and Conditioning Research*, 1; 35(Suppl 1): S23-S30.
- 30. Antonio, J. **D. G. Candow**, S. C. Forbes, B. Gualano, A. R. Jagim, R. B. Kreider, E. S. Rawson, A. E. Smith-Ryan, T. A. VanDusseldorp, D. S. Willoughby, and T. N. Ziegenfuss. (2021). Questions and Misconceptions About Creatine Supplementation: What Does the Scientific Evidence Really Show? *Journal of the International Society of Sports Nutrition*, 18(1): 13.
- 31. Forbes, S.C., **D.G. Candow**, L. Ferreira, and T. Souza-Junior. (2021). Effects of creatine supplementation on properties of muscle, bone, and brain function in older adults: a narrative review. *Journal of Dietary Supplements*, 27: 1-18.
- 32. Bagheri, R., S.C. Forbes, **D.G. Candow**, and A. Wong. (2021). Effects of branched-chain amino acid supplementation and resistance training in postmenopausal women. *Experimental Gerontology*, 144: 111185.

- 33. Pires, L.A.M., S.C. Forbes, **D.G. Candow**, and M. Machado. (2021). Creatine supplementation on cognitive performance following exercise in female Muay Thai athletes. *NeuroSports*. 1(6): 1-11.
- 34. Bagheri, R., B. H. Moghadam, D. Ashtary-Larky, S. C. Forbes, **D. G. Candow**, A. J. Galpin, M. Eskandari, R. B. Kreider, and A. Wong. (2021). Whole egg vs. egg white ingestion during 12 weeks of resistance training in trained young males: a randomized controlled trial. *Journal of Strength and Conditioning Research*, 1:35(2): 411-419.
- 35. Pourabbas, M., R. Bagheri, B. H. Moghadam, D. S. Willoughby, **D. G. Candow**, B. Elliott, S. C. Forbes, D. Ashtary-Larky, M. Eskandari, A. Wong, and F. Dutheil. (2021). Strategic ingestion of high-protein dairy milk during a resistance training program increases lean mass, strength, and power in trained young males. *Nutrients*, 13(3): 948.
- 36. **Candow, D.G.,** P. D. Chilibeck, J. J. Gordon, E. Vogt, T. Landeryou, M. Kaviani, and L. Paus-Jenssen. (2020). Effect of 12 months of creatine supplementation and whole-body resistance training on measures of bone, muscle and strength in older males. *Nutrition and Health*, 27 (2): 151-159.
- 37. Sarshin, A., V. Fallahi, S. C. Forbes, A. Rahimi, M. S. Koozehchian, **D. G. Candow**, M. Kaviani, S. Khalifeh, V. Abdollahi, A. Naderi. (2020). Short-term co-ingestion of creatine and sodium bicarbonate improves anaerobic performance in trained taekwondo athletes. *Journal of the International Society of Sports Nutrition*, 20: 17(1): 44.
- 38. Mills, S., **D.G. Candow**, S.C. Forbes, J. Patrick Neary, M.J. Ormsbee, and J. Antonio. (2020). Effects of creatine supplementation during resistance training in physically active young adults. *Nutrients*, 12: 1880.
- 39. Antonio, J., **D.G. Candow**, S.C. Forbes, M.J. Ormsbee, P.G. Saracino, and J. Roberts. (2020). Effects of Dietary Protein on Body Composition in Exercising Individuals. *Nutrients*, 25;12(6). pii: E1890.
- 40. Sarshin, A., A. Naderi, C.J.G. da Cruz, F. Feizolahi, S.C. Forbes, D.G. Candow, E. Mohammadgholian, M. Amiri, N. Jafari, A. Rahimi, E. Alijani, and C.P. Earnest. (2020). The effects of varying doses of caffeine on cardiac parasympathetic reactivation following an acute bout of anaerobic exercise in recreational athletes. *Journal of the International Society of Sports Nutrition*, 20;17(1):44.
- 41. Forbes, S.C., **D.G. Candow**, A. E. Smith-Ryan, K. Hirsch, M. D. Roberts, T. A VanDusseldorp, M. T. Stratton, M. Kaviani, and J. P. Little. (2020). Supplements and nutritional interventions to augment high intensity interval training physiological and performance adaptations a narrative review. *Nutrients*, *12(2): pii: E390.*

- 42. Grzyb, K., **D.G. Candow**, B.J. Schoenfeld, P. Bernat, S. Butchart and J.P. Neary. (2020). Effect of equal volume, high-repetition resistance training to volitional fatigue, with different workout frequencies, on muscle mass and neuromuscular performance in postmenopausal women. *Journal of Strength and Conditioning Research*, doi: 10.1519/JSC.0000000000003422.
- 43. Cornish, S.M., P.D. Chilibeck, and **D.G. Candow**. (2020). Potential importance of immune system response to exercise on aging muscle and bone. *Current Osteoporosis Reports*, 18(4): 350356.
- 44. Vieira, I.P., A.G. de Paula, P. Gentil, C. Pichard, **D.G. Candow**, and G.D. Pimentel. (2020). Effects of Creatine Supplementation on Lower-Limb Muscle Endurance Following an Acute Bout of Aerobic Exercise in Young Men. *Sports* (*Basel*), 21;8(2). pii: E12.
- 45. **Candow, D.G.**, S.C. Forbes, P.D. Chilibeck. S.M. Cornish, J. Antonio, and R.B. Kreider (2019). Variables influencing the effectiveness of creatine supplementation as a therapeutic intervention for sarcopenia. *Frontiers Nutrition*, 9: 6; 124.
- 46. Forbes, S.C., **D.G. Candow**, J. Krentz, M. Roberts, and K. Young. (2019). Changes in fat mass following creatine supplementation in adults ≥ 50 years of age: A meta-analysis. *Journal of Functional Morphology and Kinesiology*, 4(3): 62.
- 47. Bernat, P., **D. G. Candow**, K. Gryzb, S. Butchart, B. J. Schoenfeld, and P. Bruno (2019). Effects of creatine supplementation and high-velocity resistance training in untrained healthy aging males. *Applied Physiology, Nutrition and Metabolism*, 44(11): 1246-1253.
- 48. Stecker, R.A., P.S. Harty, A.R. Jagim, **D.G. Candow**, and C.M. Kerksick. (2019). Timing of ergogenic aids and micronutrients on muscle and exercise performance. *Journal of the International Society of Sports Nutrition*, 16 (1): 37.
- 49. **Candow, D.G.**, S.C. Forbes, P.D. Chilibeck. S.M. Cornish, J. Antonio, and R.B. Kreider (2019). Effectiveness of creatine supplementation on aging muscle and bone: Focus on falls prevention and inflammation. *Journal of Clinical Medicine*, 8 (4): 488-502.
- 50. **Candow, D.G.,** S.C. Forbes, E. Vogt (2019). Effect of pre and post-exercise creatine supplementation on bone mineral in healthy aging adults. *Experimental Gerontology*, 119: 89-92.

- 51. Chami, J., **D.G. Candow**. (2019). Effect of creatine supplementation dosing strategies on aging muscle performance and functionality. *Journal of Nutrition, Health and Aging, 23(3): 281-285.*
- 52. Stopyn, RJN., and **D.G. Candow**. (2019). Review: Cancer and Aging. *The International Journal of Health, Wellness and Society*, 9(3): 1-12.
- 53. Martin, AC., and **D.G. Candow**. (2019). Effects of online Yoga and Tai Chi on physical health outcome measures of adults informal caregivers. *International Journal of Yoga*, 12(1): 37-44.
- 54. Forbes, SC., and **D.G. Candow**. (2018). Timing of creatine supplementation and resistance training: A brief review. *Journal of Exercise and Nutrition*, 1:5.
- 55. Forbes, S.C., P.D. Chilibeck, **D.G. Candow**. (2018). Creatine Supplementation During Resistance Training Does Not Lead to Greater Bone Mineral Density in Older Humans: A Brief Meta-Analysis. *Frontiers Nutrition*, 2018 Apr 24; 5:27.
- Chilibeck, P.D., M. Kaviani, D. G. Candow, Gordon A. Zello. (2017). Effect of Creatine Supplementation during Resistance Training on Lean Tissue Mass and Muscular Strength in Older Adults: A meta-analysis. *Open Access Journal* of Sports Medicine, 8: 213-226.
- 57. Kreider, R.B., D.S. Kalman, J. Antonio, T.N. Ziegenfuss, R. Wildman, R. Collins, **D.G. Candow**, S.M. Kleiner, A.L. Almada, H.L. Lopez. (2017). International Society of Sports Nutrition position stand: safety and efficacy of creatine supplementation in exercise, sport, and medicine. *Journal of the International Society of Sports Nutrition*, 13; 14:18.
- 58. Duff, W.R., P.D. Chilibeck, **D.G. Candow**, J.J. Gordon, R.S. Mason, R. Taylor-Gjevre, B. Nair, M. Szafron, A. Baxter-Jones, G.A. Zello, S. Kontulainen.(2017). Effects of Ibuprofen and Resistance Training on Bone and Muscle: An RCT in Older Women. *Medicine and Science in Sports and Exercise*, 49(4): 633-640.
- 59. Duff, W.R.D., P.D. Chilibeck, **D.G. Candow**, J.J. Rooke, R. Mason, R. Taylor-Gjevre, B. Nair, M. Szafron, A. Baxter-Jones, S.A. Kontulainen. (2016). Effects of low-dose ibuprofen supplementation and resistance training on body composition and muscle strength in postmenopausal women. *Bone Reports*, 5: 96-103.
- 60. Johannsmeyer, S., **D.G. Candow,** C.M. Brahms, D. Michel, G.A. Zello. (2016). Effect of creatine supplementation and drop-set resistance training in untrained aging adults. *Experimental Gerontology*, 83:112-9.

- 61. Forbes, S.C., N. Sletten, C. Durrer, É. Myette-Cote, **D.G. Candow**, J.P. Little (2016). Creatine Monohydrate Supplementation Does Not Augment Fitness, Performance, or Body Composition Adaptations in Response to Four Weeks of High-Intensity Interval Training in Young Females. *International Journal of Sport Nutrition and Exercise Metabolism*, 21:1-23.
- 62. Gualano, B., E. S. Rawson, **D. G. Candow**, P. D. Chilibeck. (2016). Review: Creatine supplementation in the aging population: Effects on skeletal muscle, bone and brain. *Amino Acids*, 48(8): 1793-1805.
- 63. Boychuk, K.E., J. L. Lanovaz, J. R. Krentz, J. U. Lishchynsky, **D.G. Candow**, J. P. Farthing (2016). Creatine supplementation does not alter recovery from damaging eccentric exercise. *Muscle & Nerve*, 54(3): 487-495.
- 64. Baker, T., **D.G. Candow**, J.P. Farthing. (2016). Effect of pre-exercise creatine ingestion on muscle performance in healthy aging males. *Journal of Strength and Conditioning Research*, 30(6): 1763-1766.
- 65. Martin, A.C., **D.G. Candow**. (2016). Tai Chi's Potential for Improving Health Outcome Measures in Informal Caregivers. *The International Journal of Health, Wellness and Society*, 6(4): 35-50.
- 66. Martin, A.C., **D.G. Candow**. (2016). Potential of Yoga for Improving Health Outcome Measures in Informal Caregivers. *The International Journal of Health, Wellness and Society*, 7(10): 15-32.
- 67. **Candow, D.G.**, E. Vogt, S. Johannsmeyer, S. C. Forbes, J.P. Farthing. (2015). Strategic ingestion of creatine supplementation and resistance training in healthy older adults. *Applied Physiology Nutrition and Metabolism*, 40(7): 689-694. * Selected as top Editor's choice.
- 68. Chilibeck, P.D., **D.G. Candow**, T. Landeryou, M. Kaviani, L. Paus-Jenssen (2015). Effects of creatine and resistance training on bone health in postmenopausal women. *Medicine and Science in Sports and Exercise, 47(8): 1587-1595.*
- 69. Weisgarber, K.D., **D.G. Candow,** J.P. Farthing (2015). Whey protein and high-volume resistance training in postmenopausal women. *Journal of Nutrition, Health and Aging,* 19(5): 511-517.
- 70. **Candow, D.G.**, G.A. Zello, B. Ling, J.P. Farthing, P.D. Chilibeck, K. McLeod, J. Harris, S.J. Johnson. (2014). Comparison of creatine supplementation before versus after supervised resistance training in healthy older adults. *Research in Sports Medicine*, 22(1):61-74.

- 71. **Candow DG**, P.D. Chilibeck, S.C. Forbes. (2014). Creatine supplementation and aging musculoskeletal health. *Endocrine*, 45(3):354-356.
- 72. Forbes, S.C., X. Waltz, **D.G. Candow.** (2014). Creatine timing on muscle mass and strength: Appetizer or Dessert? *European Journal of Nutraceuticals and Functional Foods*, 25(4):19-22.
- 73. Len, T.K., J. P. Neary, G.J. Asmundson, **D.G. Candow**, D. Goodman, B. Bjornson, Y. Bhambhani. (2013). Serial monitoring of CO₂ reactivity following sport concussion using hypocapnia and hypercapnia. *Brain Injury*, 27(3):346-353.
- 74. Salmon, D.M., M. F. Harrison, D. Sharpe, **D. G. Candow**, W. J. Albert, J.P. Neary. (2013). Exercise therapy for improved neck muscle function in helicopter aircrew. *Aviation*, *Space*, *and Environmental Medicine*, 84 (10):1046-1054.
- 75. **Candow, D.G.,** S.C. Forbes, J.P. Little, S.M. Cornish, C. Pinkoski, P.D. Chilibeck. (2012). Effect of nutritional interventions and resistance exercise on aging muscle mass and strength. *Biogerontology*, 13(4):345-358.
- 76. **Candow, D.G.,** P.D. Chilibeck, K.D. Weisgarber, E.S.M. Vogt, A.D.G. Baxter-Jones. (2012). Ingestion of low-dose ibuprofen following resistance exercise in postmenopausal women. *Journal of Cachexia, Sarcopenia and Muscle*, 4(1):41-46
- 77. Weisgarber, K.D., **D.G. Candow**, E.S.M. Vogt. (2012). Whey protein before and during resistance exercise has no effect on muscle mass and strength in untrained young adults. *International Journal of Sport Nutrition and Exercise Metabolism*, 22:463-469.
- 78. Forbes, S.C., J. P. Little, **D.G. Candow**. (2012). Exercise and nutritional intervention strategies for improving aging muscle health. *Endocrine*, 42(1):29-38
- 79. Manders, R.J., J.P. Little, S.C. Forbes, **D.G. Candow**. (2012). Insulinotropic and muscle protein synthetic effects of branched-chain amino acids: potential therapy for type 2 diabetes and sarcopenia. *Nutrients*, 4(11):1664-1678.
- 80. Kosar, A., **D.G. Candow**, J.T. Putland. (2012). Potential beneficial effects of whole-body vibration for muscle recovery following exercise. *Journal of Strength and Conditioning Research*, 26(10):2907-2911.
- 81. **Candow**, **D.G.** (2011). Sarcopenia: current theories and the potential beneficial effect of creatine application strategies. *Biogerontology*, 12(4):273-281.

- 82. **Candow, D.G.**, D.G. Burke, P.D. Chilibeck, K. Mueller, J. Lewis, J. Lazorko. (2011). Effect of different frequencies of creatine supplementation on muscle size and strength in young adults. *Journal of Strength and Conditioning Research*, 25(7):1831-1838.
- 83. **Candow**, **D.G.**, P.D. Chilibeck, S. Abeysekara, G.A. Zello. *(*2011). Short-term heavy resistance training eliminates age-related deficits in muscle mass and strength in healthy older males. *Journal of Strength and Conditioning Research*, 25(2):326-333.
- 84. **Candow**, **D.G.**, P.D. Chilibeck. (2010). Review: Potential effect of creatine supplementation for improving properties of aging bone health. *Journal of Nutrition, Health and Aging*, 14(2):149-153.
- 85. **Candow**, **D.G.**, A. Kleisinger, S. Grenier, K. Dorsch. (2009). Effect of sugar free Red Bull energy drink on short-term high intensity run time-to-exhaustion. *Journal of Strength and Conditioning Research*, 23(4):1271-1275.
- 86. Cornish, S.M., **D.G. Candow,** N. T. Jantz, P. D. Chilibeck, J. P. Little, S. Forbes, S. Abeysekara, G. A. Zello. (2009). Conjugated linoleic acid combined with creatine monohydrate and whey protein supplementation during strength training. International Journal of Sport Nutrition and Exercise Metabolism, 19:79-96.
- 87. Johnston, A.P.W., D.G. Burke, L.G. MacNeil, **D.G. Candow** (2009). Effect of creatine supplementation during cast-induced immobilization on the preservation of muscle mass, strength, and endurance. *Journal of Strength and Conditioning Research*, 23(1):116-120.
- 88. **Candow, D.G.,** J. P. Little, P. D. Chilibeck, S. Abeysekara, G. A. Zello, M. Kazachkov, S. M. Cornish, P.H. Yu. (2008). Low-dose creatine combined with protein during resistance training in older men. *Medicine and Science in Sports and Exercise*, 40(9):1645-1652.
- 89. **Candow**, **D.G.** (2008). Potential effect of creatine supplementation on properties of aging bone. *European Journal of Nutraceuticals and Functional Foods*, 19(5):62-63.
- 90. **Candow, D.G.** (2008). The impact of nutritional and exercise strategies for aging bone and muscle. *Applied Physiology, Nutrition, and Metabolism*, 33:181-183.
- 91. **Candow**, **D.G.**, P.D. Chilibeck. (2008). Review: Timing of creatine and protein supplementation during resistance training in the elderly. *Applied Physiology*, *Nutrition*, *and Metabolism*, 33: 184-190.

- 92. Burke, D.G., **D. G. Candow**, P. D. Chilibeck, L. G. MacNeil, B. D. Roy, M. A. Tarnopolsky, T. Ziegenfuss. (2008). Effect of creatine supplementation and resistance training on muscle IGF-I and lean tissue mass in young adults. *International Journal of Sport Nutrition and Exercise Metabolism*, 18: 403-412.
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- 96. Forbes, S.C., **D.G. Candow**, J. Little, C. Magnus, P.D. Chilibeck. (2007). Effect of Red Bull® energy drink on repeated Wingate cycle performance and bench press muscular endurance. *International Journal of Sport Nutrition and Exercise Metabolism*, 17:433-444.
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- 98. **Candow, D.G.**, N.C. Burke, T.S. Palmer, D.G. Burke. (2006). Effect of whey and soy protein supplementation during resistance training in young adults. *International Journal of Sport Nutrition and Exercise Metabolism*, 3:233-244.
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- 102. **Candow, D.G.** (2004). Effect of dietary protein on muscle protein turnover and nitrogen balance. *Patient Care*, 15:1-4.
- 103. Burke, D.G., P.D. Chilibeck, G. Parise, M.A. Tarnopolsky, **D.G. Candow.** (2003). Effect of alpha-lipoic acid combined with creatine monohydrate on human skeletal muscle creatine and phosphagen concentration. *International Journal of Sport Nutrition and Exercise Metabolism*, 13(3):294-302.
- 104. Burke, D.G., P.D. Chilibeck, G. Parise, **D.G. Candow**, D. Mahoney, M.A. Tarnopolsky. (2003). Effect of creatine and weight training on muscle creatine and performance in vegetarians. *Medicine and Science in Sports and Exercise*, 35(11):1946-1955.
- 105. **Candow, D.G.,** P.D. Chilibeck, D.G. Burke, K.S. Davison, T.S. Palmer. (2001). Effect of glutamine supplementation combined with resistance training. *European Journal of Applied Physiology*, 86:142-149.
- 106. Burke, D.G., P.D. Chilibeck, K.S. Davison, D.G. Candow, J. Farthing, T.S. Palmer. (2001). The effect of whey protein supplementation with and without creatine monohydrate combined with resistance training on lean tissue mass and muscle performance. *International Journal of Sport Nutrition and Exercise Metabolism*, 11:349-364.

2.2 BOOK CHAPTERS (6)

- Kreider, R.B., D. S. Kalman, J. Antonio, T. N. Ziegenfuss, R. Wildman, D. G. Candow, C. M. Kerksick. Creatine. In: Handbook of Nutraceuticals and Functional Foods. 3rd Edition. 2020. CRC Press. Taylor & Francis Group. Chapter 15. pp. 267-294.
- 2. Forbes, S.C., **D.G. Candow**, K. McLeod. (2015). Sarcopenia Potential beneficial effects of creatine supplementation. In: *Foods and Dietary* Supplements *in the Prevention and Treatment of Disease in Older Adults.* Chapter 4, pp. 37-40. Elsevier, Inc. Eds. R. Watson.
- 3. **Candow, D.G.** (2012). Creatine and Resistance Exercise: A possible role in the prevention of muscle loss with aging. *In: Bioactive Food as Dietary Interventions for the Aging Population.* Volume 1. Chapter 11, pp. 139-143. Elsevier, Inc. Eds. Ronald Watson, Victor Preedy.

- 4. **Candow, D.G.,** D. G. Burke. (2012). Protein supplementation strategies on body composition, exercise performance, and muscle protein kinetics. In: *Current Results of Strength Training Research-Different Aspects on Fitness and Performance.* Volume 3. pp. 49-56. Eds. Jurgen Giebing, Michael Frohlich, and Roland Robler. Cuviller Verlag Gittingen.
- Salmon, D.M., M.F. Harrison, D. Sharpe, D.G. Candow, W. J. Albert, J.P. Neary. (2011). The Effect of Neck Muscle Exercise Training on Self Reported Pain in CH-146 Griffon Helicopter Aircrew. In: Shaping the Future: Military and Veteran Health Research (Eds A.B. Aiken & S.A. Belanger). Chapter 7. pp: 79-105. Canadian Defence Academy Press. Kingston, ON. (DND).
- Candow, D.G., D. G. Burke. (2008). Resistance Training Strategies for Increasing Muscle Mass and Strength in Untrained Adults. In: *Current Results* of Strength Training Research. Volume 2. Pp. 139-149. Eds. Jurgen Giebing, Michael Frohlich. Cuviller Verlag Gittingen.

2.3 EXTERNAL FUNDING AWARDED (\$1,791,217)

Egg Farmers of Canada (2021)

Title: Egg versus whey protein as the optimal supplement for fitness-conscious

people.

Role: Co-Applicant Award: \$74,980

Saskatchewan Health Research Foundation-Establishment Grant (2019)

Title: Feasibility of the STABLE program for community-dwelling older adults with

cancer: A randomized controlled trial.

Role: Co-applicant **Award: \$119,050**

University of Saskatchewan-College of Medicine Research Award (2019)

Title: Optimal loading for flywheel power training in older adults

Role: Named Collaborator Award: \$28,637 / 1 year

Canada Foundation for Innovation- JELF (2019)

Title: Infrastructure for Cardiovascular and Metabolic Health Research

Role: Co-Applicant Award: \$136,000

Canadian Institutes for Health Research- Project Grant (2018-2021)

Title: Evaluation of an Older Adult-Continuing Care Aide Dyad Exercise Program

within Home Care Networks

Role: Co-Applicant

Award: \$ 485,775 / 3 years

Canadian Institutes for Health Research- Randomized Controlled Trial (2013-2018)

Title: Long-term effects of creatine supplementation and exercise training on bone

mineral density and bone strength in postmenopausal women

Role: Co-Principal Applicant **Award: \$ 578,455 / 5 years**

Canadian Institutes for Health Research- Drug Catalyst Grant (2012-2013)

Title: Ibuprofen supplementation after resistance training and its effects on bone in

postmenopausal women Role: Co-Principal Applicant Request: \$99,212 / 1 year

Nutricia Research Foundation-Operating Grant (2010-2012)

Title: Potential of creatine application strategies and resistance-exercise for

improving musculoskeletal health in older adults

Role: Principal Applicant Award: \$72,000 / 2 years

Canada Foundation for Innovation- Leaders Opportunity (2009)

Title: Infrastructure for aging musculosleketal research

Role: Principal Applicant

Award: \$54,520

Saskatchewan Health Research Foundation-New Investigator (2009)

Title: Effect of resistance-exercise and creatine supplementation on aging

musculoskeletal health Role: Principal Applicant **Award: \$79,988 / 2 years**

Saskatchewan Health Research Foundation-Establishment (2009)

Title: Resistance-exercise infrastructure

Role: Principal Applicant

Award: \$30,000

Iovate Research and Development (2006)

Title: The effect of combining CLA, protein and creatine during resistance training.

Role: Co-applicant **Award: \$18,100**

Experimental and Applied Sciences, Inc (2003)

Title: Effects of protein and creatine supplementation combined with resistance training on muscle performance, body composition, muscle protein catabolism and bone resorption in older men.

Role: Principal Applicant **Award: \$14,500 / 2 years**

2.4 INTERNAL (UNIVERSITY) FUNDING AWARDED (\$57,440)

University of Regina-Presidents Research Fund (2021)

Title: Whole-egg protein vs. whey protein on measures of muscle mass and

strength in resistance training adults.

Role: Principal Applicant

Award: \$5,000

University of Regina-Presidents Research Fund (2021)

Title: Effects of creatine supplementation on motor skill acquisition and related

neurophysiology.

Role: Co-Principal Applicant

Award: \$4,992

University of Regina-Presidents Research Fund (2012)

Title: Effects of whey protein and resistance training in postmenopausal women.

Role: Principal Applicant

Award: \$4,900

University of Regina- Conference Fund (2011)

Title: Canadian Society for Exercise Physiology Conference.

Role: Principal Applicant

Award: \$3,000

University of Regina-Research Trust Fund (2010)

Title: Multiple Sclerosis: Potential benefits of whole-body vibration and resistance-

exercise

Role: Principal Applicant

Award: \$8,005

University of Regina- Conference Fund (2009)

Title: Exercise Physiologists of Western Canada Conference.

Role: Principal Applicant

Award: \$5,000

University of Regina- Conference Travel Fund (2009)

Title: Canadian Society for Exercise Physiology Annual Conference, Vancouver,

BC.

Role: Principal Applicant

Award: \$1,200

University of Regina- Faculty of Kinesiology & Health Studies (2008)

Title: Muscle Ultrasound Role: Principal Applicant

Award: \$10,700

University of Regina- Research Trust Fund (2007)

Title: Laboratory Development

Principal Applicant **Award: \$6,400**

University of Regina-Presidents Research Fund (2007)

Title: Effects of physical activity strategies and nutrition on functional independence

and quality of life in the elderly. Role: Principal Applicant

Award: \$4,248

Laurentian University (2006)

Title: Effects of nutritional supplementation and resistance training on body

composition, strength and power.

Role: Principal Applicant

Award: \$3,995

2.5 CONFERENCE SYMPOSIUMS

International Conference on Frailty & Sarcopenia Research. Boston, MA. USA. (2022).

Title: The Cross-Talk Between Immune & Muscle Health: Nutrition Interventions to Support Health in Aging.

Role: Chair and presenter

Presenters: Dr. Roger Fielding, Tufts University; Dr. Yves Rolland, University Hospital of Toulouse, Dr. Darren Candow, University of Regina

Canadian Society for Exercise Physiology Annual Conference. St. John's NL. (2014)

Title: Therapeutic Interactions of Exercise and Nutrition for Improving Comorbidities of Sarcopenia

Role: Symposium organizer, chair and presenter

Presenters: Dr. Jonathan Little, University of British Columbia Okanagan; Dr.

David Wright, University of Guelph; Dr. Phil Chilibeck, University of

Saskatchewan; Dr. Darren Candow, University of Regina

World Congress on Active Ageing. Glasgow, Scotland. (2012)

Title: Exercise and Nutritional Intervention for Aging Muscle and Bone Health.

Role: Symposium organizer, chair and presenter

Presenters: Dr. Darren Candow, University of Regina; Dr. Philip Chilibeck, University of Saskatchewan.

American College of Sports Medicine Annual Conference. Baltimore, MD. (2010)

Title: Aging Muscle and Bone Biology: Effects of Strategic Nutritional and Exercise Interventions.

Role: Symposium organizer, chair, and presenter

Presenters: Dr. Mark Tarnopolsky, McMaster University, Dr. Russ Tupling, University of Waterloo, Dr. Philip Chilibeck, University of Saskatchewan, Dr. Darren Candow, University of Regina.

Canadian Society for Exercise Physiology Annual Conference. Vancouver, BC. (2009)

Title: Current Theories and Potential Adjunct Therapies for Aging Muscle Biology Role: Symposium organizer, chair, and presenter

Presenters: Dr. Russ Hepple, University of Calgary; Dr. Russ Tupling, University of Waterloo; Dr. Darren Candow, University of Regina.

Canadian Society for Exercise Physiology Annual Conference. Banff, Alberta. (2008)

Title: Optimizing Beverage Selection for Health and Performance

Role: Symposium organizer and chair

Presenters: Dr. Ron Maughan, Loughborough University; Dr. Susan Whiting, University of Saskatchewan; Dr. Delia Roberts, Selkirk College

Canadian Society for Exercise Physiology Annual Conference. Halifax, NS. (2007)

Title: The Impact of Nutritional and Exercise Strategies for Aging Bone and Muscle Role: Symposium organizer, chair, and presenter

Presenters: Dr. Mark Tarnopolsky, McMaster University; Dr. Philip Chilibeck, University of Saskatchewan; Dr. Gianni Parise, McMaster University, Dr. Darren Candow, University of Regina

2.6 CONFERENCE PRESENTATIONS (Oral) (Presenting Author)

International Society of Sports Nutrition Annual Conference. Rome, Italy (2019)

Title: Creatine supplementation on musculoskeletal health and performance

3rd Annual Sport Nutrition, Health and Performance Conference. Regina, SK (2019).

Title: What would you like for your birthday? More Protein!

International Society of Sports Nutrition-Kennesaw State University Annual Conference. Kennesaw GA. (2019).

Title: Creatine Supplementation and Muscle Biology.

International Society of Sports Nutrition Annual Conference. Clearwater Beach, FL (2018)

Title: Bartender, I'll Have One of Those: Designing the optimal post-exercise nutritional cocktail for aging muscle hypertrophy

Canada Conference on Sports Nutrition and Training Conference. Regina, SK (2017)

Title: In Search of the Holy Grail- Nutritional Intervention for Muscle Hypertrophy

Canadian Society for Exercise Physiology Annual Conference. St. John's, NL (2014)

Title: Effect of different caffeine dosages on aging muscle performance

Title: Effect of pre-exercise creatine ingestion on muscle performance in healthy aging males

Canadian Society for Exercise Physiology Annual Conference. Toronto, ON (2013)

Title: Pre vs. post-exercise creatine supplementation in healthy older adults

Title: Effect of creatine supplementation and progressive resistance training on pQCT derived bone and muscle properties in older adults: A randomized controlled-trial

Canadian Society for Exercise Physiology Annual Conference. Quebec City, QC (2011)

Title: Effects of velocity-based resistance training strategies in healthy older adults

International Society of Sports Nutrition Annual Conference. Las Vegas, NV (2011)

Title: Potential effect of creatine supplementation and resistance-exercise training on aging muscle and bone biology

Pan Pacific Sports Medicine Conference. Honolulu, HI (2011)

Title: Timing of creatine supplementation in older adults

Canadian Society for Exercise Physiology Annual Conference. Vancouver, BC (2009)

Title: Timing of equal-volume creatine supplementation with different dosing frequency in young adult

Canadian Society for Exercise Physiology Annual Conference. Vancouver, BC (2009)

Title: Effect of Red Bull energy drink prior to heavy resistance-exercise in young adults

Canadian Society for Exercise Physiology Annual Conference. Banff, AB (2008)

Title: Effect of Red Bull energy drink on aerobic exercise capacity in young adults

International Society of Sports Nutrition Annual Conference. Las Vegas, NV (2008)

Title: Potential effect of creatine supplementation and resistance-exercise training on properties of aging bone

Canadian Society for Exercise Physiology Annual Conference. Ottawa, ON (2005)

Title: Effect of protein supplementation during resistance training on bone resorption in older men

Canadian Society for Exercise Physiology Annual Conference. Ottawa, ON (2005)

Title: Nutritional supplementation and resistance training in older men eliminates deficits in muscle mass and strength compared to young men

Canadian Society for Exercise Physiology Annual Conference. Saskatoon, SK (2004)

Title: Effect of protein supplementation before and after resistance training in older men

American College of Sports Medicine Annual Conference. San Francisco, CA (2003)

Title: The effect of resistance training with different workout frequency on strength and lean tissue mass

Obesity: New Prescriptions for the Canadian Epidemic Conference. Saskatoon, SK (2003)

Title: Potential benefits of high protein diets

Saskatchewan Exercise Science Association Symposium. Saskatoon, SK (2003)

Title: Protein requirements for athletes

American Society of Exercise Physiologists Annual Conference. Memphis, TN (2001)

Title: Comparison of the changes in muscular strength and body composition resulting from resistance training and consumption of different protein supplements

2.7 CONFERENCE PRESENTATIONS (Poster) (Presenting Author)

American College of Sports Medicine Annual Conference. Minneapolis, MN (2018)

Title: Effect of pre vs. post-exercise creatine supplementation om bone mineral in aging adults.

Canadian Society for Exercise Physiology Annual Conference. Toronto, ON (2013)

Title: Whey protein following unilateral high-volume resistance training has no effect on muscle mass and strength in postmenopausal women

American College of Sports Medicine- Integrated Exercise Physiology Conference. Miami, FL (2010)

Title: Effect of different frequencies of creatine supplementation during resistance-training in young adults

The Physiology Society Annual Conference. Dublin, Ireland (2009)

Title: Effect of creatine and arginine alpha-ketoglutarate supplementation during short-term heavy resistance-exercise on lean tissue mass and muscle strength in young adults

Title: Effect of equal-volume creatine supplementation with different dosing frequency on muscle hypertrophy and strength in young adults

Canadian Federation of Biological Sciences Annual Conference. Winnipeg, MB (2008)

Title: Effect of creatine supplementation and resistance training on muscle IGF-I in young adults

American College of Sports Medicine Annual Conference. Nashville, TN (2005)

Title: The effectiveness of creatine combined with protein supplementation during resistance training in older men

Canadian Society for Exercise Physiology Annual Conference. St. John's, NL (2002)

Title: Effect of resistance training on Crohn's disease

Canadian Society for Exercise Physiology Annual Conference. Montreal, QE (2001)

Title: Effect of soy and whey protein supplementation and resistance training on lean tissue mass, strength and muscle protein degradation

Canadian Society for Exercise Physiology Annual Conference. Canmore, AB (2000)

Title: Effect of glutamine supplementation combined with resistance training

American College of Sports Medicine Annual Conference. Indianapolis, IN (2000)

Title: Effect of creatine supplementation cessation with maintenance of resistance training in old men

2.8 CONFERENCE ABSTRACTS (Contributing Author)

Botero, J.P., E.E.P. dos Santos, R.C. de Araujo, **D.G. Candow**, S.C. Forbes, J. A Guijo, C.C. de Almeida Santana, and W.L Prado. Effects of creatine supplementation and resistance training on muscle strength in older females: Systematic Review and Meta-Analysis. American College of Sports Medicine. San Diego, USA.

Gordon, J., W.R.D. Duff, R. Mason, R. Taylor-Gjevre, B. Nair, G.A. Zello, **D.G. Candow**, and P.D. Chilibeck. (2019). The effect of two years of creatine monohydrate supplementation during resistance and walking training on bone health in postmenopausal women. *Canadian Society for Exercise Physiology Annual Conference*. Kelowna, BC, Canada.

Forbes, S.C., J.R. Krentz, and **D.G. Candow**. (2019). Body fat changes following creatine and resistance training in older adults: a meta-analysis. *Canadian Society for Exercise Physiology Annual Conference*. Kelowna, B, Canada.

Duff, W.R.D., P.D. Chilibeck, **D.G. Candow**, J.J. Rooke, R. Mason, R. Taylor-Gjevre, B. Nair, M. Szafron, A. Baxter-Jones, S.A. Kontulainen. (2015). Effects of low-dose ibuprofen supplementation and resistance training on body composition and muscle strength in postmenopausal women. *Canadian Society for Exercise Physiology Conference*. Hamilton, ON, Canada.

- Duff, W.R.D., S.A. Kontulainen, J.J. Rooke, R. Taylor-Gjevre, B. Nair, M. Szafron, A. Baxter-Jones, **D.G. Candow**, P.D. Chilibeck. (2015). Effect of Ibuprofen and Exercise Training on Bone, Body Composition and Strength in Older Women. *Life and Health Sciences Research Conference, University of Saskatchewan (March 13); American College of Sports Medicine Conference*. San Diego, CA, USA.
- Duff, W.R.D., P.D. Chilibeck, **D.G. Candow,** J.J. Rooke, R.Mason, Taylor-Gjevre, B. Nair, M. Szafron, A. Baxter-Jones, G.A. Zello, S.A. Kontulainen. (2015). Effect of exercise training combined with ibuprofen supplementation on bone properties and strength in postmenopausal women: A randomized controlled trial. *American Society for Bone Mineral Research Conference*. Seattle, WA, USA.
- Sletten, N., S.C. Forbes, C. Durrer, **D. G. Candow**, J.P. Little. (2015). The effects of creatine and high intensity interval training on cardiorespiratory fitness, performance, and body composition in young females. *Canadian Society for Exercise Physiology Conference*. Hamilton, ON, Canada.
- Boychuk, K.E., **D. G. Candow**, J.L. Lanovaz, J. R. Krentz, J.P. Farthing. (2013). No effect of creatine supplementation on voluntary muscle activation and muscle damage after eccentric exercise. *Applied Physiology, Nutrition and Metabolism*, 38:1026. Canadian Society for Exercise Physiology Annual Conference. Toronto, ON, Canada.
- Landeryou, T., P.D. Chilibeck, L. Paus-Jenssen, **D.G. Candow**. (2013). Long-term safety of creatine supplementation in older adults. *Applied Physiology, Nutrition and Metabolism*, 38:1051. Canadian Society for Exercise Physiology Annual Conference, Toronto, ON.
- Chilibeck, P.D., J. Rooke, L. Paus-Jenssen, **D.G. Candow**. (2012). The effect of creatine monohydrate supplementation combined with resistance training on bone mineral density in older men and women. *Applied Physiology, Nutrition and Metabolism*, 37:S6. Canadian Society for Exercise Physiology Annual Conference. Regina, SK, Canada.
- Cornish, S.M., **D. G. Candow**, P. D. Chilibeck, N. Jantz, K. Jones, S. Forbes, J. Little. (2007). Effect of supplementing with conjugated linoleic acid, creatine monohydrate, and whey protein during high intensity resistance training in young adults. *Applied Physiology, Nutrition and Metabolism*, 32:S21. Canadian Society for Exercise Physiology Annual Conference, London, ON, Canada.
- Little, J.P., S. C. Forbes, **D. G. Candow**, P. D. Chilibeck. (2007). Effects of a nutritional supplement containing creatine monohydrate and arginine alphaketoglutarate on wingate and bench press performance. *Applied Physiology, Nutrition and Metabolism*, 32:S54. Canadian Society for Exercise Physiology Annual Conference, London, ON, Canada.

- Chilibeck, P.D., **D. G. Candow,** J. Little, T. Grand, S. Abeysekara, G. Zello, M. Kazachkov, P. Yu. (2007). Effect of low-dose creatine monohydrate supplementation on muscle protein catabolism and formaldehyde production in older men. *Medicine and Science in Sports and Exercise*, 39(5):S409. American College of Sports Medicine Annual Conference, New Orleans, LA, USA.
- Forbes, S.C., **D.G. Candow**, J. Little, P.D. Chilibeck. (2007). Effects of a nutritional supplement containing creatine monohydrate and arginine alpha-ketoglutarate in young males. *Medicine and Science in Sports and Exercise*, 39(5):S364. American College of Sports Medicine Annual Conference, New Orleans, LA, USA.
- Jantz, N.T., **D.G. Candow**, K. Jones, J.P. Little, P.D. Chilibeck. (2006). The effects of protein, creatine and conjugated linoleic acid combined with resistance training in young adults. *Applied Physiology, Nutrition and Metabolism*, 31:S40. Canadian Society for Exercise Physiology Annual Conference, Halifax, NS, Canada.
- Pinkoski, C., P.D. Chilibeck, **D.G. Candow**, D. Esliger, J. Farthing. (2004). Conjugated linoleic acid supplementation during strength training. *Medicine and Science in Sports and Exercise*, 36:S284. American College of Sports Medicine Annual Conference, Indianapolis, IN, USA.
- Chilibeck, P.D., **D.G. Candow**, A. Rizvi, L. Worobetz. (2003). Effect of resistance training on disease activity, muscle, and bone in patients with Crohn's Disease. *Medicine and Science in Sports and Exercise*, 35:S350. American College of Sports Medicine Annual Conference, San Francisco, CA, USA.
- Rizvi, A., P.D. Chilibeck, **D.G. Candow**, L. Worobetz. (2003). Differences in lean tissue mass and strength between patients with Crohn's Disease and healthy controls. *Medicine and Science in Sports and Exercise*, 35:S350. American College of Sports Medicine Annual Conference, San Francisco, CA, USA.
- Pinkoski, C., P.D. Chilibeck, J. Farthing, **D.G. Candow**. (2003). Reproducibility and validity of ultrasound measurements on muscle thickness. *Medicine and Science in Sports and Exercise*, 35:S167. American College of Sports Medicine Annual Conference, San Francisco, CA, USA.
- Burke, D.G., P.D. Chilibeck, **D.G. Candow**, G. Parise, M.A. Tarnopolsky, T.S. Palmer. (2001). The effect of creatine supplementation and weight training in vegetarians. *Canadian Journal of Applied Physiology*, 25:469. Canadian Society for Exercise Physiology Annual Conference, Montreal, QC, Canada.
- Grant, C., D.G. Burke, **D.G. Candow**, P.D. Chilibeck, T.S. Palmer. (2001). Total body creatine retention in vegetarians and non-vegetarians during acute creatine loading based on lean tissue mass. *Canadian Journal of Applied Physiology*, 25:483. Canadian Society for Exercise Physiology Annual Conference, Montreal, QC, Canada.

Burke, D.G., P.H. Yu, P.D. Chilibeck, **D.G. Candow**, K.S. Davison, T.S. Palmer. (2000). Development of optimal dosing during creatine supplementation based on lean tissue mass. *Canadian Journal of Applied Physiology*, 25:361. Canadian Society for Exercise Physiology Annual Conference, Canmore, AB, Canada.

Chilibeck, P.D., K.S. Davison, **D.G. Candow**. (2000). Specific strength during concentric and eccentric muscle contraction in young and old women. *Canadian Journal of Applied Physiology*, 25:365. Canadian Society for Exercise Physiology Annual Conference, Canmore, AB, Canada.

2.9 INVITED PRESENTATIONS

International SINSeB Medical Congress- Nutrition and Exercise for Performance, Nutrition and Disease. Italy. June 2022.

Title: Effects of Creatine Supplementation on and Aging Musculoskeletal Form and Function

International Conference on Frailty and Sarcopenia Research. Boston, USA. April 2022.

Title: Is there a link between sarcopenia and immune senescence?

Creatine for Health Conference. Virtual. March 2022.

Title: Current Evidence and Possible Future Applications of Creatine for Older Adults.

Master of Sport Nutrition and Wellness. Italy. January 2022.

Title: Beyond Creatine: Supplementation for Strength Development

Master of Sport Nutrition and Wellness. Italy. September 2021. *Title: Creatine and Sport: Efficacy, Myths and Side Effects*

International Symposium of Nutritional Supplements Conference. Spain. September 2021. *Title: Have we discovered the elusive fountain of youth with creatine supplementation*

Saskatchewan Federation of Police Offices Wellness Conference. Regina, SK, Canada. (2018)

Title: Nutrition and Physical Activity Strategies for Muscle Health

Retirement Planning Institute. Regina and Saskatoon, SK, Canada. (2018)

Title: Nutrition and Physical Activity Strategies for Healthy Aging

International Society of Sports Nutrition Annual Conference. Phoenix, AZ, USA. (2017)

Title: Medical and Clinical Application of Creatine Supplementation for Healthy Aging

SaskFit Conference. Regina, SK, Canada. (2015).

Title: Physical Activity and Nutrition for Healthy Aging.

Creatine Conference. Laufen, Germany. (2015).

Title: Effects of Creatine on Aging Musculoskeletal Health.

Friedrich-Baur Institute. Munich, Germany. (2015).

Title: Creatine and Exercise Training Strategies on Aging Muscle and Bone Biology.

University of Regina Women's Cougars Hockey Team. Regina, SK, Canada. (2015).

Title: Nutritional Strategies for Optimizing Performance.

Saskatchewan Kinesiology and Exercise Science Association Education Day. Saskatoon, SK, Canada. (2013)

Title: Designing the optimal nutritional cocktail for improving aging muscle health.

5th **Annual Exercise Physiologists of Western Canada Conference.** Edmonton. AB, Canada. (2011)

Title: Designing the optimal nutritional cocktail for aging muscle and bone health

Saskatchewan Senior's Health Fair. Regina, SK, Canada. (2008)

Title: Exercise and nutrition therapies for the elderly

Saskatchewan Seniors Mechanism Conference. Regina, SK, Canada. (2008)

Title: Older adults navigating the health care system: Impact of nutrition and physical activity

Saskatchewan Kinesiology and Exercise Science Association Education Day. Saskatoon, SK, Canada. (2008)

Title: Effects of nutritional interventions and exercise on musculoskeletal health

Obesity: New Prescriptions for the Canadian Epidemic Conference. Saskatoon, SK, Canada. (2008)

Title: Potential benefits of high protein diets

SECTION III PROFESSIONAL APPOINTMENTS, SERVICE, and ADMINISTRATION

3.1 University of Regina-Leadership Development Program

- Leadership Assessment
- Emotional Intelligence
- Trust and Honesty in Leadership
- Strategic Leadership and Change
- Adaptive Leadership Skills

3.2 PROFESSIONAL APPOINTMENTS/CREDENTIALS

Frontiers (2021-present)

Title: Member of the Editorial Review Board

Nutrients (2020-present)

Title: Member of the Editorial Review Board

Italian International Society of Sports Nutrition (2020-present)

Role: Scientific Program Advisor

International Society of Sports Nutrition-Advisory Board (2019-present)

Role: Sports Science Advisor

Society for NeuroSports (2019-present)

Role: Scientific advisor

TDF Sports (2018-2019)

Role: Chief Scientific Officer

Professional Standards, Board of Directors, Canadian Society for Exercise Physiology (2014-2016)

Role: Vice-Chair

Journal of Aging and Physical Activity (2012-2019)

Title: Associate Editor

Biogerontology (2012-present)

Title: Member of the Editorial Review Board

Journal of the International Society for Sports Nutrition (2007-present)

Title: Member of the Editorial Review Board

Centre on Aging and Health, University of Regina (2009-2013)

Title: Gerontology Graduate Coordinator

Saskatchewan Kinesiology and Exercise Science Association (2008-2013)

Title: Executive Member of the Board of Directors

Canadian Society for Exercise Physiology (2012-present)

Title: Certified Exercise Physiologist (CEP) and Personal Trainer Course (CPT)-

Designation and Facilitator

3.3 STUDENT SUPERVISION

Student	Subject Area	Degree	Role
Jessica Lewgood	Aging	PhD	Supervisor
Scotty Mills	Creatine Interventions	PhD	Supervisor
Andi-Celine Martin	Mind Body Medicine	PhD	Supervisor
Sarah Johannsmeyer	Rehabilitation	PhD	Supervisor
Thomas Brescani	Resistance Training	MSc	Supervisor
Chelsea Ziolkowski	Resistance Training	MSc	Supervisor
John Odgers	Resistance Training	MSc	Supervisor
Robert Bailie	Exercise Prescription	MSc	Supervisor
Sara Butchart	Aging	MSc	Supervisor
Scott Mills	Sport Nutrition	MSc	Supervisor
Avery Pakaluck	Sport Nutrition	MSc	Supervisor
Patrick Bernat	Aging	MSc	Supervisor
Karolina Gryzb	Aging	MSc	Supervisor
Jennifer Chami	Creatine	MSc	Supervisor
Krissy Weisgarber	Aging Physiology	MSc	Supervisor
Angela Kosar	Exercise Physiology	MSc	Supervisor
Jessica Lewgood	Exercise & Multiple Sclerosis	MSc	Supervisor
Jessica Lewis	Sarcopenia	MSc	Supervisor
Taylor Baker	Creatine	BSc-H	Supervisor
Brian Godwin	Caffeine	BSc- H	Supervisor
Amanda Kleisinger	Caffeine	BSc-H	Supervisor
Stephanie Grenier	Caffeine	BSc-H	Supervisor
Danielle Gervais	Creatine	BSc-H	Supervisor
Kathleen Shain	Caffeine	BSc-H	Supervisor
Nic Ryan	Low Back Pain	PhD	Committee member
Jo Singh	Concussion	PhD	Committee member
Landyn Hickmott	Training	PhD	Committee member
Rob Morton	Muscle Biology	PhD	Committee member
Dan LeBoutillier	Anxiety	PhD	Committee member
Murray Abrams	Anxiety	PhD	Committee member
Sarah Chan	Chronic Pain	PhD	Committee member
Matt Fretzner	Anxiety	PhD	Committee member
Brandon Krug	Biology	PhD	Committee member
Omeed Ghandehari	Psychology	PhD	Committee member
Eric Wu	Stroke	MSc	Committee member
Mike Markewich	Resistance Training	MSc	Committee member
Taylor Teckchandani	Concussion	MSc	Committee member
Drew Walford	Obesity	MSc	Committee member
Michael Alesi	Creatine	MSc	Committee member
Ed Toledo	Cross-Education	MSc	Committee member

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Luke Sirant	Concussion	MSc	Committee member
Jo Singh	Concussion	MSc	Committee member
lan Rowan-Legg	Pain	MSc	Committee member
Michael Harrison	Fatigue	MSc	Committee member
Erin Tyson	Pre-habilitation	MSc	Committee member
Simon Schaerz	Thermoregulation	MSc	Committee member
Whitney Duff	Heart Physiology	MSc	Committee member
Trevor Len	Heart Physiology	MSc	Committee member
Emelie Vogt	Heart Physiology	MSc	Committee member
Barclay Dalstrom	Neurophysiology	MSc	Committee member
David MacQuarrie	Hypoxia	MSc	Committee member
Christian Clermont	Osteoarthritis	MSc	Committee member
Sheila Kelly	Diabetes	MSc	Committee member
Nana Bonsu	Diabetes	MSc	Committee member
Danielle Salmon	Fatigue	MSc	Committee member
Jonathan Harris	Dementia	MSc	Committee member

3.4 CONFERENCE ORGANIZATION & FACILITATION

Sport Nutrition, Health and Performance Conference. Regina, SK, Canada. (2018, 2019)

Role: Conference organizer and chair

Canada Conference on Sports Nutrition and Training. Regina, SK, Canada. (2017)

Role: Conference organizer, chair and presenter

Clinical and Applied Training Techniques for Optimal Performance Conference. Regina, SK, Canada. (2017, 2019)

Role: Conference organizer

Canadian Society for Exercise Physiology Annual Conference. Regina, SK, Canada. (2012)

Role: Conference organizer and chair

Exercise Physiologists of Western Canada Annual Conference. Regina, SK, Canada. (2010).

Role: Conference organizer and chair

Kinesiology Research Seminar Series

Faculty of Kinesiology & Health Studies, University of Regina. Regina, SK, Canada. (2008-2010)

Role: Organizer, chair and presenter

Kinesiology Conference. Laurentian University, Sudbury, ON, Canada. (2008).

Role: Conference organizer and chair

3.5 INVITED GUEST EDITOR

Special Issue: Nutrition for Human Health, Performance and Recovery (2020)

Journal: Nutrients

Special Issue: Interaction of Amino Acids and Dietary Proteins and Exercise

on Muscle Health (2013)

Journal: Nutrients

3.6 INVITED EXTERNAL EXAMINER

MSc Defense : Katherine Ludlow. Biology. University of Regina. (2015)

PhD Defence: Cameron Mitchell. Kinesiology. McMaster University. (2013)

Dissertation Title: Determinants of the magnitude of resistance training mediated

muscle hypertrophy

Tenure Review: Dr. Scott Butcher. School of Physical Therapy, University of

Saskatchewan. (2012)

MSc Defense: Cody Vandommele. Kinesiology, Brock University. (2012)

Thesis Title: Regulation of protein turnover during hyper-osmotic stress in skeletal

muscle

MSc Defense: Clair Bearfoot. Psychology, University of Regina. (2011)

Thesis Title: Evaluation of a self-management program for older adults with chronic

pain

3.7 INVITED REVIEW COMMITTEE MEMBER

Canadian Institutes for Health Research (CIHR)-Movement and Exercise Committee: Project Grant Competition (2019)

3.8 INVITED GRANT REVIEWER

Grant Applications: Natural Science and Engineering Research Council (5), Canada Foundation for Innovation (2), Dairy Farmers of Canada (5), University of Saskatchewan Medical School Research Foundation (7), Polish Research Foundation (3), Saskatchewan Pulse Foundation (1), Saskatchewan Health Research Foundation (9), Mitacs (1)

3.9 INVITED MANUSCRIPT REVIEWER

Journal of Aging and Physical Activity; Applied Physiology, Nutrition and Metabolism; Medicine and Science in Sports and Exercise; Journal of Applied Physiology; Journal of the American Aging Association; Amino Acids; Rejuvenation Research; Molecular Nutrition and Food Research; Physician and Sports Medicine; International Journal of Sport Nutrition and Exercise Metabolism; International Sport Medicine Journal; Journal of the International Society of Sports Nutrition; Acta Physiologica; Sports Medicine; Nutrients; European Journal of Nutraceuticals and Functional Foods; Experimental Gerontology

3.10 CONSULTING

Ontario Ministry of Training (2016)

Role: Seneca College Program Application-Therapeutic Recreation

Saskatchewan Sports Medicine Council (2008-present)

Role: Exercise Physiology Consultant

3.11 COMMITTEES

Canadian Society for Exercise Physiology

- Vice-Chair (Professional Standards), Board of Directors
- Certified Members Awards Committee
- Board Liaison: Professional Standards Committee
- Annual General Meeting Planning Committee
- Finance Committee
- -Appeals Committee

University Wide Committees: University of Regina

- Canada Research Chair Selection
- Research Impact
- Executive Council
- University Council Committee on Budget
- University Council Committee on Research
- Biosafety Advisory Committee (Kinesiology representative)
- FGSR
- Research Stories Working Group
- AD Committee
- CIHR University of Regina Strategic Development Committee
- Aboriginal Health Research Chair Committee
- Academic Leadership Committee
- Canada Foundation for Innovation
- PhD Special Case Committee

Faculty of Kinesiology and Health Studies Committees: University of Regina

- KHS Leadership Committee
- KHS Safety Committee
- Chair-Graduate Steering Committee
- Chair-KHS Research Day
- Chair-Criteria Document Review Committee
- Chair- KHS Honours Program
- Chair-MKin program development
- Chair-Peer Review Committee

School of Human Kinetics Committees: Laurentian University

- Biosafety
- Laboratory
- Kinesiology
- Research Ethics

SECTION IV TEACHING

4.1 COURSES (* instructed multiple times)

Faculty of Kinesiology and Health Studies, University of Regina

*Course: KHS 800/900 Graduate Seminar (Graduate Level)

Faculty of Kinesiology and Health Studies, University of Regina Course: KHS 887 Nutrition, Exercise and Physiology (Graduate Level)

Faculty of Kinesiology and Health Studies, University of Regina *Course: KHS 892 Physiology of Aging (Graduate Level)

Faculty of Kinesiology and Health Studies, University of Regina
*Course: KHS 880 Exercise Physiology and Metabolism (Graduate Level)

Faculty of Kinesiology and Health Studies, University of Regina *Course: KIN 475 Sport Nutrition and Exercise Metabolism

Faculty of Kinesiology and Health Studies, University of Regina *Course: KHS 373 Training and Conditioning

Faculty of Kinesiology and Health Studies, University of Regina *Course: KHS 372 Fitness Appraisal and Exercise Leadership

Faculty of Kinesiology and Health Studies, University of Regina *Course: KIN 369 Advanced Exercise Physiology

Faculty of Kinesiology and Health Studies, University of Regina

*Course: KIN 275 Introduction to Nutriton

Faculty of Kinesiology and Health Studies, University of Regina

*Course: KIN 269 Exercise Physiology

Faculty of Kinesiology and Health Studies, University of Regina

*Course: KIN 267 Human Physiology

Faculty of Kinesiology and Health Studies, University of Regina

Course: KIN 261 Anatomy & Physiology

Faculty of Kinesiology and Health Studies, University of Regina

*Course: KIN 170 Lifestyle, Health and Wellness

School of Human Kinetics, Laurentian University

*Course: PHED 4107 Human Development and Physical Activity

School of Human Kinetics, Laurentian University

*Course: PHED 3219 Basic Principles of Weight Training

School of Human Kinetics, Laurentian University

Course: PHED 1106 Human Movement

College of Kinesiology, University of Saskatchewan

Course: KIN 470 Fitness Appraiser Practicum

College of Kinesiology, University of Saskatchewan

*Course: KIN 428 Nutrition, Drugs, and Physical Activity

College of Kinesiology, University of Saskatchewan

*Course: KIN 226 Cardiovascular Physiology

College of Kinesiology, University of Saskatchewan

*Course: KIN 225 Exercise Physiology

4.2 INVITED GUEST LECTURES

College of Pharmacy and Nutrition, University of Saskatchewan. Saskatoon,

SK, Canada. (2003) Course: Pharmacology

Topic: Ergogenic aids and banned substances in exercise performance

College of Kinesiology, University of Saskatchewan. Saskatoon, SK, Canada. (2003)

Course: Adult Fitness and Exercise Management (Certified Fitness Consultant)

Topic: Muscle physiology

College of Kinesiology, University of Saskatchewan. Saskatoon, SK, Canada. (2003)

Course: Ethics and Values in Sport and Physical Activity Topic: Ethical use of creatine supplementation in sport

Faculty of Health Sciences, University of Saskatchewan. Saskatoon, SK, Canada (2002)

Canada. (2003)

Course: Personal Health

Topic: Effect and safety of ergogenic aids

College of Kinesiology, University of Saskatchewan. Saskatoon, SK, Canada. (2002)

Course: Adult Fitness and Exercise Management (Certified Fitness Consultant

course)

Topic: Nutrition for the Certified Fitness Consultant

School of Physiotherapy, University of Saskatchewan. Saskatoon, SK, Canada. (2001)

Course: Exercise Physiology

Topic: Anaerobic metabolism-functions of glycolysis and creatine metabolism