

July 2019

**Curriculum Vitae
John McDaniel**

Associate Professor
Department of Exercise Science
School of Health Science, Kent State University
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Health Science Specialist
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EXPERIENCE AND TRAINING

Academic Preparation

Ph.D. Exercise and Sport Science. University of Utah, 2008,
Advisor: James Martin.
M.S. Exercise Physiology, University of South Carolina, 2001,
Advisor: James Martin.
B.S. Exercise Science, Malone College, 1998.

Previous Professional Experience

Visiting Scientist, Cleveland Clinic	2014-present
Professor & Graduate Faculty, School of Health Sciences, Kent State University	2011- present
Health Science Specialist, Cleveland VA Medical Center, Special Fellowship in Geriatrics, VA Medical Center, Mentor: Russell Richardson.	2011- present
Research Associate, The orthopaedic Specialty Hospital, Murray, Utah.	2007-2011
Exercise Physiologist at Lexington Medical Center	2003-2005
Exercise Physiologist at South Carolina Heart Center	2000-2001. 1999.

SCHOLARSHIP

Publications in Peer Reviewed Journals

1. Exaggerated post exercise hypotension following concentric but not eccentric resistance exercise: Implications for metabolism. Stavres J, Fischer SM, **McDaniel J.** Eur J Sport Sci. 2019 Jan 4:1-11.

2. Comparison of Peak Torque and Aerobic Capacity Asymmetries in the Lower Limbs. Harper SA, Bagley MC, Custer L, **McDaniel J**. *Journal of Exercise and Nutrition* 2019 2(1): 1-7.
3. Limb blood flow and tissue perfusion during exercise with blood flow restriction. Kilgas MA, **McDaniel J**, Stavres J, Pollock BS, Singer TJ, Elmer SJ. *Eur J Appl Physiol*. 2019 Feb;119(2):377-387.
4. What Lies Beneath: Why Some Pressure Injuries May Be Unpreventable for Individuals With Spinal Cord Injury. Lemmer DP, Alvarado N, Henzel K, Richmond MA, **McDaniel J**, Graebert J, Schwartz K, Sun J, Bogie KM. *Arch Phys Med Rehabil*. 2018.
5. Stavres J, Singer TJ, Brochetti A, Kilbane M, Brose S, **McDaniel J**. The Feasibility of Blood Flow Restriction Exercise in Patients With Incomplete Spinal Cord Injury. *PM&R*. 2018 Dec;10(12):1368-1379.
6. Passive limb movement intervals results in repeated hyperemic responses in those with paraplegia. Burns KJ, Pollock BS, Stavres J, Kilbane M, Brochetti A, **McDaniel J**. *Spinal Cord*. 2018 Oct; 56(10):940-948.
7. **McDaniel J**, Lombardo LM, Foglyano KM, Marasco PD, Triolo R. Cycle Training Using Implanted Neural Prosthesis: Team Cleveland. *Eur J Transl Myol*. 2017 Dec 6;27(4):7087.
8. **McDaniel J**, Lombardo LM, Foglyano KM, Marasco PD, Triolo RJ. Setting the pace: insights and advancements gained while preparing for an FES bike race. *J Neuroeng Rehabil*. 2017 Nov 17;14(1):118.
9. Burns KJ, Pollock BS, **McDaniel J**. The cardiovascular response to passive limb movement in joint dependent. *Physiol. Rep.* Mar;4(5). pii: e12721. doi: [10.14814/phy2.12721](https://doi.org/10.14814/phy2.12721), 2016.
10. Rebold MJ, Lepp A, Kobak MS, **McDaniel J**, Barkley JE. The Effect of Parental Involvement on Children's Physical Activity. *J Pediatrics*. [170: 206-210](https://doi.org/10.1016/j.peds.2016.06.010), 2016.
11. **McDaniel J**, Davuluri G, Hill EA, Moyer M, Runkana A, Prayson R, van Lunteren E, Dasarthy S. Hyperammonemia Results in Reduced Muscle Function Independent of Muscle Mass. *Am J Physiol Gastrointest Liver Physiol*. [310: G163-G170](https://doi.org/10.1152/ajpgi.00107.2016), 2016.
12. Elmer SJ, **McDaniel J**, Martin JC. Biomechanics of Counterweighted One-Legged Cycling. *J Appl Biomech*. Feb; [32\(1\):78-85](https://doi.org/10.1123/jab.2015-0100), 2016.
13. Seo Y, Fennell C, Burns K, Pollock B, Gunstad J, **McDaniel J**, Glickman E. Exercise improves mood state in normobaric hypoxia. *Aerospace Medicine and Human Performance*. [86\(11\):976-81](https://doi.org/10.1249/01.mhp.0000458810.96100.9d), 2015.
14. Seo Y, Burns K, Fennell C, Kim JH, Gunstad J, Glickman E, **McDaniel J**. The Influence of Exercise on Cognitive Performance in Normobaric Hypoxia. *High Alt Med Biol*. [16\(4\):298-305](https://doi.org/10.1089/halt.2014.0100), 2015.
15. Kean DJ, Peacock CA, Sanders GJ, **McDaniel J**, Colvin LA, Glickman EL. The effects of cold and lower body negative pressure on cardiovascular homeostasis. *Biomed Res Int*. doi:[10.1155/2015/728145](https://doi.org/10.1155/2015/728145), 2015.

16. Burns KJ, Martin JC, Elmer SJ, **McDaniel J**. Response to Letter to the Editor: a counterweight is not necessary to implement simple, natural and comfortable single-leg cycle training. *Eur J Appl Physiol*. Nov; [114\(11\):2457-8](#), 2014.
17. **McDaniel J**, Behjani NS, Elmer SJ, Brown N AT, Martin JC. Joint-Specific Power-Pedaling Rate Relationships During Maximal Cycling. *J Appl Biomech*, [30\(3\):423-30](#), 2014.
18. Ives SJ, Harris RA, Witman MA, Fjeldstad AS, Garten RS, **McDaniel J**, Wray DW, Richardson RS. Vascular Dysfunction and Chronic Obstructive Pulmonary Disease: The Role of Redox Balance. *Hypertension*, [63\(3\): 459-67](#), 2014.
19. Venturelli M, Amann M, Layec G, **McDaniel J**, Trinity JD, Fjeldstad AS, Ives SJ, Yonnet G, Richardson RS. Passive leg movement-induced hyperaemia with a spinal cord lesion: evidence of preserved vascular function. *Acta Physiol (Oxf)*, [210\(2\) 429-439](#), 2014.
20. Burns KJ, Pollock BS, Lascola P, **McDaniel J**. Cardiovascular responses to counterweighted single-leg cycling: implications for rehabilitation. *Eur J Appl Physiol*. [14\(5\):961-8](#), 2014.
21. Wray D.W., M.A. Witman, S.J. Ives, **J. McDaniel**, J.D. Trinity, J.D. Conklin, M.A. Supiano, R.S. Richardson. Does Brachial Artery Flow-Mediated Vasodilation Provide a Bioassay for NO? *Hypertension*, [62\(2\):345-51](#), 2013.
22. Amann M., M. Venturelli, S.J. Ives, **J. McDaniel**, G. Layec, M.J. Rossman, R.S. Richardson. Peripheral fatigue limits endurance exercise via a sensory feedback-mediated reduction in spinal motoneuronal output. *J Appl Physiol*, [115\(3\):355-64](#), 2013.
23. **McDaniel, J.**, W. Askew, D. Bennett, J. Mihalopoulos, S. Anantharaman, A. S. Fjeldstad, D.C. Rule, N.M. Nanjee, R.A. Harris and R.S. Richardson. Bison meat has a lower atherogenic risk than beef. *Nutrition Research*, [33\(4\):293-302](#), 2013.
24. Ives, S., **J. McDaniel**, M. Witman, and R.S. Richardson. Passive limb movement: evidence of mechanoreflex sex specificity. *Am J Physiol Heart Circ Physiol*, [304\(1\):H154-61](#), 2013.
25. Barrett-O'Keefe Z., M.A. Witman, **J. McDaniel**, A.S. Fjeldstad, J.D. Trinity, S.J. Ives, J.D. Conklin, V. Reese, S. Runnels, D.E. Morgan, M. Sander, R.S. Richardson, D.W. Wray. Angiotensin-II potentiates alpha-adrenergic vasoconstriction in the elderly. *Clin Sci (Lond)*, [124\(6\):413-22](#), 2013.
26. Elmer, S.J., M.K. Amann, **J. McDaniel**, D.T. Martin, J.C. Martin. Fatigue is specific to working muscles: no cross-over with single-leg cycling in trained cyclists. *Euro J Appl Physiol*, [113\(2\): 479-88](#), 2013.
27. Witman, M.A., **J. McDaniel**, AS Fjeldstad, SJ Ives, J Zhao, JN Nativi, J Stehlik, DW Wray, RS Richardson. A differing Role of oxidative stress in the regulation of central and peripheral hemodynamics during exercise in heart failure. *Am J Physiol - Heart Circ Physiol*, [303\(10\):H1237-44](#), 2012.
28. Witman, M.A., A.S. Fjeldstad, **J. McDaniel**, S.J. Ives, J. Zhao, Z. Barrett-O'Keefe, J.N. Nativi, J. Stehlik, D.W. Wray, R.S. Richardson. Vascular Function and the

- Role of Oxidative Stress in Heart Failure, Heart Transplant, and Beyond. *Hypertension*, [60\(3\):659-68](#), 2012.
29. Rossman, M.J., M. Venturelli, **J. McDaniel**, M. Amann, R.S. Richardson. Muscle mass and peripheral fatigue: a potential role for afferent feedback? *Acta Physiol*, [206\(4\):242-50](#), 2012.
 30. Wray, D.W., **J. McDaniel**, M.A.H. Witman, S. Ives, A.S. Fjeldstad, and R.S. Richardson. Acute Reversal of Endothelial Dysfunction in the Elderly Following Antioxidant Consumption. *Hypertension*, [59\(4\): 818-24](#), 2012.
 31. Elmer S, **J. McDaniel**, J.C. Martin. Effects of Locomotor Muscle Fatigue on Joint-Specific Power Production During Cycling. *Med Sci Sport and Exerc*, [44\(8\) 1504-11](#), 2012.
 32. **McDaniel, J**, S. Ives, and R.S. Richardson. Muscle Length Dependent Changes in Human Blood Flow. *Journal of Applied Physiology*, [112\(4\): 560-5](#), 2012.
 33. Venturelli M., M.K. Amann, **J. McDaniel**, J.D. Trinity, AS Fjeldstad, R.S. Richardson. Central and peripheral hemodynamic responses to passive-limb movement: the role of arousal. *Am J Physiol Heart Circ Physiol*, [302\(1\): H333-9](#), 2012.
 34. Ives S, R.H. Andtbacka, R.D. Noyes, **J. McDaniel**, M.K. Amann, M.A. Witman, J.D. Symons, D.W. Wray, R.S. Richardson. Human skeletal muscle feed arteries studied in vitro: The effect of temperature on alpha-adrenergic responsiveness. *Exp Physiol* [96\(9\):907-918](#), 2011.
 35. Fjeldstad AS, **J. McDaniel**, M.A. Witman, S.J. Ives, J. Zhao, J.W. Rose, J. Hannon, D.W. Wray, R.S. Richardson. Vascular function and multiple sclerosis. *J Neural* [258\(11\): 2036-42](#), 2011.
 36. Trinity JD, **J. McDaniel**, M. Venturelli, A.S. Fjeldstad, S.J. Ives, M.A. Witman, Z. Barret-O'Keefe, M.K. Amann, D.W. Wray, R.S. Richardson. Impact of Body Position on Central and Peripheral Hemodynamic Contributions to Movement-Induced Hyperemia: Implications for Rehabilitative Medicine. *Am J Physiol Heart Circ Physiol*. [300\(5\):H1885-91](#), 2011.
 37. Wray, D.W., M.A.H. Witman, S. Ives, **J. McDaniel**, A.S. Fjeldstad, J.D. Trinity, J. Conklin, M. Supiano, and R.S. Richardson. Progressive Handgrip Exercise: Evidence of Nitric Oxide-dependent Vasodilation and Blood Flow Regulation in Humans. *Am J Physiol Heart Circ Physiol*, [300\(3\):H1101-7](#), 2011.
 38. Elmer S., **J. McDaniel**, J.C. Martin. Effect of a Contusion Injury on Muscular Force, Power, Work, and Fatigue in Rat Gastrocnemius. *Scandinavian Journal of Medicine and Science in Sports*, [22: 488-494](#), 2011.
 39. **McDaniel, J.**, M.A. Hayman, S.J. Ives, A.S. Fjeldstad, J.D. Trinity, D. Walter Wray and R.S. Richardson. Attenuated Exercise Induced Hyperemia with Age: Mechanistic Insight from Passive Limb Movement. *J Physiol* [588\(pt 22\): 4507-17](#), 2010.
 40. Trinity, J.D., M. Amann, **J. McDaniel**, A.S. Fjelstad, Z. Barret-O'Keefe, S. Runnels, D.N. Morgan, D.W. Wray, and Russell S. Richardson. Limb movement-induced

- hyperemia has a central component; evidence from a neural blockade study. *American J. of Physiol – Heart and Circ Physiol* [299\(5\):H1693-700, 2010.](#)
41. Hayman, M.A., J. Nativi, J. Stehlik, **J. McDaniel**, A.S. Fjeldstad, S.J. Ives, D.W. Wray and R.S. Richardson. Understanding exercise induced hyperemia for central and peripheral responses to passive limb movement in heart transplant patients. *American J. of Physiol – Heart and Circ Physiol* [299\(5\):H1653-9, 2010.](#)
 42. Elmer S., **J. McDaniel** and J.C. Martin. Alterations in neuromuscular function and perceptual responses following acute eccentric cycling exercise. *Euro J Appl Physiol* [110\(6\):1225-33, 2010.](#)
 43. **McDaniel, J.**, A.S. Fjeldstad, S.J. Ives, M.A Hayman, P. Kithas, R.S. Richardson. Central and peripheral contributors to skeletal muscle hyperemia: responses to passive limb movement. *Journal of Applied Physiology*, [108\(1\):76-84, 2010.](#)
 44. **McDaniel, J.**, S. Elmer, J.C. Martin. Limitations of Relaxation Kinetics on Muscular Work. *Acta. Physiologica*, [198\(2\):191-8, 2010.](#)
 45. **McDaniel, J.**, S. Elmer, J.C. Martin. The Effect of Shortening History on Isometric and Dynamic Muscle Function. *Journal of Biomechanics*, [43\(4\): 606-11, 2010.](#)
 46. **McDaniel, J.**, A. Subudi, J.C. Martin. Torso stabilization reduces metabolic cost of producing cycling power. *Canadian Journal of Applied Physiology*, 30(4): 433-441, 2005.
 47. **McDaniel, J.**, J.L. Durstine, G.A. Hand, and J.C. Martin. Determinants of the metabolic cost of submaximal cycling. *Journal of Applied Physiology*, [93\(3\): 823-828, 2002.](#)

Books/Lab Manual

1. **McDaniel, J** Pollock BS, Burns KJ, Barkley JE and Glickman EL. *Kent State's Laboratory Manual for Exercise Testing*. Dubuque, IA: Kendal Hunt: 2013
2. Glickman EL, Burns KJ, Pollock BS, Barkley JE, and **McDaniel J.** *Kent State's Lab Manual for Exercise Physiology*.

Invited Presentations

1. *Blood Flow Regulation in Those with Spinal Cord Injuries*. Michigan Tech University, Department of Exercise Science, Fall 2017.
2. *Myths and Science in Cycling* Presented at the Medicine of Cycling Conference. August 14th-16th 2015, Colorado Springs, Colorado.
3. *Vascular Control*. Chaired a thematic poster session at the American College of Sports Medicine Annual Meeting Orlando, FL, May 2014.
4. *Optimizing your experience as a VA special Fellow*. American Society of Geriatrics, Washington DC, 2011.

Oral Presentations

1. **McDaniel, J.** *Attenuated Exercise Induced Hyperemia with Age: Mechanistic Insight from Passive Limb Movement.* Symposium at the American College of Sports Medicine annual Conference, San Francisco, CA, 2012.
2. **McDaniel J,** Fjeldstad A, Ives S, Hayman M, Kithas P, Richardson RS. *Central and peripheral contributors to skeletal muscle hyperemia.* American College of Sports Medicine, Seattle, WA, 2009.
3. Brown, N.A.T., **J. McDaniel,** C.J. Davidson, J.C. Martin. *Cycling: a common task with uncommon capacity to facilitate scientific investigation.* Symposium at American College of Sports Medicine Southwest Conference, Las Vegas NV, 2003.
4. **McDaniel, J.** and J.C. Martin. *Determinants of metabolic cost of submaximal cycling.* Presented at the 48th annual meeting of the American College of Sports Medicine. Baltimore, MD, 2001.

Poster Presentations

1. Stavres J, Fischer S, **McDaniel J.** *Post exercise hypotension and blood flow characteristics following eccentric and concentric exercise.* American College of Sports Medicine Annual Meeting, Denver, CO, May 2017.
2. Pollock BS, Petersen J, Calvo D, Gerhart G, **McDaniel J,** Spitznagel MB, and Ridgel A. *The effects of water aerobics exercise on cerebral perfusion in multiple sclerosis.* American College of Sports Medicine Annual Meeting, Denver, CO, May 2017.
3. Fischer S, J Stavres and **J McDaniel.** *Metabolic differences between a bout of eccentric, concentric and traditional resistance exercise.* American College of Sports Medicine Annual Meeting, Denver, CO, May 2017
4. Pollock BS, Burns KJ, Boka K, Ridgel A and **J McDaniel.** *Vascular function in Parkinson's disease patients.* World's Parkinson Congress, Portland, OR, September 2016
5. **McDaniel J,** PV LaScola, KJ Burns and BS Pollock. *Comparing the Physiological Responses to Single and Double Leg Cycling in Older Individuals.* Medicine and Science in Sport and Exercise, 48(5S) Supplement. 63rd Meeting of the American College of Sports Medicine, Boston, MA., 2016.
6. Harper SA, Cooper-Bagley M, Habowski S, Chinn L and **McDaniel J.** *Comparison of Strength and Aerobic Capacity Imbalances in the Lower Limbs.* Medicine and Science in Sport and Exercise, 48(5S) Supplement. 63rd Meeting of the American College of Sports Medicine, Boston, MA., 2016.
7. Pollock BS, KJ Burns and **McDaniel J.** *The Influence of Gender On Functional Sympatholysis.* Medicine and Science in Sport and Exercise, 48(5S) Supplement. 63rd Meeting of the American College of Sports Medicine, Boston, MA., 2016.
8. **McDaniel J,** Pollock BS, Burns K and Pundik S. *Vascular Function is Preserved in the Paretic Limb Following a Stroke.* The American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

9. Pollock BS, Burns K, Boka K, and **McDaniel J**. *Comparing Cardiovascular Responses Between Upper and Lower Body Negative Pressure Stimulation*. The American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.
10. Peroutky K, Pollock BS, Burns KJ, Stavres J and **McDaniel J**. *The influence of upper body negative pressure on brachial artery blood flow during handgrip exercise*. The American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.
11. Burns K, Pollock B, Harper S, Peroutky K, **McDaniel J**. *Hyperemic response to passive limb movement In the Lower and Upper extremities*. The American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015
5. Witman MAH, **McDaniel J**, Ives SJ, Nativi JN, Stehlik J, Richardson RS. *Heart Transplant Recipients and NO-mediated Vascular Function: Evidence from Passive Limb Movement*. American College of Sports Medicine Annual Meeting Orlando, FL, May 2014.
6. Burns KJ, Pollock BS, Harper S, Peroutky K and **McDaniel J**. *Use of passive exercise to transiently increase blood flow in the lower and upper extremities*. American College of Sports Medicine Annual Meeting, Orlando, FL, May 2014.
7. Pollock BS, Burns KJ, Harper S, Peroutky K and **McDaniel J**. *Skeletal muscle hyperemia and repetitive passive limb movement*. American College of Sports Medicine Annual Meeting Orlando, FL, May 2014.
8. Harper S, Burns KJ, Pollock BS, **McDaniel J**. *The influence of lateral pedal displacement on cycling efficiency and maximal cycling power*. American College of Sports Medicine Annual Meeting, Orlando, FL, May 2014.
9. **McDaniel, J.**, M Moyer, E. van Lunteren. *The Influence of DAP on cyclic muscle contractions*. American College of Sports Medicine National Meeting, Indianapolis, IN, May 2013.
10. Peroutky K, Pollock BS, Burns KJ and **McDaniel J**. *Validity of handgrip exercise to study vascular function in Parkinson's disease*. American College of Sports Medicine National Meeting, Indianapolis, IN, May 2013.
11. Pollock BS, Burns KJ, Ridgel A, and **McDaniel J**. *Vascular Function in Parkinson's disease patients*. American College of Sports Medicine National Meeting, Indianapolis, IN, May 2013.
12. Burns KJ, Pollock BS, Ridgel A, and **McDaniel J**. *Hemodynamic and vascular responses to handgrip exercise in Parkinson's disease*. American College of Sports Medicine National Meeting, Indianapolis, IN, May 2013.
13. Burns, K.J., B.S. Pollock, P. LaScola, **J. McDaniel**. *Single leg counter-weighted cycling elicits similar cardiovascular responses to double leg cycling: implications for rehabilitation*. American College of Sports Medicine annual meeting, San Francisco, CA 2012.
14. Witman, M.A.H, **J. McDaniel**, S.J. Ives, A.S. Fjeldstad, J. Zhao, R.S. Richardson. *Role of free radicals in the regulation of systemic vascular resistance in chronic*

- heart failure. American College of Sports Medicine annual meeting, San Francisco, CA 2012.
15. Elmer, S.J., C.S. Marshall, **J. McDaniel**, D.T. Martin, J.C. Martin. Influence of exercise-induced fatigue on submaximal and maximal joint-specific power production. American College of Sports Medicine annual meeting, San Francisco, CA 2012.
 16. Rossman, R.J., M. Venturelli, **J. McDaniel**, M. Amann, R.S. Richardson. Muscle Mass and Peripheral Fatigue: Implications for the role of afferent feedback. American College of Sports Medicine annual meeting, San Francisco, CA 2012.
 17. Ives, S.J., **J. McDaniel**, M.A.H. Witman, R.S. Richardson. Are there sex-specific differences in the mechanoreflex that alter limb movement induced hemodynamic responses. American College of Sports Medicine annual meeting, San Francisco, CA 2012.
 18. Fjeldstad, A.S., **J. McDaniel**, S.J. Ives, M.A.H. Witman, J. Zhao, R.S. Richardson. Oxidative Stress and Flow-Mediated Dilation During Incremental Handgrip Exercise In Multiple Sclerosis. American College of Sports Medicine, Denver, CO 2011.
 19. Trinity, J.D., **J. McDaniel**, M. Venturelli, A.S. Fjeldstad, Z. Barrett-O'Keefe, M. Amann, D.W. Wray, R.S. Richardson. Central And Peripheral Hemodynamic Contributions To Movement-induced Hyperemia: Impact Of Body Position. American College of Sports Medicine, Denver, CO 2011.
 20. Venturelli, M., M. Amann, **J. McDaniel**, J.D. Trinity, A.S. Fjeldstad, R.S. Richardson. Central And Peripheral Hemodynamic Responses To Passive-limb Movement: The Role Of Central Command. American College of Sports Medicine, Denver, CO 2011.
 21. Wray, D.W., M.A. Hayman, S.J. Ives, **J. McDaniel**, A.S. Fjeldstad, J.D. Trinity, J.D. Conklin, R.S. Richardson. Brachial Artery Flow-Mediated Vasodilation: Is Nitric Oxide Obligatory? American College of Sports Medicine, Denver, CO 2011.
 22. Witman, M.A.H., A.S. Fjeldstad, S.J. Ives, **J. McDaniel**, Z. Barrett-O'Keefe, D.W. Wray, R.S. Richardson. Vascular Function And Oxidative Stress: In Health, Heart Failure, Heart Transplantation, And Beyond. American College of Sports Medicine, Denver, CO 2011.
 23. **McDaniel, J.**, D.W. Wray, S.K. Nishiyama, R.A. Harris, J. Zhao, A.S. Fjeldstad M.A. Hayman, S.J. Ives, Z. Barrett-O'Keefe and R.S. Age-specific Effect of Acute Antioxidant Consumption on Endothelial Function. American College of Sports Medicine, Denver, CO 2011.
 24. Wray, D.W., M.A. Hayman, S.J. Ives, **J. McDaniel**, A.S. Fjeldstad, J. R.S. Richardson. Handgrip Exercise as a Model For Determination Of Endothelium-dependent Vasodilation In Humans. American College of Sports Medicine, Baltimore, MD 2010.
 25. Fjeldstad, A.S., M.A. Hayman, **J. McDaniel**, R.S. Richardson. COPD, Antioxidants, and Vascular Function. American College of Sports Medicine, Baltimore, MD 2010.

26. Hayman, M.A., J. Nativi, J. Stehlik, **J. McDaniel**, A.S. Fjeldstad, S.J. Ives, D.W. Wray, R.S. Richardson. Understanding Exercise-induced Hyperemia: Central and Peripheral Responses to Passive Limb Movement in Heart Transplant Patients. American College of Sports Medicine, Baltimore, MD 2010.
27. **McDaniel, J**, M.A. Hayman, A.S. Fjeldstad, S.J. Ives, J.D. Trinity, Z. Barrett-O'Keefe, R.S. Richardson. Age and Attenuated Exercise Hyperemia: Partitioning the Contributors. American College of Sports Medicine, Baltimore, MD 2010.
28. Elmer, S.J., J.C. Martin, and **J. McDaniel**. Influence of relaxation kinetics on muscular work. Workshop on Multi-Scale Muscle Mechanics, Woods Hole, MA, September 2009.
29. Ives, S., **J. McDaniel**, R.S. Richardson. Skeletal muscle blood flow during limb movement: the role of joint angle. American College of Sports Medicine, Seattle, WA, 2009.
30. **McDaniel J**, Fjeldstad A, Ives S, Hayman M, Kithas P, Richardson RS. Central and peripheral contributors to exercise onset hyperemia. American College of Sports Medicine, Seattle, WA, 2009.
31. Hayman, M., **J. McDaniel**, A. Fjeldstad, S. Ives, D.W. Wary, R.S. Richardson. Normalizing flow mediated dilation for shear rate unveils the vascular effect of a nutritional intervention. American College of Sports Medicine, Indianapolis, IN, 2009.
32. **McDaniel, J.**, S.J. Elmer, and J.C. Martin. The Influence of Shortening History on Dynamic Muscle Function. American College of Sports Medicine, Indianapolis, IN, 2008.
33. Elmer, S.J., **J. McDaniel**, and J.C. Martin. Maximal Neuromuscular Function Following a Contusion Injury. American College of Sports Medicine, Indianapolis, IN, 2008.
34. **McDaniel, J.**, S.J. Elmer and J.C. Martin Submaximal work production scales with isometric force. Experimental Biology, San Francisco, CA 2006
35. Horscroft, R.D., C.J. Davidson, **J McDaniel**, E.L. Hunter, J.D. Grisham, J.M. McNeil, L.D. Gidley, C. Carroll, F.T. Thompson, and J.C. Martin . Joint Power Distribution Differs During Maximal and Submaximal Cycling. American College of Sports Medicine, Nashville, TN, 2005.
36. **McDaniel, J.**, A Tomas, E.L. Hunter, J.D. Grisham, J.M. McNeil, L.D. Gidley, C. Carroll, F.T. Thompson, C.J. Davidson, R.D. Horscroft, and J.C. Martin . Joint Power Distribution at 60, 90, and 120 rpm During Seated Maximal Cycling. American College of Sports Medicine, Nashville, TN, 2005.
37. Davidson, C.J., R.D. Horscroft, **J. McDaniel**, A Tomas, E.L. Hunter, J.D. Grisham, J.M. McNeil, L.D. Gidley, C. Carroll, F.T. Thompson, and J.C. Martin . The Biomechanics of Producing Standing and Seated Maximal Cycling Power. American College of Sports Medicine, Nashville, TN, 2005.

38. **McDaniel, J.**, A.W. Subudhi, and J.C. Martin Metabolic Cost of Upper Body Torso Stabilization During Cycling. American College of Sports Medicine, Indianapolis IN, 2004.
39. Martin, J.C., C.J. Davidson, **J. McDaniel**, and B.M. Wagner. Duty Cycle Alters Maximal Cycling Power. American College of Sports Medicine, Indianapolis IN, 2004.
40. **McDaniel, J.**, J.P. Mattson, and J.C. Martin. High stimulation frequency alters rate of force development but not maximum force. American College of Sports Medicine, San Francisco CA. 2003.
41. Horscroft, R.D., C.J. David, **J. McDaniel**, and J.C. Martin. Altered saddle height does not alter joint power distribution during submaximal cycling. American College of Sports Medicine, San Francisco CA. 2003.

GRANTS / FUNDING

Funded Grants

Development of a personalized model for pressure ulcer prevention acutely following spinal cord injury: biomarkers of muscle composition and resilience.

Agency: Department of Defense: Spinal Cord Injury Research Program (SCRIP)
(Sept 2014-Sept 2017)

Role: Co-Investigator

Funding: \$449,500

Exercise to improve blood flow and vascular health in the lower limbs of SCI.

Agency: Veterans Affairs RR&D SPiRE- (Apr 2015-Apr 2017)

Role: Principal Investigator

Funding: \$200,000

Development of personalized pressure ulcer/deep tissue injury risk tool

Agency: Craig H. Neilsen Foundation (Jan 2015 – Dec 2016)

Role: Co-Investigator

Funding: \$300,000

Partitioning the Contributors to Post-Exercise Hypotension: Elevated Muscular Work or Metabolism

College of EHHS Seed Award- 2014

Role- Principal Investigator

Funding: \$5,000

Single Leg Cycling: Implications for Cardiac Rehabilitation

Kent State University Research Council - 2012

Role: Principal Investigator/ Mentor

Funding: \$3,500

Muscle Function and Vascular Health in the Elderly Population: The Role of Chronic Antioxidant Supplementation.

Agency: Veterans Affairs RR&D – 2010-2014.

Role: Principal Investigator.

Funding: \$600,000

Antioxidants and Blood Flow in the Elderly Population

Agency: University of Utah, Center on Aging - 2009

Role: Principal Investigator

Funding: \$20,000

Passive movement as a Rehabilitative Modality for Spinal Cord Injured Patients

Agency: University of Utah, College of Health - 2008

Role: Principal Investigator

Funding: \$5000

Non-Funded Grants

Cognitive benefits of a brief exercise intervention in multiple sclerosis

Agency: Department of Defense (proposed Sept 2015)

Role: Co-Investigator

Budget: \$573,000

Cognitive benefits of a brief aquatic exercise intervention in multiple sclerosis

Agency: NIH R21 (proposed June 2015)

Role: Co-Investigator

Budget: \$407,000

The influence of remaining lower limb sympathetic innervation on orthostatic intolerance and blood flow regulation during exercise.

Agency: Paralyzed Veterans of America Foundation –(Proposed Sept 2014)

Role: Principal Investigator

Funding: \$150,000

Hyperammonemia induces impaired skeletal muscle contractile function in cirrhosis

Agency: National institutes of Health (R21) – (Proposed August 2013)

Role: Principal Investigator

Funding: \$200,000

Hyperammonemia induces impaired skeletal muscle contractile function in cirrhosis

Agency: Kent State University/Lerner Research Institute collaborative Grant – (proposed Spring 2013)

Role: Co-Principal Investigator

Funding: \$120,000

TEACHING ACTIVITIES

University of South Carolina

Physiology of Muscular Contraction, University of South Carolina (1998, 1999)
Adult Fitness Programs, University of South Carolina (1998, 1999)

University of Utah

ESS 3091- Physiology of Fitness (2004)
ESS 3093- Biomechanics (2006)
Research Experience (2007)

Kent State University

Courses (2-2 teaching load)

EXPH 65081/75081 - Energy Metabolism and Body Composition
Spring 2011

EXSC 45070/EXPH 55070 – ECG for the Exercise Physiologist
Spring and Fall 2011, 2012, 2014, 2015, 2016, 2017

EXSC 45065/EXPH 55065 – Exercise Testing
Fall 2011, 2012, 2013, 2014, 2015, 2016, 2017

EXPH 75084 – Cardiovascular and Respiratory Dynamics
Spring 2012

EXPH 65080/75080 - Physiological Basis of Exercise and Sport
Spring 2013, 2014, 2015, 2016, 2017, 2018

Additional requirements beyond 2-2 teaching load

(During both fall and spring semesters I have approximately 8-12 undergraduate students and 3-4 graduate students that register for research experience in my lab. This requires me to incorporate them into existing projects or create additional research projects for them.)

EXSC 45096 - Individual Investigation in Exercise Science
Fall 2011, Spring and Fall 2012, 2013, 2014, 2015, 2016, 2017

EXPH 83098 – Graduate Research
Fall 2011, Spring and Fall 2012, 2013, 2014, 2015, 2017

STUDENT ADVISING

PhD Dissertation – Advisor

1. Shane Draper (2018)- Physiological Responses to Single and Double Leg Cycling in Normoxic and Hypoxic Conditions
2. Jon Stavres (2017) – Efficacy of BFR Exercise for Those with SCI
3. Phil LaScola (2015) - Cardiovascular Responses to Single-Leg Cycling in the Elderly Population.
4. Keith Burns (2015) – Exercise to Improve Blood Flow and Tissue Perfusion in Lower Limbs of SCI.
5. Brandon Pollock (2015) - Determining the influence of limb and gender on blood pressure regulation and functional sympatholysis during the application of negative pressure.
6. Morgan Bailey (2015) - Single leg aerobic capacity, muscular strength, balance and agility in healthy and surgically repaired anterior cruciate ligament legs in college age students.
7. Yong Suk Seo (Co-Advisor 2015) - The effects of acute exercise on cognitive performance in hypoxic condition.
8. David Keen (Co-Advisor 2012) - The Effects of Cold and Lower Body Negative Pressure on Cardiovascular and Thermoregulatory Homeostasis.

PhD Dissertation - Committee Member

1. Sara Harper (2016)- The influence of BDNF Val66Met Polymorphism on Cognition, Depression, Quality of Life and Motor Symptoms in Individuals with Parkinson's Disease after Dynamic Cycling.
2. Fred Peters (2016)- The Effects of Localized Vibration on Delayed Onset Muscle Soreness Following Intense Eccentric Cycling
3. Dana Ault (2016)- The effects of dynamic cycling on motor function, HR, and RPE in individuals with Parkinson's disease.
4. Jennifer Peterson (2016) – Effects of brief aquatic exercise in multiple sclerosis on mobility and function.
5. Michael Rebold (2014) – The experimental effect of parental influence on children's physical activity.
6. Andrew Carnes (2014) – The effect of peer influence on exercise behavior and enjoyment in recreational runners.
7. Bobby Phillips (2014) – Single trial effects of dynamic cycling: how long does it last?
8. Carly Goldstein (2014) – Moderators and contextual factors in the relationship between depression and medication adherence in heart failure.

9. Rachel Galioto (2014) - The effects of exercise on cognitive function in older adults with heart failure: an interventional study
10. Matthew Feedback (2013) - Normobaric hypoxia and race.
11. Steve Elmer (2011) - University of Utah. Understanding the Mechanisms of Fatigue: Central and Peripheral Fatigue in Young and Old.

Master Thesis – Advisor

1. Steven Fischer (Fall 2016) – Differences in metabolic costs to eccentric, concentric and traditional resistance exercise.
2. Sara Harper (2014) -The influence of lateral pedal displacement on cycling efficiency and maximal cycling power.

Master Thesis - Committee Member

1. Samantha Uhas (2013)- Participating in physical activity after consuming meals of differing caloric content does not alter appetite four hours post activity.
2. Kelly Wagner (2013)- Meals of differing caloric content do not alter physical activity behavior during a subsequent simulated recess period in children.
3. Kayla Wilson (2013) – Interval active-assisted cycling intervention improves motor function in individuals with parkinson’s diseases.

Undergraduate Research Advisor

1. Sara Harper- Received grant from Kent State Undergraduate Research Council for her project “Single Leg Cycling: Implications for Cardiac Rehabilitation”.

SERVICE

University/College/School Service

- School Curriculum Committee – member 2012, 2013, 2014
- School FAC committee – 2014
- College Research Advisory Council – 2013, 2014, 2015
- Kent State IRB committee member – 2015, 2016, 2017
- Kent State IRB Chair- 2018

Department Service

- Overhaul department website - 2014

Professional Service

- Assistant Cross Country Coach for the University of South Carolina, 1999-2000.
- AD HOC Reviewer for the following journals (number of reviews):
 - Journal of Applied Physiology (4)
 - Medicine and Science in Sports and Exercise (3)
 - International Journal of Sports Medicine (5)
 - Journal of Biomechanics (3)
 - Journal of Neurology (1)
 - Journal of Rehabilitation Research and Development
- External Grant Reviewer for Department of Veterans Affairs Rehabilitation, Research and Development SPiRE grant applications.

Community Service

- Volunteer Coach with Hudson Youth Cross Country program, 2015.
- Guest speaker at multi-sport presented by The Orthopaedic Specialty Hospital, Salt Lake City UT, 2005
- Director of a Running Clinic for Body Techs, Columbia SC, 2000
- Guest speaker at multisport workshop presented by UNC Charlotte, 1999
- Women's Marathon Olympic Trials committee member, Columbia, SC. 1999
- Mayfest Quest Road Race committee, Columbia, SC 1999-2001.