CURRICULUM VITAE

David L. Williamson IV, Ph.D.

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EDUCATION

- 1995 — Pennsylvania State University — B.S.-Exercise and Sport Science
- 1999 — Ball State University — M.S.-Exercise Physiology
  Thesis: Effects of progressive resistance training on skeletal muscle protein isoform adaptations in elderly men
- 2002 — Ball State University — Ph.D.-Human Bioenergetics
  Dissertation: Intracellular signaling, sarcopenia, and exercise

POST-DOCTORAL TRAINING

- 2002-2006 — Pennsylvania State University, College of Medicine, Cellular and Molecular Physiology — Post-Doctoral Fellow

PROFESSIONAL EXPERIENCE:

- 2006-2010 — West Virginia University, School of Medicine, Department of Human Performance and Health Professions, Division of Exercise Physiology — Assistant Professor (Non-Tenure/Clinical Line)
- 2010-2016 — University at Buffalo, SUNY, School of Public Health and Health Professions, Department of Exercise and Nutrition Sciences — Assistant Professor (Tenure-Line)
- 2016-present — Penn State Harrisburg, School of Behavioral Sciences & Education, Kinesiology Program — Assistant Professor (Tenure-Line)

OTHER EXPERIENCE

- 1995-1997 Pennsylvania State University — Research Technician
  Noll Physiological Research Center
  (PI: John P. Kirwan, Ph.D.)

HONORS/AWARDS

1998	Student Research Award, Ball State University
1998	Neuromuscular Performance: Advanced Research Methods, Catholic University of Leuven, Belgium
2001	Student Research Award, Gatorade Sport Science Institute
2001	Student Research Award, Ball State University

PEER-REVIEWED PUBLICATIONS

1. **Williamson, D.L.** and J.P. Kirwan. An acute bout of resistance exercise increases BMR 48 hrs. after resistive exercise in older men. *J. Gerontol. Med. Sci. 52: M352-M355, 1997.*

2. Krishnan, R.K., J.M. Hernandez, **D.L. Williamson**, D.J. O'Gorman, W.J. Evans, J.P. Kirwan. Age related differences in the pancreatic ß-cell response to hyperglycemia after eccentric exercise. *Am. J. Physiol. 275: E463-E470, 1998.*

3. **Williamson, D.L.**, M.P. Godard, D.A. Porter, D.L. Costill, S.W. Trappe. Progressive resistance training reduces myosin heavy chain coexpression in single muscle fibers from older men. *J. Appl. Physiol. 88: 627-633, 2000.*

4. Kirwan, J.P., L. Aguila, J.M. Hernandez, **D.L. Williamson**, D.J. O'Gorman, R.L. Lewis, R. K. Krishnan. Regular exercise enhances insulin activation of IRS-1-associated PI-3 kinase in human skeletal muscle. *J. Appl. Physiol. 88: 797-803, 2000.*

5. Carrithers, J.A., **D.L. Williamson**, P.M. Gallagher, M.P. Godard, K.E. Schulze, S.W. Trappe. Effects of postexercise carbohydrate-protein feedings on muscle glycogen restoration. *J. Appl . Physiol. 88: 1976-1982, 2000.*

6. Parcell, A.C., S.W. Trappe, M.P. Godard, **D.L. Williamson**, W.J. Fink, D.L. Costill. An upper arm model for simulated weightlessness. *Acta Physiol. Scand. 169: 47-54, 2000.*

7. Trappe, S.W., **D.L. Williamson**, M.P. Godard, D.A. Porter, G. Rowden, D.L. Costill. Effect of resistance training on single muscle fiber function in older men. *J. Appl. Physiol. 89:143-152, 2000.*

8. O'Gorman, D. J., L. F. del Aguila, **D. L. Williamson**, R. K. Krishnan, J. P. Kirwan. Insulin and exercise differentially regulate IRS-1-associated PI3-kinase and glycogen synthase in human skeletal muscle. *J. Appl. Physiol. 89:1412-1419, 2000.*

9. Godard, M.P., **D.L. Williamson**, D.A. Porter, G. Rowden, S.W. Trappe. Concentric and eccentric neuromuscular drive with a 12 week knee extensor progressive resistance training program in older men. *J. Aging Phys. Act. 9:438-451, 2001.*

10. **Williamson, D. L.**, P. M. Gallagher, C. C. Carroll, U. Raue, S. W. Trappe. Reduction in hybrid single muscle fiber proportions with resistance training in humans. *J. Appl. Physiol. 91:1955-1966, 2001.*

11. Trappe, S., **D. Williamson**, M. Godard. Maintenance of whole muscle strength and size following resistance training in older men. *J. Gerontol. Biol. Sci. 57:B138-43, 2002.*

12. Godard, M.P., **D.L. Williamson**, S.W. Trappe. Oral amino-acid provision does not affect muscle strength or size gains in older men. *Med. Sci. Sports Exerc. 34:1126-31, 2002.*

13. **Williamson, D.**, P. Gallagher, M. Harber, C. Hollon, S. Trappe. Mitogen-activated protein kinase (MAPK) pathway activation: effects of age and acute exercise on human skeletal muscle. *J. Physiol. 547:977-87, 2003.* ***Century Citation Club (100 citations in less then 10 yrs).***

14. Bolster, D.R., N. Kubica, S.J. Crozier, **D.L. Williamson**, P. A. Farrell, S. R. Kimball, L.S. Jefferson. Immediate response of mammalian target of rapamycin (mTOR)-mediated signaling following acute resistance exercise in rat skeletal muscle. *J. Physiol. 553:213-220, 2003.*

15. Bolster, D.R., N. Kubica, S.J. Crozier, **D.L. Williamson**, P.A. Farrell, S.R. Kimball, L.S. Jefferson. Understanding skeletal muscle hypertrophy: integration of cell signaling. *Physiol. News. 55:18-19, 2004.*

16. **Williamson, D.L.**, S.R. Kimball, L.S. Jefferson. Acute Treatment with TNF-alpha Attentuates Insulin-Stimulated Protein Synthesis in Cultures of C2C12 Myotubes Through a MEK1-sensitive Mechanism. *Am. J. Physiol. 289:E95-E104, 2005.*

17. Raue, U., B. Terpstra, **D.L. Williamson**, P.M. Gallagher, S.W. Trappe. Effects of Short-term Concentric vs. Eccentric Resistance Training on Single Muscle Fiber MHC Distribution in Humans. *Int. J. Sports Med. 26:339-343, 2005.*

18. **Williamson, D.L.**, N. Kubica, S.R. Kimball, L.S. Jefferson. Exercise-induced alterations in extracellular signal-regulated kinase 1/2 and mammalian target of rapamycin (mTOR) signaling to regulatory mechanisms of mRNA translation in mouse muscle. *J. Physiol. 573:497-510, 2006.*

19. **Williamson, D.L.**, S.R. Kimball, L.S. Jefferson. Time course changes in signaling pathways and protein synthesis in C2C12 myotubes following AMPK activation by AICAR. *Am. J. Physiol. 291:E80–E89, 2006.*

20. Peterson, J., J.Wang, R. Bryner, **D.L. Williamson**, S.A. Alway. Bax signaling mediates palmitate-induced apoptosis in C2C12 myotubes. *Am. J. Physiol. 295(6):E1307-14, 2008.*

21. **Williamson, D.L.**, D.C. Butler, S.E. Alway. AMPK inhibits myoblast differentiation through a PGC-1α-dependent mechanism. *Am. J. Physiol. 297: E304–E314, 2009.*

22. Butler, D.C., S. Hiramizu, **D.L. Williamson**, S.E. Alway. Phospho-ablated Id2 is growth suppressive and pro-apoptotic in proliferating myoblasts. *PLoS ONE 4:e6302, 2009.*

23. Kelly, K.R., **D.L. Williamson**, C.E. Fealy, D.A. Kriz, R.K. Krishnan, J.L. Loomis, J.P. Kirwan. Acute Altitude-Induced Hypoxia Suppresses Plasma Glucose and Leptin in Healthy Humans. *Metabolism 59:200-5, 2010.*

24. **Williamson, D.L.**, U. Raue, D. Slivka, S. Trappe. Resistance Exercise, Skeletal Muscle FOXO3A, and 85-Year-Old Women. *J. Geront. A. Biol. Med. Sci. 65(4):335-43, 2010.*

25. Drake, J.C., S.E. Alway, J.M. Hollander, **D.L. Williamson**. AICAR treatment for 14 days normalizes obesity-induced dysregulation of TORC1 signaling and translational capacity in fasted skeletal muscle. *Am. J. Physiol. 299:R1546-1554, 2010.*

26. **Williamson, D.L.** and J.C. Drake. Normalizing a hyperactive mTOR initiates muscle growth during obesity. *Aging 3:83-84, 2011.*

27. Drake, J.C., L. Benniger, **D.L. Williamson**. 8-weeks of β-GPA Treatment Reduces Body Mass While Positively Altering Translation Initiation in Obese Skeletal Muscle. *J. Obesity Weight Loss Ther. 1:1-7, 2011 (doi: 10.4172/2165-7904.1000101).*

28. Bryner, R.W, M. Woodworth-Hobbs, **D.L. Williamson** S.E. Alway. Docosahexaenoic acid (DHA) protects muscle cells from palmitate-induced atrophy. *ISRN Obesity. vol. 2012, Article ID 647348. (doi:10.5402/2012/647348).*

29. Wen S., Jadhav K.S., **Williamson, D.L.,** and Rideout, T.C. Treadmill Exercise Training Modulates Hepatic Cholesterol Metabolism and Circulating PCSK9 Concentration in High-Fat-Fed Mice. *Journal of Lipids, vol. 2013, Article ID 908048. (doi:10.1155/2013/908048).*

30. Jadhav K.S., C.M. Dungan, **D.L. Williamson** Metformin limits ceramide-induced senescence in C2C12 myoblasts. *Mech. Ageing Dev. 134:548-59, 2013.*

31. Carrier, B., S. Wen, S. Zigouras, R.W. Browne, Z. Li, M.S. Patel, **D.L. Williamson**, T.C. Rideout. Alpha-Lipoic Acid Reduces LDL-Particle Number and PCSK9 Concentrations in High-Fat Fed Obese Zucker Rats. *PLoS ONE 9(3):e90863, 2014.*

32. **Williamson DL**, Z. Li, R.M. Tuder, E. Feinstein, S.R. Kimball, C.M. Dungan. Altered nutrient response of mTORC1 as a result of changes in REDD1 expression: Effect of obesity versus REDD1 deficiency. *J. Appl. Physiol. 117(3):246-256, 2014.*

33. Mennes, E. C.M. Dungan, S. Frendo-Cumbo, **D.L. Williamson,** D.C. Wright. Aging-Associated Reductions in Lipolytic and Mitochondrial Proteins in Mouse Adipose Tissue Are Not Rescued by Metformin Treatment. *J. Geront. A. Biol. Med. Sci. 69(9):1060-068, 2014.*

34. Dungan C.M., D.C. Wright, **D.L. Williamson**. Lack of REDD1 reduces whole body glucose and insulin tolerance, and impairs skeletal muscle insulin signaling. *Biochem. Biophys. Res. Comm. 453(4):778-783, 2014.*

35. Li Z., C.M. Dungan, B. Carrier, T.C. Rideout, **D.L. Williamson**. Alpha-lipoic acid supplementation reduces mTORC1 signaling in skeletal muscle from high fat fed, obese Zucker rats. *Lipids. 49(12):1193-201, 2014.*

36. Gordon, B.S., **D.L. Williamson**, C.H. Lang, L.S. Jefferson, S.R. Kimball. Nutrient-induced stimulation of protein synthesis in mouse skeletal muscle is limited by the mTORC1 repressor REDD1. *J. Nutr. 145(4):708-713, 2015.*

37. Dungan C.M., Z. Li, D.C. Wright, **D.L. Williamson**. Hyperactive mTORC1 signaling is unaffected by metformin treatment in aged skeletal muscle. *Muscle and Nerve, 53(1):107-17, 2016.*

38. **Williamson, D.L,** Mahmoud, A.M., Mey, J.T., Blackburn, B.K., Haus, J.M. Aberrant REDD1-mTORC1 responses to insulin in skeletal muscle from type 2 diabetics. *Am. J. Physiol: Regul Integr Comp Physiol. 309(8):R855-863, 2015.*

39. Ray, A.D., Personius, K.E., **Williamson, D.L,** Dungan, C.M., Dhillon, S.S., Hershberger, P.A. Vitamin D3 intake modulates diaphragm but not peripheral muscle force in young mice. *J. Appl. Physiol. 120(10):1124-1131, 2016.*

40. Gordon, B.S., Steiner, J.L., **Williamson, D.L,** Lang, C.H., Kimball, S.R. Emerging role for regulated in development and DNA damage 1 (REDD1) in the regulation of skeletal muscle metabolism. *Am. J. Physiol: Endo. Metab. 311(1):E157-174, 2016.*

41. Dungan C.M., Li, J., **Williamson, D.L.** Caloric Restriction Normalizes Obesity-Induced Alterations on Regulators of Skeletal Muscle Growth Signaling. *Lipids. 51(8):905-912, 2016.*

42. **Williamson D.L.** and Rideout, T.C. Is ACSL6 at the crossroads of lipid synthesis? *Journal of Physiology, Perspective. 595(3):619-620, 2017.*

43. Dungan C.M. and **Williamson D.L.** Regulation of skeletal muscle insulin-stimulated signaling through the MEK-REDD1-mTOR axis. *Biochem. Biophys. Res. Comm. 482(4):1067-1072, 2017.*

44. Gordon B.S., Steiner J.L., Rossetti M.L., Qiao S., Ellisen L.W., Govindarajan S.S., Eroshkin A.M., Williamson D.L., and Coen P.M. REDD1 Induction Regulates the Skeletal Muscle Gene Expression Signature following Acute Aerobic Exercise. *Am. J. Physiol: Endo. Metab. 313:E737-E747, 2017.*

45. Dungan C.M., Gordon, B.S., and **Williamson D.L.** Acute treadmill exercise discriminately improves the skeletal muscle insulin-stimulated growth signaling responses in mice lacking REDD1. *Physiol. Reports. e14011, 2019.*

INVITED SPEAKER

"Strength Training in Older Adults: Effects on Single Muscle Fiber Function and Structure", Symposium presented at American College of Sports Medicine: Midwest Regional Chapter, Grand Rapids, MI, October, 2000.

"Overnutrition, mTOR, and Skeletal Muscle", presented at University of Pittsburgh, Division of Endocrinology and Metabolism (seminar guest), March 26, 2010.

"Atypical Regulation of Muscle Mass". Mid-Atlantic ACSM Regional Chapter-American College of Sports Medicine (MARC-ACSM) Annual Meeting in Harrisburg, PA, November 5-6, 2010.

"Normalization of mechanisms regulating skeletal muscle growth in obesity", University of Guelph, Department of Human Health and Nutritional Sciences (seminar guest), October 31, 2011.

"Does a high fat environment prematurely age skeletal muscle?", Colorado State University, Department of Health and Exercise Science (seminar guest), January 20, 2012.

"Does a high fat environment prematurely age skeletal muscle?", University at Buffalo, Department of Pharmacology and Toxicology (seminar guest), February 20, 2012.

"Do high lipid concentrations induce skeletal muscle senescence?", Learner Institute, Metabolic Translational Research Center, Endocrinology & Metabolism, Cleveland Clinic (seminar guest), August 14, 2012.

"Lipid regulation of skeletal muscle cell cycle", Muscle Health Awareness Day sponsored by the Muscle Health Research Centre (MHRC) and director, David A. Hood at York University (Invited Speaker), May 17, 2013.

"Cell senescence and mTOR: is REDD the color of aging?", University at Buffalo Post-Doc Research Symposium, Keynote Speaker, June 3, 2014.

"REDD1 Regulation of Metabolism and Insulin Action?", Roswell Park Cancer Institute Department of Molecular and Cellular Biology (seminar guest), April 30, 2015.

"Role of REDD1 in Insulin Resistance". Mid-Atlantic ACSM Regional Chapter-American College of Sports Medicine (MARC-ACSM) Annual Meeting in Harrisburg, PA, November 6-7, 2016.

"The emerging metabolic role of REDD1 in skeletal muscle." Pennsylvania State University, Noll Laboratory, Department of Kinesiology, (seminar guest), September 16, 2016.

"The Two Faces of REDD1." Pennsylvania State University, College of Medicine, Department of Cellular and Molecular Physiology, (seminar guest), October 11, 2016.

"The Two Faces of REDD1: The Emerging Metabolic Role in Skeletal Muscle." Ball State University, Human Performance Laboratory, (seminar guest), November 15, 2018.

"The Two Faces of REDD1" East Carolina University, (Leaders in Bioenergetics; Annual Lecture), February 28, 2019.

CONFERENCE PRESENTATIONS

Oral Presentations

1. "Single myofiber myosin heavy chain expression among inactive humans: Influence of age and gender". **Williamson, D.L.,** M.P. Godard, P.M. Gallagher, D.L. Costill, and S.W. Trappe. Med. Sci. Sport Ex. 32:S41, 2000. Presented at the National ACSM Meeting in Indianapolis, IN.

Poster Presentations- First Author

1. **Williamson, D.L.,** R.K. Krishnan, D.J. O'Gorman, C. Lakatta, J. Hernandez, W.J. Evans and J.P. Kirwan. A single bout of resistive exercise increases basal metabolic rate in healthy 60-70 yr. old men. Med. Sci. Sport Ex. 28(5):S42, 1996. Presented at the National ACSM Meeting, Cincinnati, OH.

2. **Williamson, D.L.,** D.A. Kriz, R.K. Krishnan, J.L. Loomis and J.P. Kirwan. Glucose tolerance at a simulated altitude of 4,300m. Presented at the 1998 Experimental Biology Annual Meeting in San Francisco, CA.

3. **Williamson, D.L.,** M.P. Godard, W. Fink, D.L. Costill, S.W. Trappe. Effect of resistance exercise training on skeletal muscle protein isoforms adaptations in older men. Presented at the 1999 Experimental Biology Annual Meeting in Washington, D.C.

4. **Williamson, D.L.,** P.M. Gallagher, C.C. Carroll, U. Raue, and S.W. Trappe. Bi-directional single muscle fiber myosin heavy chain adaptations to progressive resistance training. Presented at the 2001 Experimental Biology Annual Meeting in Orlando, FL.

5. **Williamson, D.L.**, P. Gallagher, M. Harber, C. Hollon, and S. Trappe. Mitogen-activated protein kinase (MAPK) pathway activation: effects of age and acute exercise on human skeletal muscle. Presented at the 2003 Experimental Biology Annual Meeting in San Diego, CA.

6. **Williamson, D.L.,** S.R. Kimball, and L.S. Jefferson. Mitogen-Activated Protein Kinases Regulate the Effect of Tumor Necrosis Factor-α on Insulin-Stimulated Protein Synthesis in C2C12 Myotubes. Presented at the 2003 American Diabetes Assoc. Annual Meeting in New Orleans, LA.

7. **Williamson, D.L**., Shantz, L.M., S.R. Kimball, and L.S. Jefferson. Inhibition of MNK By siRNA Leads to Decreased eIF4E Phosphorylation and Ornithine Decarboxylase Protein in Ras-Transformed Fibroblasts. Presented at the 2004 Translational Control Meeting at Cold Spring Harbor Laboratories, NY.

8. **Williamson, D.L.,** N. Kubica, S.R. Kimball, and L.S. Jefferson. AMPK Phosphorylation in Skeletal Muscle Differentially Regulates the ERK1/2 and mTOR Pathways, Inhibiting Translation Initiation. Presented at the 2005 Experimental Biology Annual Meeting in San Diego, CA.

9. **Williamson, D.L.,** D.C. Butler, and S.E. Alway. AMPK regulation of proliferation and differentiation in C2C12 culture models. Presented at the 2007 Experimental Biology Meeting, Washington. D.C.

10. **Williamson, D.L**. and S.E. Alway. AMPK regulation of cardiac growth-related signaling in ob/ob mice following 2 weeks of AICAR treatment. Presented at the 2008 Experimental Biology Meeting in San Diego, CA.

11. **Williamson, D.L.,** U. Raue, and S.W. Trappe. Alterations in Akt-FOXO3a signaling before and after 12 weeks of resistance exercise in young (24 yr) and old women (85 yr). Presented at the 2008 Integrative Biology of Exercise Meeting, Hilton Head, SC, 2008.

12. **Williamson, D.L**. and J. Drake. AICAR treatment alters skeletal muscle mass regulatory processes in ob/ob mice. Presented at the International Biochemistry of Exercise (14th Meeting) Guelph, ON, CANADA, 2009.

13. **Williamson, D.L**., Dungan C.M., and Jadhav K.S. High lipid concentrations regulate skeletal muscle REDD1. Presented at the 2013 Experimental Biology Meeting in Boston, MA.

14. **Williamson, D.L**., Wright, D.C., and Dungan C.M. Lack of REDD1 limits insulin action on skeletal muscle mTORC1 and TSC2. Presented at the 2015 Experimental Biology Meeting in Boston, MA.

15. **Williamson, D.L**. and Dungan C.M. The regulation of skeletal muscle insulin-stimulated signaling by the MEK-REDD1-mTOR axis. Presented at the 2017 Experimental Biology Meeting in Chicago, IL.

Poster Presentations- Last Author

1. Drake, J.C., Benninger L., Alway S.E., and **Williamson D.L**. Long Term AMPK-Activation Limits Obesity Induced Muscle Atrophy. Presented at the 2011 Rocky Mountain Chapter of ACSM (RMACSM) Regional Meeting, Fort Collins, CO.

2. Drake, J.C., Benninger L., Alway S.E., and **Williamson D.L**. Long Term AMPK-Activation Limits Obesity Induced Muscle Atrophy. Presented at the 2011 Annual American College of Sports Medicine Meeting, Denver, CO.

3. Dungan C.M., Jadhav K.S., and **Williamson, D.L.** Regulation of skeletal muscle p27 and CDK4 expression by high lipid concentrations. Presented at the 2013 Experimental Biology Meeting in Boston, MA.

4. Harding, S., I. Steane, K.S. Jadhav, and **D.L. Williamson**. Exercise increases indicators of cholesterol absorption and decreases indicators of stearoyl-CoA desaturase activity in livers of mice consuming high and low fat diets. Presented at the 2014 Experimental Biology Meeting in San Diego, CA.

5. Dungan C.M. and **Williamson, D.L.** A role for REDD1 on insulin-stimulated signaling activation following acute treadmill exercise. Presented at the 2017 Experimental Biology Meeting in Chicago, IL.

Co-Authored Presentations

1. Lewis, R., **D.L. Williamson**, D.J. O'Gorman, L. del Aguila, R.K. Krishnan, and J.P. Kirwan. Free fatty acid suppression of insulin mediated glucose metabolism in older overweight individuals. Med. Sci. Sports Exerc. 30(5): S 247, 1998.

2. Krishnan, R.K., J.M. Hernandez, **D.L. Williamson**, D.J. O'Gorman, W.J. Evans and J.P. Kirwan.Age-related differences in the pancreatic ß-cell response to hyperglycemia following eccentric exercise. Med. Sci. Sport Ex. 30:S24, 1998.

3. Kirwan, J.P., J.M. Hernandez, L.F. Del Aguila, **D.L. Williamson**, D.J. O'Gorman, R. Lewis and R.K. Krishnan. Effects of exercise training on insulin mediated phosphatidylinositol 3-kinase activation in human skeletal muscle. Diabetes 47(1): A 4, 1998.

4. Krishnan, R.K., J.M. Hernandez, **D.L. Williamson**, D.J. O'Gorman, W.J. Evans and J.P. Kirwan. Hyperglycemia induces age-related differences in substrate metabolism following exercise-induced muscle damage. Diabetes 47(1): A 390, 1998.

5. Krishnan, R.K., J.M. Hernandez, **D.L. Williamson**, D.J. O'Gorman, W.J. Evans, and J.P. Kirwan.Delayed glucose clearance in healthy older men is related to abdominal adiposity. Diabetes 48(1): A294, 1999.

6. Godard, M.P., D. L. **Williamson, D.L.** Costill, and S.W. Trappe. Neuromuscular responses to progressive resistance training in older men. Presented at Seattle, WA, Med. Sci. Sport Ex. 31(5): S349, 1999.

7. Parcell, A., S.W. Trappe, M.P.Godard, **D.L. Williamson**, W. Fink, and D.L. Costill. An upper arm model for simulated weightlessness. Presented at Seattle, WA, Med. Sci. Sport. Ex. 31(5): S275, 1999.

8. Trappe, S.W., M. P. Godard, **D.L. Williamson**, D. Porter, G. Rowden, and D. L. Costill. Effect of resistance training on single muscle fiber contractile properties in older men. FASEB 13(4): A411, 1999.

9. Kirwan, J.P., R.K. Krishnan, S.N. Sistrun, **D.L. Williamson**, R. Lewis , D.J. O'Gorman, L.F. del Aguila, D.A. Kriz, and C.M. Marchetti. Decreased visceral fat after exercise and caloric restriction is related to improved glucose tolerance in 57-77 yr old obese men and women with impaired glucose tolerance (IGT). Presented at San Francisco, CA, The Gerontologist 39: 138-139, 1999.

10. del Aguila, L.F., D. O'Gorman, D., R.K. Krishnan, **D.L. Williamson**, R. Lewis, and J.P. Kirwan. Acute exercise decreases insulin stimulation of phosphatidylinositol 3-kinase in human subjects. J. of Sports Sciences 17(7):570, 1999.

11. O'Gorman, D., L.F. del Aguila, R.K. Krishnan, **D.L. Williamson**, R. Lewis, P.A. Farrell and J.P. Kirwan. Effects of exercise and insulin on extracellular-signal regulated kinase-1 in human muscle. J. of Sports Sciences 17(7): 585-586, 1999.

12. Trappe, S.W., M.P., Godard, **D.L. Williamson**, D. Porter, G. Rowden, and D.L. Costill. Whole muscle and single myofiber specific tension in older adults: Influence of gender. Presented at Indianapolis, IN, Med. Sci. Sport Ex. 32:S293, 2000.

13. Godard, M.P., **D.L. Williamson**, J.R. Witter, D.A. Porter, G.A. Rowden, and S.W. Trappe. Effect of branch chain amino acid supplementation and progressive resistance training on muscle strength and size in old men. Presented at Indianapolis, IN, Med. Sci. Sport Ex. 32:S62, 2000.

14. Carrithers, J.C., **D.L. Williamson**, P.M. Gallagher, M.P. Godard, K.E. Schulze, and S.W. Trappe. Effects of post-exercise carbohydrate-protein feedings on muscle glycogen restoration. Presented at Indianapolis, IN, Med. Sci. Sport Ex. 32:S290, 2000.

15. Gallagher, P.M., **D.L. Williamson**, M.P. Godard, J.R. Witter, and S.W. Trappe. Effects of ribose supplementation on adenine nucleotide concentration in skeletal muscle following high-intensity exercise. Presented at Baltimore, MD, Med. Sci. Sport Ex. 33(5):S166, 2001.

16. Raue, U., P.M. Gallagher, **D.L. Williamson,** M.P. Godard, and S.W. Trappe. Effect of ribose supplementation on performance during repeated high-intensity cycle sprints. Presented at Baltimore, MD, Med. Sci. Sport Ex. 33(5):S44, 2001.

17. Terpstra, B.T., J.R. Witter, M.P. Godard, **D.L. Williamson**, P.M. Gallagher, and S.W. Trappe. Age and gender related differences in neuromuscular adaptations to twelve weeks of progressive resistance training. Presented at Baltimore, MD, Med. Sci. Sport Ex. 33(5):S118, 2001.

18. Trappe, S.W., **D.L. Williamson**, M.P. Godard, and P.M. Gallagher. Maintenance of whole muscle strength and size following resistance training in older men. Presented at Baltimore, MD, Med. Sci. Sport Ex. 33(5):S147, 2001.

19. Godard, M.P., P.M. Gallagher, U. Raue, **D.L. Williamson**, D.L. Costill, D.A. Porter, G.A. Rowden, and S.W. Trappe. Effect of progressive resistance training on single myofiber calcium sensitivity in older women. Presented at Baltimore, MD, Med. Sci. Sport Ex. 33(5):S187, 2001.

20. Kubica, N., **D.L. Williamson**, D.R. Bolster, S.R. Kimball, P.A. Farrell, and L.S. Jefferson. An mTOR-dependent increase in global rates of protein synthesis and eIF2B content during the recovery period following a bout of acute muscle loading. Translational Control Meeting, Cold Spring Harbor Laboratory Conference, Fall 2004.

21. Butler, D.C., **D.L. Williamson**, and S.E. Alway. Rapamycin-sensitive regulation of ID1 and p21 in C2C12 myoblasts. Presented at the 2007 Experimental Biology Meeting, Washington. D.C.

22. Woodworth-Hobbs, M.E., R W. Bryner, **D.L. Williamson**, and S.E. Alway. Palmitate and the omega-3 fatty acid, docosahexaenoic acid, have differential effects on signaling in skeletal muscle cells. Presented at Seattle, WA, Med Sci Sports Exerc 39, Supplement: S, 2009

23. Wen S., Jadhav K.S., **Williamson, D.L.,** and Rideout. T.C. Treadmill exercise training modulates PCSK9 metabolism in high fat fed mice. Presented at the 2013 Experimental Biology Meeting in Boston, MA.

24. Gordon, BS Steiner JL, **Williamson DL,** Coen PM, Rossetti ML, Shyamalagovindarajan S, Eroshkin A. Regulated in Development and DNA Damage 1 (REDD1) Alters the Expression of a Distinct Set of Genes in Skeletal Muscle by Activity/Inactivity. Presented at the 2017 Experimental Biology Meeting in Chicago, IL.

25. Pérez-Sisqués L , Martín-Flores N, Llobet A, Canal M, Romaní-Aumedes J, Masana M, Santamaría E, Fernández J, Gilber JP, Man H-Y, Feinstein E, **Williamson DL**, Gasull X, Soto D, Alberch J, and Malagelada C. Role of RTP801 in neuronal plasticity and motor learning. Presented at the 2017 SfN Society for Neuroscience Meeting in Washington. D.C.

Research Support

In Progress

NIH/NIDDK (DK119961)
"**Regulation of Skeletal Muscle Anabolic Resistance in Obesity**"
02/01/19 – 01/31/24
Role: PI

In Revision

"**Regulation of skeletal muscle insulin action by the ERK1/2-REDD1 axis in obesity**"
09/01/16 – 08/31/21
Role: PI
Score (A1): Impact 41, Percentile 32

Completed

N.I.H.-National Research Service Award (NIDDK # 5F32DK067803-02)
"Regulation of mRNA translation by cAMP in muscle"
08/01/04 – 03/17/06
Pennsylvania State University College of Medicine
Role: PI

West Virginia University, School of Medicine
Research Funding and Development Grant
"AMPK regulation of cell cycle and muscle loss"
2006-2007
Role: PI

West Virginia University, School of Medicine
Research Funding and Development Grant
"Obesity regulation of muscle growth"
2008-2009
Role: PI

United University Professionals (UUP)
University at Buffalo, SUNY
Research Travel Award
2011

SERVICE

Professional Service

Grant Review/Editorial Board

American Diabetes Association (ADA) Research Grant Review Committee (RGRC)- Appointed 01/2013-12/2018

Grants Reviewed
March 2013 cycle 9 grants
September 2013 cycle 10 grants
Attended RGRC Meeting- November 2013 (Sept. cycle), Dallas, TX
3 grants as secondary or tertiary reviewer
April 2014 cycle 11 grants

July 2016 cycle	12 grants
July 2017 cycle	5 grants

Research Foundation-Penn State Health Scientific Review Committee
Appointed 10/2018-present
Journal of Gerontology: Biological Sciences, Editorial Board Member-
Appointed 10/13-present

Journal Review *(in past 5 years)*

Acta Physiologica
American Journal of Physiology: Cell Physiology
American Journal of Physiology: Endocrinology and Metabolism
American Journal of Physiology: Regulatory, Integrative, Comparative Physiology
Annals of Nutrition and Metabolism
Applied Physiology, Nutrition, and Metabolism
Cell Biochemistry and Function
European Journal of Applied Physiology
Exercise and Sport Science Reviews
Gynecologic and Obstetric Investigation
Journal of Applied Physiology
Journal of Gerontology
Medicine, Science, Sport, and Exercise
Molecular and Cellular Biology of Lipids
Molecular Medicine
Muscle and Nerve
PLoS One
The Journal of Physiology

Professional Organizations

American Physiological Society (Environmental and Exercise Physiology (EEP))
American College of Sports Medicine