

JOSEPH P. WEIR
Curriculum Vitae
May 11, 2017

Personal Information

Chair, Department of Health, Sport, and Exercise Sciences
Professor
Health, Sport, & Exercise Sciences
University of Kansas
1301 Sunnyside Avenue
104D Robinson Health and Physical Education Center
Lawrence, KS 66045-7567

Email Address: joseph.weir@ku.edu
Office Phone: (785) 864-0784
Office Fax: (785) 864-3343

Education

Ph.D., Exercise Physiology, 1993
University of Nebraska-Lincoln, Lincoln, NE
Advisor: Terry J. Housh

M.P.E., Exercise Science, 1990
University of Nebraska-Lincoln, Lincoln, NE

B.S., Exercise Science, 1987
Eastern Washington University, Cheney, WA

Experience

Academic

University of Kansas, Lawrence, KS
Professor, Department of Health, Sport, and Exercise Sciences, 2012 - Present
Chair, Department of Health, Sport, and Exercise Sciences, 2012 - Present

Des Moines University, Des Moines, IA
Professor, 2004 - 2012
Associate Professor (Tenured: 2000), 1998 - 2004
Assistant Professor, 1995 - 1998

Teachers College Columbia University, New York, NY
Assistant Professor, 1993 - 1995

Nebraska Wesleyan University, Lincoln, NE
Visiting Instructor, 1991 - 1993

University of Nebraska-Lincoln, Lincoln, NE

Graduate Assistant, 1988 - 1993

Administrative Assignments

University of Kansas
Chair, Department of Health, Sport, and Exercise Sciences, 2012 - Present

Professional Memberships

American College of Sports Medicine (ACSM)
National Strength and Conditioning Association (NSCA)

Honors/Awards/Honor Societies

Individual Honor/Award

Fellow, National Strength and Conditioning Association. (2008)
President's Award, National Strength and Conditioning Association. (2007)
Outstanding Researcher Award, Des Moines University. (2006)
Outstanding Sport Scientist Award, National Strength and Conditioning Association. (2006)
Fellow, American College of Sports Medicine. (2000)
Outstanding Young Investigator Award, National Strength and Conditioning Association. (2000)
Maude Hammond Fling Doctoral Fellowship. (1992 - 1993)
Coor's Veteran's Memorial Scholarship. (1986 - 1987)

Other Honor/Award

Sigma Xi Scientific Research Society. (1995)

Research Key Words

Exercise; Fatigue; Electromyography; Muscle; Strength

Research/Scholarly Work

Publications

Books

1. Housh, T. J., Cramer, J. T., Weir, J. P., Beck, T. W., & Johnson, G. O. (2016). *Laboratory Manual for Exercise Physiology, Exercise Testing, and Physical Fitness*. Holcomb Hathaway. ISBN: 978-1-62159-046-0

2. Vincent, W. J., & Weir, J. P. (2012). *Statistics in Kinesiology* (4th ed.). Champaign IL: Human Kinetics Publishers.
3. Housh, T. J., Cramer, J. T., Weir, J. P., Beck, T. W., & Johnson, G. O. (2009). *Physical Fitness Laboratories on a Budget*. Scottsdale, AZ: Holcomb Hathaway Publishers.

Book Chapters

1. Weir, J. P. (2015). Statistical Approaches to Data Analysis. In L. E. Armstrong & W. J. Kraemer (Eds.), *ACSM's Research Methods* (1st ed., pp. 325-342). Wolters Kluwer.
2. Weir, J. P., & Brown, L. E. (2012). Acute and Chronic Resistance Training Adaptations. In J. W. Coburn & M. H. Malek (Eds.), *NSCA's Essentials of Personal Training* (2nd ed.). Champaign, IL: Human Kinetics Publishers.
3. Weir, J. P. (2012). Exercise Physiology. In T. J. Housh, D. J. Housh, & G. O. Johnson (Eds.), *Introduction to Exercise Science* (4th ed.). Holcomb Hathaway.
4. Weir, J. P. (2008). Methods of Body Composition Assessment. In J. Antonio, D. Kalman, J. Stout, M. Greenwood, & D. Willoughby (Eds.), *Essentials of Sports Nutrition and Supplements*. Totowa, NJ: Humana Press.
5. Malek, M. H., York, A. M., & Weir, J. P. (2007). Foundations of Strength Training for Special Populations. In T. J. Chandler & L. E. Brown (Eds.), *Conditioning for Strength and Human Performance*. Philadelphia: Lippincott Williams and Wilkins.
6. Weir, J. P. (2007). Exercise Physiology. In T. J. Housh, D. J. Housh, & G. O. Johnson (Eds.), *Introduction to Exercise Science* (3rd ed.). Holcomb Hathaway.
7. Weir, J. (2007). Clinical Applications. In J. R. Stout, J. Antonio, & D. Kalman (Eds.), *Essentials of Creatine in Sports and Health*. Totowa, NJ: Humana Press.
8. Weir, J. P., & Cramer, J. T. (2005). Principles of Musculoskeletal Exercise Programming. In L. Kaminsky (Ed.), *ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription* (5th ed.). Philadelphia: Lippincott Williams and Wilkins.
9. Brown, L. E., & Weir, J. P. (2004). Acute and Chronic Resistance Training Adaptations. In R. W. Earl & T. R. Baechle (Eds.), *NSCA's Essentials of Personal Training* (1st ed.). Champaign, IL: Human Kinetics Publishers.
10. Weir, J. P. (2003). Exercise Physiology. In T. J. Housh, D. J. Housh, & G. O. Johnson (Eds.), *Introduction to Exercise Science* (2nd ed.). Benjamin Cummings.
11. Weir, J. P. (2000). Exercise Physiology. In T. J. Housh & D. J. Housh (Eds.), *Introduction to Exercise Science* (1st ed.). Allyn and Bacon.
12. Weir, J. P. (2000). Youth Isokinetic Testing. In L. E. Brown (Ed.), *Isokinetic Performance Enhancement*. Champaign IL: Human Kinetics Publishers.

Journal Articles

Reviewed/Refereed

1. Wecht, J. M., Weir, J. P., & Bauman, W. A. (in press). Inter-day reliability of blood pressure and cerebral blood flow velocities in persons with spinal cord injury and intact controls. *The Journal of Spinal Cord Medicine*.
2. Cramer, J. T., Jenkins, N. D., Mustad, V. A., & Weir, J. P. (in press). Isokinetic dynamometry in healthy versus sarcopenic and malnourished elderly: Beyond simple measurements of muscle strength. *Journal of Applied Gerontology*.
3. Ciccone, A. B., Siedlik, J. A., Wecht, J. M., Deckert, J. A., Nguyen, N. D., & Weir, J. P. (in press). Reminder: RMSSD and SD1 are identical heart rate variability metrics. *Muscle & Nerve*. doi:10.1002/mus.25573 ISSN: 0148-639X
4. Fry, A. C., Housh, T. J., Cramer, J. B., Weir, J. P., Beck, T. W., Schilling, B. K., Miller, J. D., & Nicoll, J. X. (in press). Non-Invasive Assessment of Skeletal Muscle Myosin Heavy Chain Expression in Trained and Untrained Men. *Journal of strength and conditioning research*. doi:10.1519/JSC.0000000000001645 ISSN: 1064-8011
5. Miramonti, A. A., Jenkins, N. D., Oza, P. D., Weir, J. P., & Cramer, J. T. (in press). Mechanomyographic responses during recruitment curves in the soleus muscle. *Muscle & Nerve*. doi:10.1002/mus.25432 ISSN: 0148-639X
6. Smith, C. M., Housh, T. J., Zuniga, J. M., Camic, C. L., Bergstrom, H. C., Smith, D. B., Herda, T., Weir, J. P., Hill, E. C., Jenkins, N. D., Schmidt, R. J., & Johnson, G. (2017). Influences of Interelectrode Distance and Innervation Zone on Electromyographic Signals. *International Journal of Sports Medicine*, 38(2), 111-117. doi:10.1055/s-0042-119398 ISSN: 0172-4622
7. Smith, C. M., Housh, T. J., Herda, T., Zuniga, J. M., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Cramer, J. T., Hill, E. C., Cochrane, K. C., Jenkins, N. D.M., Schmidt, R. J., & Johnson, G. (2016). Electromyographic responses from the vastus medialis during isometric muscle actions. *International Journal of Sports Medicine*, 37(8), 647-652.
8. Smith, C. M., Housh, T. J., Herda, T. J., Zuniga, J. M., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Hill, E. C., Cochrane, K. C., Jenkins, N. D., Schmidt, R. J., & Johnson, G. O. (2016). Time course of changes in neuromuscular parameters during sustained isometric muscle actions. *Journal of Strength and Conditioning Research*, 30(10), 2697-2702.
9. Siedlik, J. A., Benedict, S. H., Landes, E. J., Weir, J. P., Vardiman, J. P., & Gallagher, P. M. (2016). Acute bouts of exercise induce a suppressive effect on lymphocyte proliferation in human subjects: a meta-analysis. *Brain, Behavior, and Immunity*, 56, 343-351.
10. Smith, C. M., Housh, T. J., Herda, T., Zuniga, J. M., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Cramer, J. T., Hill, E. C., Cochrane, K. C., Jenkins, N. D., Schmidt, R. J., & Johnson, G. (2016). Electromyographic responses from the vastus medialis during isometric muscle actions. *International Journal of Sports Medicine*, 37(8),

647-52.

11. Wecht, J. M., Weir, J. P., Radulovic, M., & Bauman, W. A. (2016). Effects of midodrine and L-NAME on systemic and cerebral hemodynamics during cognitive activation in spinal cord injury and intact controls. *Physiological Reports*, 4(3), e12683.
12. Wecht, J. M., Weir, J. P., Martinez, S., Eraifej, M., & Bauman, W. A. (2016). Orthostatic hypotension and orthostatic hypertension in American veterans. *Clinical Autonomic Research*, 26(1), 49-58.
13. Herda, T. J., Zuniga, J. M., Ryan, E. D., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Cramer, J. T., & Housh, T. J. (2015). The influence of electromyographic recording methods and the innervation zone on the mean power frequency - torque relationships. *Journal of Electromyography and Kinesiology*, 25(3), 423-430.
14. Siedlik, J. A., Harrison, G., Brigman, R., Graham, Z. A., Weir, J. P., Gallagher, P. M., & Vardiman, J. P. (2015). Methods comparison: Assessing agreement of physiological parameters obtained from exercise on two different cycle ergometers. *Journal of Strength and Conditioning Research*, 29(4), 1139-1145.
15. Smith, C. M., Housh, T. J., Herda, T. J., Zuniga, J. M., Ryan, E. D., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Cramer, J. T., Hill, E. C., Cochrane, K. C., Jenkins, N. D., Schmidt, R. J., & Johnson, G. O. (2015). Effects of the innervation zone on the time and frequency domain parameters of the surface electromyographic signal. *Journal of Electromyography and Kinesiology*, 25(4), 565-570.
16. Wecht, J. M., Weir, J. P., Galea, M., Martinez, S., & Bauman, W. A. (2015). Prevalence of abnormal systemic hemodynamics in veterans with and without spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 96(6), 1071-1079.
17. Herda, T. J., Siedlik, J. A., Trevino, M. A., Cooper, M. A., & Weir, J. P. (2015). Motor unit control strategies of endurance versus resistance trained individuals. *Muscle and Nerve*, 52(5), 832-843.
18. Jenkins, N. D., Buckner, S. L., Cochrane, K. C., Bergstrom, H. C., Goldsmith, J. A., Weir, J. P., Housh, T. J., & Cramer, J. T. (2014). CLA supplementation and aerobic exercise lower blood triacylglycerol, but have no effect on peak oxygen uptake or cardiorespiratory fatigue thresholds. *Lipids*, 49(9), 871-880.
19. Jenkins, N. D., Buckner, S. L., Baker, R. B., Bergstrom, H. C., Cochrane, K. C., Weir, J. P., Housh, T. J., & Cramer, J. T. (2014). Effects of 6 weeks of aerobic exercise combined with conjugated linoleic acid on the physical working capacity at fatigue threshold. *Journal of Strength and Conditioning Research*, 28(8), 2127-2135.
20. Fjeldstad, C., Fjeldstad, A. S., Weir, J. P., & Gabriel, P. (2014). Association of Vitamin D deficiency with RNFL thickness in MS individuals without history of optic neuritis. *Multiple Sclerosis and Related Disorders*, 3, 489-493.
21. Herda, T. J., Zuniga, J. M., Ryan, E. D., Camic, C. L., Bergstrom, H. C., Smith, D. B., Weir, J. P., Cramer, J. T., & Housh, T. J. (2013). Quantifying the effects of electrode distance from the innervation zone on the electromyographic amplitude versus torque

- relationships. *Physiological Measurement*, 34(3), 315-324.
22. Lopez, H. L., Ziegenfuss, T. N., Hofheins, J. E., Habowski, S. M., Arent, S. M., Weir, J. P., & Ferrando, A. A. (2013). Eight weeks of supplementation with a multi-ingredient weight loss product enhances body composition, reduces hip and waist girth, and increases energy levels in overweight men and women. *Journal of the International Society of Sports Nutrition*, 10(22), 14. <http://www.jissn.com/content/10/1/22>
<http://www.jissn.com/content/10/1/22>
 23. Wecht, J. M., Rosado-Rivera, D., Weir, J. P., Yen, C., Ivan, A. M., & Bauman, W. M. (2013). Hemodynamic effects of L-threo-3,4-dihydroxyphenylserine (droxidopa) in hypotensive individuals with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 94, 2006-2012.
 24. Wecht, J. M., Zhu, C., Weir, J. P., Yen, C., Renzi, C., & Galea, M. (2013). A prospective report on the prevalence of heart rate and blood pressure abnormalities in veterans with spinal cord injuries. *The Journal of Spinal Cord Medicine*, 36(5), 454-462.
 25. Ronnebaum, J. A., Weir, J. P., & Hilsabeck, T. A. (2012). Earlier mobilization decreases the length of stay in the intensive care unit. *Journal of Acute Care Physical Therapy*, 3(2), 204-210.
 26. Camic, C. L., Housh, T. J., Weir, J. P., Zuniga, J. M., Hendrix, C. R., Mielke, M., Johnson, G. O., Housh, D. J., & Schmidt, R. J. (2010). Influence of body-size variables on age-related increases in isokinetic peak torque in young wrestlers. *Journal of Strength and Conditioning Research*, 24(9), 2358-2365.
 27. Herda, T. J., Housh, T. J., Fry, A. C., Weir, J. P., Schilling, B. K., Ryan, E. D., & Cramer, J. T. (2010). A noninvasive log-transform method for fiber type discrimination using mechanomyography. *Journal of Electromyography and Kinesiology*, 20(5), 787-794.
 28. Beck, T. W., Housh, T. J., Fry, A. C., Cramer, J. T., Weir, J. P., Schilling, B. K., Falvo, M. J., & Moore, C. A. (2009). A wavelet-based analysis of surface mechanomyographic signals from the quadriceps femoris. *Muscle and Nerve*, 39(3), 355-363.
 29. Beck, T. W., Housh, T. J., Fry, A. C., Cramer, J. T., Weir, J. P., Schilling, B. K., Falvo, M. J., & Moore, C. A. (2009). An examination of the relationships among myosin heavy chain isoform content, isometric strength, and mechanomyographic median frequency. *Journal of Strength and Conditioning Research*, 23(9), 2683-2688.
 30. Beck, T. W., Housh, T. J., Fry, A. C., Cramer, J. T., Weir, J. P., Schilling, B. K., Falvo, M. J., & Moore, C. A. (2009). Wavelet-based analysis of surface mechanomyographic signals from subjects with differences in myosin heavy chain isoform content. *Electromyography and Clinical Neurophysiology*, 49, 167-175.
 31. Beck, T. W., Housh, T., Fry, A. C., Cramer, J. T., Weir, J., Schilling, B., Falvo, M., & Moore, C. (2009). MMG-EMG cross-spectrum and muscle fiber type. *International Journal of Sports Medicine*, 30, 538-544.
 32. Bhargava, A., Felice, J. F., & Weir, J. P. (2009). Case series: Premixed insulin dosing in actual practice: two-thirds in AM, one-third in PM, or half and half. *Clinical Diabetes*,

27(2), 91-95.

33. Hendrix, C. R., Housh, T. J., Johnson, G. O., Weir, J. P., Beck, T. W., Malek, M. H., Mielke, M., & Schmidt, R. J. (2009). A comparison of critical force and electromyographic fatigue threshold for isometric muscle actions of the forearm flexors. *European Journal of Applied Physiology*, *105*(3), 333-342.
34. Herda, T. J., Housh, T. J., Weir, J. P., Ryan, E. D., Costa, P. B., deFreitas, J. M., Walter, A. A., Stout, J. R., Beck, T. W., & Cramer, J. T. (2009). The consistency of ordinary least-squares and generalized least-squares polynomial regression on characterizing the mechanomyographic amplitude versus torque relationship. *Physiological Measurement*, *30*, 115-128.
35. Herda, T. J., Ryan, E. D., DeFreitas, J. M., Costa, P. B., Walter, A. A., Hoge, K. M., Weir, J. P., & Cramer, J. T. (2009). Can Recruiting Rankings Predict the Success of NCAA Division I Football Teams? An Examination of the Relationships among Rivals and Scouts Recruiting Rankings and Jeff Sagarin End-of-Season Ratings in Collegiate Football. *Journal of Quantitative Analysis in Sports*, *5*(4), Article 4.
36. Herda, T. J., Weir, J. P., Ryan, E. D., Walter, A. A., Costa, P. B., Hoge, K. M., Beck, T. W., Stout, J. R., & Cramer, J. T. (2009). Reliability of absolute versus log-transformed regression models for examining the torque-related patterns of response for mechanomyographic amplitude. *Journal of Neuroscience Methods*, *179*(2), 240-246.
37. Wecht, J. M., Weir, J. P., DeMeersman, R. E., Schilero, G. J., Handrakis, J. P., LaFontaine, M. F., Cirnigliaro, C. M., Kirshblum, S. C., & Bauman, W. A. (2009). Cold face test in persons with spinal cord injury: age versus inactivity. *Clinical Autonomic Research*, *19*(4), 221-229.
38. Beck, T. W., Housh, T. J., Cramer, J. T., & Weir, J. P. (2008). The effects of electrode placement and innervation zone location on the electromyographic amplitude and mean power frequency versus isometric torque relationships for the vastus lateralis muscle. *Journal of Electromyography and Kinesiology*, *18*, 317-328.
39. Beck, T. W., Housh, T. J., Cramer, J. T., Malek, M. H., Mielke, M., Hendrix, R., & Weir, J. P. (2008). Electrode shift and normalization reduce the innervations zone's influence on EMG. *Medicine and Science in Sports and Exercise*, *40*(7), 1314-1322.
40. Beck, T. W., Housh, T. J., Fry, A. C., Cramer, J. T., Weir, J. P., Schilling, B. K., Falvo, M. J., & Moore, C. A. (2008). The influence of myosin heavy chain isoform composition and training status on the patterns of responses for mechanomyographic amplitude versus isometric torque. *Journal of Strength and Conditioning Research*, *22*(3), 818-825.
41. Beck, T. W., von Tscharnner, V., Housh, T. J., Cramer, J. T., Weir, J. P., Malek, M. H., & Mielke, M. (2008). Time/frequency events of surface mechanomyographic signals resolved by nonlinearly scaled wavelets. *Biomedical Signal Processing and Control*, *3*, 255-266.
42. Hendrix, C. R., Bull, A. J., Housh, T. J., Rana, S. R., Cramer, J. T., Beck, T. W., Weir, J. P., Malek, M. H., & Mielke, M. (2008). The effect of pedaling cadence and power output on mechanomyographic amplitude and mean power frequency during submaximal cycle ergometry. *Electromyography and Clinical Neurophysiology*, *48*(5), 195-201.

43. Radulovic, M., Schilero, G. J., Wecht, J. M., Weir, J. P., Spungen, A. M., Bauman, W. A., & Lesser, M. (2008). Airflow obstruction and reversibility in spinal cord injury: Evidence for functional sympathetic innervation. *Archives of Physical Medicine and Rehabilitation*, 89(12), 2349-2353.
44. Wecht, J. M., Weir, J. P., Goldstein, D. S., Krothe-Petroff, A. H., Spungen, A. M., Holmes, C., & Bauman, W. A. (2008). Direct and reflexive effects of nitric oxide synthase inhibition on blood pressure. *American Journal of Physiology*, 294(1), H190-H197.
45. Beck, T. W., Housh, T. J., Cramer, J. T., & Weir, J. P. (2007). The effect of the estimated innervation zone on EMG amplitude and center frequency. *Medicine and Science in Sports and Exercise*, 39(8), 1282-1290.
46. Beck, T. W., Housh, T. J., Cramer, J. T., Malek, M. H., Mielke, M., Hendrix, R., & Weir, J. P. (2007). A comparison of monopolar and bipolar recording techniques for examining the patterns of responses for electromyographic amplitude and mean power frequency versus isometric torque for the vastus lateralis. *Journal of Neuroscience Methods*, 166(2), 159-167.
47. Beck, T. W., Housh, T. J., Fry, A. C., Cramer, J. T., Weir, J. P., Schilling, B. K., Falvo, M. J., & Moore, C. A. (2007). The influence of muscle fiber type composition on the patterns of responses for electromyographic and mechanomyographic amplitude and mean power frequency during a submaximal isometric muscle action. *Electromyography and Clinical Neurophysiology*, 47(4-5), 221-232.
48. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., Malek, M. H., & Mielke, M. (2007). Effects of two days of isokinetic training on strength and electromyographic amplitude in the agonist and antagonist muscle. *Journal of Strength and Conditioning Research*, 21(3), 757-762.
49. Beck, T. W., Housh, T. J., Mielke, M., Cramer, J. T., Weir, J. P., Malek, M. H., & Johnson, G. O. (2007). The influence of electrode placement over the innervation zone on electromyographic amplitude and mean power frequency versus isokinetic torque relationships. *Journal of Neuroscience Methods*, 162(1-2), 72-83.
50. Cramer, J. T., Housh, T. J., Johnson, G. O., Weir, J. P., Beck, T. W., & Coburn, J. W. (2007). An acute bout of stretching does not affect maximal eccentric isokinetic peak torque, the joint angle at peak torque, mean power, electromyography, or mechanomyography. *Journal of Orthopaedic and Sports Physical Therapy*, 37(3), 130-139.
51. McClinton, S., Donatel, G., Weir, J., & Heiderscheidt, B. (2007). Influence of step height on quadriceps onset timing and activation during stair ascent in individuals with patellofemoral pain syndrome. *Journal of Orthopaedic and Sports Physical Therapy*, 37(5), 239-244.
52. Wecht, J. M., Weir, J. P., Krothe, A. H., Spungen, A. M., & Bauman, W. A. (2007). Normalization of supine blood pressure after nitric oxide synthase inhibition in persons with tetraplegia. *Journal of Spinal Cord Medicine*, 30(1), 5-9.
53. Beck, T. W., Housh, T. J., Johnson, G. O., Cramer, J. T., Weir, J. P., Coburn, J. W., &

- Malek, M. H. (2006). Comparison of the fast Fourier transform and continuous wavelet transform for examining mechanomyographic frequency versus eccentric torque relationships. *Journal of Neuroscience Methods*, 150(1), 59-66.
54. Beck, T. W., Housh, T. J., Johnson, G. O., Cramer, J. T., Weir, J. P., Coburn, J. W., & Malek, M. H. (2006). Electromyographic instantaneous amplitude and and instantaneous mean power frequency patterns across a range of motion during a concentric isokinetic muscle action of the biceps brachii. *Journal of Electromyography and Kinesiology*, 16(5), 531-539.
 55. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2006). Comparison of piezoelectric contact sensor and an accelerometer for examining mechanomyographic amplitude and mean power frequency versus torque relationships during isokinetic and isometric muscle actions of the biceps brachii. *Journal of Electromyography and Kinesiology*, 16, 325-335.
 56. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2006). Mechanomyographic and electromyographic responses during submaximal to maximal eccentric isokinetic muscle actions of the biceps brachii. *Journal of Strength and Conditioning Research*, 20(1), 184-191.
 57. Beck, T. W., Housh, T. J., Weir, J. P., Cramer, J. T., Vardaxis, V., Johnson, G. O., Coburn, J. W., Malek, M. H., & Mielke, M. (2006). An examination of the runs test and reverse arrangements test for assessing EMG signal stationarity. *Journal of Neuroscience Methods*, 156(1-2), 242-248.
 58. Coburn, J. W., Housh, T. J., Malek, M. H., Weir, J. P., Cramer, J. T., Beck, T. W., & Johnson, G. O. (2006). Mechanomyographic and electromyographic responses to eccentric muscle contractions. *Muscle and Nerve*, 33(5), 664-671.
 59. Coburn, J. W., Housh, T. J., Malek, M. H., Weir, J. P., Cramer, J. T., Beck, T. W., & Johnson, G. O. (2006). Neuromuscular responses to three days of velocity-specific isokinetic training. *Journal of Strength and Conditioning Research*, 20(4), 892-898.
 60. Malek, M. H., Coburn, J. W., Weir, J. P., Beck, T. W., & Housh, T. J. (2006). The effects of innervation zone on electromyographic amplitude and mean power frequency during incremental cycle ergometry. *Journal of Neuroscience Methods*, 155(1), 126-133.
 61. Malek, M. H., Housh, T. J., Coburn, J. W., Weir, J. P., Schmidt, R. J., & Beck, T. W. (2006). The effects of interelectrode distance on electromyographic amplitude and mean power frequency during incremental cycle ergometry. *Journal of Neuroscience Methods*, 151, 139-147.
 62. Wecht, J. M., Weir, J. P., & Bauman, W. A. (2006). Blunted heart rate response to vagal withdrawal in persons with tetraplegia. *Clinical Autonomic Research*, 16(6), 378-383.
 63. Wecht, J., Marsico, R., Weir, J., Spungen, A., Bauman, W., & DeMeersman, R. (2006). Autonomic recovery from peak arm exercise in fit and unfit individuals with paraplegia. *Medicine and Science in Sports and Exercise*, 38(7), 1223-1228.
 64. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., &

- Malek, M. H. (2005). Comparison of Fourier and wavelet transform procedures for examining mechanomyographic and electromyographic frequency vs isokinetic torque relationships. *Electromyography and Clinical Neurophysiology*, 45(2), 93-103.
65. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2005). Comparison of Fourier and wavelet transform procedures for examining the mechanomyographic and electromyographic frequency domain responses during fatiguing isokinetic muscle actions of the biceps brachii. *Journal of Electromyography and Kinesiology*, 15(2), 190-199.
66. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2005). Gender comparisons of the mechanomyographic amplitude and mean power frequency versus isometric torque relationships. *Journal of Applied Biomechanics*, 21, 96-109.
67. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2005). The effects of interelectrode distance on electromyographic amplitude and mean power frequency during isokinetic and isometric muscle actions of the biceps brachii. *Journal of Electromyography and Kinesiology*, 15(5), 482-495.
68. Coburn, J. W., Housh, T. J., Cramer, J. T., Weir, J. P., Miller, J. M., Beck, T. W., Malek, M. H., & Johnson, G. O. (2005). Mechanomyographic and electromyographic responses of the vastus medialis muscle during isometric and concentric muscle actions. *Journal of Strength and Conditioning Research*, 19(2), 412-420.
69. Cramer, J. T., Housh, T. J., Weir, J. P., Johnson, G. O., Coburn, J. W., & Beck, T. W. (2005). The acute effects of static stretching on peak torque, mean power output, electromyography and mechanomyography. *European Journal of Applied Physiology*, 93(5-6), 530-539.
70. Wecht, J. M., Radulovic, M., Weir, J. P., Lessey, J., Spungen, A. M., & Bauman, W. A. (2005). Partial angiotensin-converting enzyme inhibition during acute orthostatic stress in persons with tetraplegia. *Journal of Spinal Cord Medicine*, 28(2), 103-108.
71. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2004). Mechanomyographic amplitude and mean power frequency versus torque relationships during maximal isokinetic and isometric muscle actions of the biceps brachii. *Journal of Electromyography and Kinesiology*, 14(5), 555-564.
72. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2004). Mechanomyographic and electromyographic amplitude and frequency responses during fatiguing isokinetic muscle actions of the biceps brachii. *Electromyography and Clinical Neurophysiology*, 44(7), 431-441.
73. Beck, T. W., Housh, T. J., Johnson, G. O., Weir, J. P., Cramer, J. T., Coburn, J. W., & Malek, M. H. (2004). Mechanomyographic and electromyographic time and frequency domain responses during submaximal to maximal isokinetic muscle actions of the biceps brachii. *European Journal of Applied Physiology*, 92(3), 352-359.
74. Coburn, J. W., Housh, T. J., Cramer, J. T., Weir, J. P., Miller, J. M., Beck, T. W., Malek, M. M., & Johnson, G. O. (2004). Mechanomyographic time and frequency domain

- responses of the vastus medialis muscle during submaximal to maximal isometric and isokinetic muscle actions. *Electromyography and Clinical Neurophysiology*, 44, 247-255.
75. Coburn, J. W., Housh, T. J., Weir, J. P., Malek, M. H., Cramer, J. T., Beck, T. W., & Johnson, G. O. (2004). MMG responses of the vastus medialis to isometric and eccentric muscle actions. *Medicine and Science in Sports and Exercise*, 36(11), 1916-1922.
 76. Cramer, J. T., Housh, T. J., Weir, J. P., Johnson, G. O., Berning, J. M., Perry, S. R., & Bull, A. J. (2004). Gender, muscle, and velocity comparisons of mechanomyographic and electromyographic responses during isokinetic muscle actions. *Scandinavian Journal of Medicine and Science in Sports*, 14, 116-127.
 77. Evetovich, T. K., Whitehead, M. T., Webster, M. J., Soukup, J. T., Magal, M., Exchbach, L. C., Drake, S. M., Boyd, J. C., Weir, J. P., & Hinnerichs, K. R. (2004). The effect of glycerol on torque, electromyography, and mechanomyography. *Journal of Strength and Conditioning Research*, 18(4), 741-746.
 78. Wecht, J. M., Weir, J. P., DeMeersman, R. E., Spungen, A. M., & Bauman, W. A. (2004). Arterial stiffness in persons with paraplegia. *Journal of Spinal Cord Medicine*, 27(3), 255-259.
 79. Weir, J. P., Koerner, S., Mack, B., Masek, J., Vanderhoff, D., & Heiderscheid, B. C. (2004). VO₂ plateau detection in cycle ergometry. *Journal of Exercise Physiology* *online*, 7(2), 55-62. <http://www.asep.org/FLDR/Jep/Doc/Apr2004/Weir.doc>
 80. Cramer, J. T., Housh, T. J., Weir, J. P., Ebersole, K. T., Perry-Rana, S. R., Bull, A. J., & Johnson, G. O. (2003). Cross-correlation analyses of mechanomyographic signals from the superficial quadriceps femoris muscles during concentric and eccentric isokinetic muscle actions. *Electromyography and Clinical Neurophysiology*, 43(5), 293-300.
 81. Wecht, J. M., DeMeersman, R. E., Weir, J. P., Spungen, A. M., & Bauman, W. A. (2003). Cardiac autonomic responses to acute HUT in subjects with paraplegia and controls. *Clinical Autonomic Research*, 13(6), 433-438.
 82. Wecht, J. M., DeMeersman, R. E., Weir, J. P., Spungen, A. M., & Bauman, W. A. (2003). Cardiac homeostasis is independent of calf venous compliance in subjects with paraplegia. *American Journal of Physiology*, 284(6), H2392-H2399.
 83. Cramer, J. T., Housh, T. J., Weir, J. P., Johnson, G. O., Berning, J. M., Perry, S. R., & Bull, A. J. (2002). Mechanomyographic and electromyographic amplitude and frequency responses from the superficial quadriceps femoris muscles during maximal, eccentric isokinetic muscle actions. *Electromyography and Clinical Neurophysiology*, 42(6), 337-346.
 84. Cramer, J. T., Housh, T. J., Weir, J. P., Johnson, G. O., Ebersole, K. T., Perry, S. R., & Bull, A. J. (2002). Power output, mechanomyographic, and electromyographic responses to maximal, concentric isokinetic muscle actions in men and women. *Journal of Strength and Conditioning Research*, 16(3), 399-408.
 85. Evetovich, T. K., Boyd, J. C., Drake, S. M., Eschbach, L. C., Magal, M., Soukup, J. T., Webster, M. J., Whitehead, M. T., & Weir, J. P. (2002). Effect of moderate dehydration on

- torque, electromyography, and mechanomyography. *Muscle and Nerve*, 26(2), 225-231.
86. Breithaupt, T., Harris, K., Ellis, J., Purcell, E., Weir, J., Clothier, M., & Boesler, D. (2001). Thoracic lymphatic pumping and the efficacy of influenza vaccination in healthy individuals. *Journal of the American Osteopathic Association*, 101, 21-25.
[2001 George W. Northrup Medical Writing Award of JAOA]
 87. Perry, S. R., Housh, T. J., Weir, J. P., Johnson, G. O., Bull, A. J., & Ebersole, K. T. (2001). Mean power frequency and amplitude of the mechanomyographic and electromyographic signals during incremental cycle ergometry. *Journal of Electromyography and Kinesiology*, 11(4), 299-305.
 88. Stumbo, T., Merriam, S., Nies, K., Smith, A., Spurgeon, D., & Weir, J. P. (2001). The effect of hand grip stabilization on isokinetic torque at the knee. *Journal of Strength and Conditioning Research*, 15, 372-377.
 89. Wecht, J. M., DeMeersman, R. E., Weir, J. P., Bauman, W. A., & Grimm, D. R. (2001). The effects of autonomic dysfunction and endurance training on cardiovascular control. *Clinical Autonomic Research*, (11), 29-34.
 90. Ebersole, K. T., Housh, T. J., Weir, J. P., Johnson, G. O., Evetovich, T. K., & Smith, D. B. (2000). The effect of leg angular velocity on mean power frequency and amplitude of the mechanomyographic signal. *Electromyography and Clinical Neurophysiology*, 40, 49-55.
 91. Evetovich, T. K., Housh, T. J., Weir, J. P., Housh, D. J., Johnson, G. O., Ebersole, K. T., & Smith, D. B. (2000). The effect of concentric isokinetic leg extension training of the quadriceps femoris on the mean power frequency of the mechanomyographic signal. *Muscle and Nerve*, 23, 973-975.
 92. Wecht, J. M., De Meersman, R. E., Weir, J. P., Bauman, W. A., & Grimm, D. R. (2000). The effects of autonomic disruption and inactivity on venous vascular function. *American Journal of Physiology*, 278, H515-H520.
 93. Weir, J. P., Ayers, K. M., Lacefield, J. F., & Walsh, K. L. (2000). Mechanomyographic and electromyographic responses during fatigue in humans: Influence of muscle length. *European Journal of Applied Physiology*, 81, 352-359.
 94. Evetovich, T. K., Housh, T. J., Weir, J. P., Johnson, G. O., Smith, D. B., & Ebersole, K. T. (1999). Mean power frequency and amplitude of the mechanomyographic signal during maximal eccentric isokinetic muscle actions. *Electromyography and Clinical Neurophysiology*, 39, 123-127.
 95. Weir, J. P., Housh, T. J., Johnson, G. O., Housh, D. J., & Ebersole, K. T. (1999). Allometric scaling of isokinetic peak torque: The Nebraska Wrestling Study. *European Journal of Applied Physiology*, 80, 240-248.
 96. Weir, J. P., Mahoney, K. P., Haan, K. G., & Davis, A. (1999). Influence of electrode orientation on electromyographic fatigue indices of the vastus lateralis. *Journal of Exercise Physiology (online)*, 2(3), 15-22. <http://www.css.edu/users/tboone2/asep/july99b.html>
 97. De Meersman, R. E., Zion, A. S., Giardina, E. G., Alejandro, R., Sciacca, R. R., Weir, J. P.,

- Lieberman, J. S., & Downey, J. A. (1998). Estrogen replacement, vascular distensibility and blood pressures in post-menopausal women. *American Journal of Physiology*, 274, H1539-H1544.
98. De Meersman, R. E., Zion, A. S., Weir, J. P., Lieberman, J. S., & Downey, J. A. (1998). Mechanoreceptors and autonomic responses to movement in humans. *Clinical Autonomic Research*, 8, 201-205.
 99. Housh, D. J., Housh, T. J., Weir, J. P., Weir, L. L., Evetovich, T. K., & Donlin, P. E. (1998). Effects of unilateral concentric-only dynamic constant external resistance training on quadriceps femoris cross-sectional area. *Journal of Strength and Conditioning Research*, 12, 185-191.
 100. Housh, D. J., Housh, T. J., Weir, J. P., Weir, L. L., Evetovich, T. K., & Donlin, P. E. (1998). Effects of unilateral eccentric-only dynamic constant external resistance training on quadriceps femoris cross-sectional area. *Journal of Strength and Conditioning Research*, 12, 192-198.
 101. Weir, J. P., Keefe, D. A., Eaton, J. F., Augustine, R. T., & Tobin, D. M. (1998). Effect of fatiguing isokinetic knee extension exercise on hamstring coactivation. *European Journal of Applied Physiology*, 78, 555-559.
 102. Weir, J. P., Lloyd, B. R., Tussing, A. M., Green, M. S., & Robel, S. J. (1998). Reliability of electromyographic fatigue curves. *Journal of Exercise Physiology (online)*, 1(3). <http://www.css.edu/users/tboone2/asep/jan13c.htm>
 103. Florence, S., & Weir, J. P. (1997). Relationship of critical velocity to marathon running performance. *Journal of Applied Physiology*, 75, 274-278.
 104. Weir, J. P., Housh, D. J., Housh, T. J., & Weir, L. L. (1997). The effect of unilateral concentric weight training and detraining on joint angle specificity, cross-training, and the bilateral deficit. *Journal of Orthopaedic and Sports Physical Therapy*, 25, 264-270.
 105. Weir, L. L., Weir, J. P., Housh, T. J., & Johnson, G. O. (1997). Effect of an aerobic training program on physical working capacity at heart rate threshold (PWCHRT). *European Journal of Applied Physiology*, 75, 351-356.
 106. De Meersman, R. E., Zion, A. S., Teitelbaum, S., Weir, J. P., Lieberman, J., & Downey, J. (1996). [Deriving respiration from the pulse wave: A new signal processing technique]. *American Journal of Physiology*, 270, H1672-H1675.
 107. Housh, D. J., Housh, T. J., Weir, J. P., Weir, L. L., Donlin, P. E., & Chu, W. (1996). Concentric isokinetic resistance training and quadriceps femoris cross-sectional area. *Isokinetics and Exercise Science*, 6, 101-108.
 108. Housh, T. J., Housh, D. J., Weir, J. P., & Weir, L. L. (1996). Effects of unilateral concentric-only constant external resistance training. *International Journal of Sports Medicine*, 17, 338-343.
 109. Housh, T. J., Johnson, G. O., Housh, D. J., Stout, J. R., Weir, J. P., Weir, L. L., & Eckerson, J. M. (1996). Isokinetic peak torque in youth wrestlers. *Pediatric Exercise*

- Science*, 8, 143-155.
110. Housh, T. J., Johnson, G. O., Housh, D. J., Weir, J. P., Weir, L. L., Eckerson, J. M., & Stout, J. R. (1996). Age, fat-free weight and isokinetic peak torque in high school female gymnasts. *Medicine and Science in Sports and Exercise*, 28, 610-613.
 111. Hughes, R. J., Johnson, G. O., Housh, T. J., Weir, J. P., & Kinder, J. E. (1996). The effect of submaximal treadmill running on serum testosterone. *Journal of Strength and Conditioning Research*, 10, 224-227.
 112. McDonough, A. L., & Weir, J. P. (1996). The effect of post-surgical edema of the knee joint on reflex inhibition of the quadriceps femoris. A case study. *Journal of Sport Rehabilitation*, 5, 172-182.
 113. Weir, J. P., Evans, S. A., & Housh, M. L. (1996). The effect of extraneous movements on peak torque and constant joint angle torque-velocity curves. *Journal of Orthopaedic and Sports Physical Therapy*, 23, 302-308.
 114. Weir, J. P., McDonough, A. L., & Hill, V. J. (1996). The effects of joint angle on electromyographic indices of fatigue. *European Journal of Applied Physiology*, 73, 387-392.
 115. Housh, D. J., Housh, T. J., Weir, J. P., Weir, L. L., Johnson, G. O., & Stout, J. R. (1995). Anthropometric estimation of thigh muscle cross-sectional area. *Medicine and Science in Sports and Exercise*, 27, 784-791.
 116. Housh, T. J., Housh, D. J., Weir, J. P., & Weir, L. L. (1995). Effects of eccentric-only dynamic constant external resistance training. *International Journal of Sports Medicine*, 17, 145-148.
 117. Housh, T. J., Stout, J. R., Weir, J. P., Weir, L. L., Housh, D. J., Johnson, G. O., & Evans, S. A. (1995). Relationships of age and muscle mass to peak torque in high school wrestlers. *Research Quarterly for Exercise and Sport*, 66, 256-261.
 118. Tharp, G. D., Weir, L. L., Weir, J. P., & Stout, J. (1995). Effects of aerobic training on malondialdehyde excretion. *Journal of Strength and Conditioning Research*, 9, 237-239.
 119. Weir, J. P., Housh, D. J., Housh, T. J., & Weir, L. L. (1995). The effect of unilateral eccentric weight training and detraining on joint angle specificity, cross-training, and the bilateral deficit. *Journal of Orthopaedic and Sports Physical Therapy*, 22, 207-215.
 120. Weir, J. P., Housh, T. J., Weir, L. L., & Johnson, G. O. (1995). Effects of unilateral isometric strength training on joint angle specificity and cross-training. *European Journal of Applied Physiology*, 70, 337-343.
 121. Housh, D. J., Donlin, P., Housh, T. J., Weir, J. P., Weir, L. L., Stout, J. R., & Johnson, G. O. (1994). Isokinetic peak torque and cross-sectional area of the quadriceps. *Isokinetics and Exercise Science*, 4, 3-7.
 122. Housh, D. J., Housh, T. J., Weir, J. P., Stout, J. R., Weir, L. L., & Johnson, G. O. (1994). Cross-validation of equations for predicting isokinetic peak torque in adult males.

Isokinetics and Exercise Science, 4, 146-149.

123. Weir, J. P., Housh, T. J., & Wagner, L. L. (1994). Electromyographic evaluation of joint angle specificity and cross-training after isometric training. *Journal of Applied Physiology*, 77, 197-201.
124. Weir, J. P., Wagner, L. L., & Housh, T. J. (1994). The effect of rest interval length on repeated maximal bench presses. *Journal of Strength and Conditioning Research*, 8, 58-60.
125. McDowell, S. L., Weir, J. P., Eckerson, J. M., Wagner, L. L., Housh, T. J., & Johnson, G. O. (1993). The effect of weight training on salivary immunoglobulin A. *Research Quarterly for Exercise and Sport*, 64, 348-351.
126. Schwab, R., Johnson, G. O., Housh, T. J., Kinder, J. R., & Weir, J. P. (1993). The acute effects of heavy and light squat weightlifting exercise on serum testosterone. *Medicine and Science in Sports and Exercise*, 25, 1381-1385.
127. Weir, J. P., Housh, T. J., Evans, S. A., & Johnson, G. O. (1993). The effect of dynamic constant external resistance training on the isokinetic torque-velocity curve. *International Journal of Sports Medicine*, 14, 124-128.
128. Wagner, L. L., Evans, S. A., Weir, J. P., Housh, T. J., & Johnson, G. O. (1992). The effect of grip width on bench press performance. *International Journal of Sports Biomechanics*, 8, 1-10.
129. Wagner, L. L., Housh, T. J., Weir, J. P., & Johnson, G. O. (1992). Gender differences in the isokinetic torque-velocity relationship. *Isokinetics and Exercise Science*, 2, 110-115.
130. Weir, J. P., Wagner, L. L., & Housh, T. J. (1992). Linearity and reliability of the IEMG V. torque relationship for the forearm flexors and leg extensors. *American Journal of Physical Medicine and Rehabilitation*, 71, 283-287.
131. Weir, J. P., Wagner, L. L., Housh, T. J., & Johnson, G. O. (1992). Horizontal abduction and adduction strength at the shoulder of high school wrestlers across age. *Journal of Orthopaedic and Sports Physical Therapy*, 15, 183-186.
132. Housh, T. J., Hughes, R. J., Johnson, G. O., Housh, D. J., Wagner, L. L., Weir, J. P., & Evans, S. A. (1990). Age-related increases in the shoulder strength of high school wrestlers. *Pediatric Exercise Science*, 2, 65-72.

Commentaries

1. Weir, J. P. (2007). Misconceptions in measuring change. *Archives of Physical Medicine and Rehabilitation*, 88(12), 1741.
Letter to the editor

Reviews

1. Beck, T. W., Housh, T. J., Johnson, G. O., Cramer, J. T., Weir, J. P., Coburn, J. W., & Malek, M. H. (2007). Does the frequency content of the surface mechanomyographic signal

- reflect motor unit firing rates? A brief review *Journal of Electromyography and Kinesiology*, 17(1), 1-13.
2. Weir, J. P., Beck, T. W., Cramer, J. T., & Housh, T. J. (2006). Is fatigue all in your head? A critical review of the central governor model *British Journal of Sports Medicine*, 40(7), 573-586.
 3. Beck, T. W., Housh, T. J., Cramer, J. T., Weir, J. P., Johnson, G. O., Coburn, J. W., Malek, M. H., & Mielke, M. (2005). Mechanomyographic amplitude and frequency responses during dynamic muscle actions: a comprehensive review *Biomedical Engineering Online*, 4(1), 67.
 4. Weir, J. P. (2005). Quantifying test-retest reliability using the intraclass correlation coefficient and the SEM *Journal of Strength and Conditioning Research*, 19(1), 231-240.
 5. Kreider, R. B., Almada, A. A., Antonio, J., Broeder, C., Earnest, C., Greenwood, L., Greenwood, M., Incledon, T., Kalman, D. S., Kerksick, C., Kleiner, S. M., Lowery, L. M., Leutholtz, B., Mendel, R., Rasmussen, C. J., Stout, J. R., Weir, J. P., Willoughby, D. S., & Ziegenfuss, T. N. (2003). Letter-To-The Editor. Exercise and sport nutrition: A balanced perspective *Professionalism of Exercise Physiology (online)*, 6(8).
<http://www.css.edu/users/tboone2/asep/PEPonlineNutritionKREIDER.doc>
 6. Weir, J. P. (2002). Endurance exercise following stroke *ACSM Current Comment*. [<http://www.acsm.org/health%2Bfitness/pdf/currentcomments/stroke071002.pdf>]
 7. Brown, L. E., & Weir, J. P. (2001). ASEP procedures recommendations I: accurate assessment of muscular strength and power *Journal of Exercise Physiology (online)*, 4(3), 1-21.
 8. Curtis, C. L., & Weir, J. P. (1996). Overview of exercise responses in healthy and impaired states *Neurology Report*, 20(2), 13-19.
 9. Weir, J. P. (1991). Teaching Techniques #12: The front squat. (Round Table) *National Strength and Conditioning Association Journal*, 13, 70-74.

Invited Presentations/Lectures

International/National

1. Weir, J. P. (2012, July). *Critical Evaluation of Strength and Conditioning Research*. Annual meeting of the National Strength and Conditioning Association, Providence, RI.
2. Weir, J. P. (2011, July). *Customized Supplementation Approaches for the Future*. Annual meeting of the National Strength and Conditioning Association, Las Vegas, NV.
3. Wier, J. P. (2010). *Critical Evaluation of Sports Nutrition Research*". Performance Nutrition Symposium, Columbus, Ohio.
4. Weir, J. P. (2010, July). *Statistical Analysis of Change in Strength and Conditioning Research*". Annual meeting of the National Strength and Conditioning Association,

Orlando, FL.

5. Weir, J. P. (2010, July). *Supplements for Strength and Power Athletes*". Annual meeting of the National Strength and Conditioning Association, Orlando, FL.
6. Weir, J. P. (2010, June). *Detecting Treatment Effects in Sports Nutrition Research*. 7th Annual International Society of Sports Nutrition Conference and Expo, Clearwater Beach, Florida.
7. Weir, J. P. (2010, March). *Metabolic Training*. 2010 Midwest Strength and Conditioning Clinic, Crystal Lake, IL.
8. Weir, J. P. (2010, March). *Physiology of Strength, Power, and Speed*. Keynote presentation at the 2010 Midwest Strength and Conditioning Clinic, Crystal Lake, IL.
9. Weir, J. P. (2008, July). *Pre-Exercise Supplementation*. Annual meeting of the National Strength and Conditioning Association, Las Vegas, NV.
10. Weir, J. P. (2008, June). *Physiology of Fatigue*. National meeting of the International Society of Sports Nutrition, Las Vegas, NV.
11. Weir, J. P. (2008, February). *Neuromuscular Adaptations to Resistance Training*. Bridging the Gap Symposium, sponsored by the National Strength and Conditioning Association, Fullerton, CA.
12. Weir, J. P. (2008, February). *Physiology of Fatigue*. Bridging the Gap Symposium, sponsored by the National Strength and Conditioning Association, Fullerton, CA.
13. Weir, J. P. (2007, April). *Metabolic Training*. 2007 Strength and Conditioning Training Course For National Team Coaches by the General Administration of Sport, sponsored by the National Strength and Conditioning Association and the Administrators Training Center of General Administration of Sport, Beijing, China.
14. Weir, J. P. (2007, April). *Metabolism and Bioenergetics*. 2007 Strength and Conditioning Training Course For National Team Coaches by the General Administration of Sport, sponsored by the National Strength and Conditioning Association and the Administrators Training Center of General Administration of Sport, Beijing, China.
15. Weir, J. P. (2007, April). *Physiology of Strength, Power, and Speed*. 2007 Strength and Conditioning Training Course For National Team Coaches by the General Administration of Sport, sponsored by the National Strength and Conditioning Association and the Administrators Training Center of General Administration of Sport, Beijing, China.
16. Weir, J. P. (2006, July). *Is Fatigue All In Your Head? Central and Peripheral Mechanisms of Fatigue*. Annual meeting of the National Strength and Conditioning Association, Washington, D.C.
17. Weir, J. P. (2004, July). *Creatine Supplementation, In: Beyond Ephedra: Safe and Effective Nutritional Supplements for Health and Athletics*. National Strength and Conditioning Association Pre-Conference Symposium, Minneapolis, MN.

18. Weir, J. P., & Housh, T. J. (2002, July). *The Application of Statistical Methods for Strength and Conditioning Professionals*. Annual meeting of the National Strength and Conditioning Association, Las Vegas, NV.
19. Weir, J. P. (2001, December). *Cardiovascular Autonomic Nervous System Testing in Humans*. Endocrinology and Metabolism Section, Department of Medicine, West Virginia University School of Medicine, Morgantown, WV.
20. Weir, J. P. (2001, November). *Determination of Heart Rate Variability, Blood Pressure Variability, and Baroreceptor Sensitivity in Humans*. Center for the Study of Complementary and Alternative Therapies, University of Virginia, Charlottesville, VA.
21. Weir, J. P. (2001, May). *Non-Invasive Assessment of Cardiovascular Autonomic Nervous System Function in Humans*. Spaulding Rehabilitation Hospital, Harvard University, Boston, MA.
22. Weir, J. P. (1999, October). *Recommendations For the Accurate Assessment of Muscular Strength and Power*. Annual meeting of the American Society of Exercise Physiologists, Albuquerque, NM.
23. Weir, J. P. (1995, November). *Surface Electromyography and Muscle Fatigue*. UOMHS-Drake Scientific Lecture Series, Des Moines, IA.
24. Weir, J. P. (1995, April). *Journeys With Joint Angles*. Research Colloquium, Program In Physical Therapy, New York University, New York, NY.
25. Weir, J. P. (1994, November). *Muscle Soreness and Training*. Annual meeting of the Greater New York Regional Chapter of the American College of Sports Medicine, New York, NY.

Research Funding/Fellowships

University of Kansas

Externally-Funded Grant/Contract

Funded

1. Wecht, J. M. (Principal), et al, & Weir, J. P. (Statistician). *Blood pressure, cerebral blood flow and cognition in SCI*. 284196, Craig H. Neilsen Foundation (February 1, 2014 - January 31, 2017).
Statistician
2. Vardiman, J. P. (Principal), Gallagher, P. (Co-Principal), Herda, T. (Co-Investigator), Fry, M. (Co-Investigator), Weir, J. (Co-Investigator), Denning, M. (Co-Investigator), & Siedlik, J. (Co-Investigator). *Establishing optimal training intervals for the Marine Corps Martial Arts Program (MCMAP) for improvement in physical performance and warrior mindset*. BAA# 13-004, Office of Naval Research (January 1, 2014 - December 31, 2016).

3. Wecht, J. M. (Principal), et al, & Weir, J. P. (Statistician). *Effects of increases in blood pressure on cerebral blood flow in SCI*. 8731573, Veteran's Affairs Rehabilitation Research and Development (June 1, 2014 - May 31, 2016).
Statistician
4. Wecht, J. M. (Principal), et al, & Weir, J. P. (Statistician). *Impact of age on cardiovascular, cerebrovascular and cognitive function.*, New Jersey Commission for Spinal Cord Research \$596,152 (June 6, 2013 - May 31, 2016).
Statistician

Columbia University

Externally-Funded Grant/Contract

Funded

1. Heymsfield, S. B. (Principal), et al, & Weir, J. P. *Aging and Skeletal Muscle: New Body Composition Models*. National Institutes of Health \$1,054,056 (1994).
Consultant. R01 Research Grant.

Internal Award

Funded

1. Weir, J. P. (Principal). *Physiological factors affecting the cardiovascular drift*. Teachers College \$1,000 (1994).
Teachers College Faculty Research Grant.

Des Moines University

Externally-Funded Grant/Contract

Funded

1. Bauman, W. (Principal), et al, & Weir, J. P. *Anabolic therapies: New hope for treating secondary disabilities of spinal cord injury*. VA Center of Excellence \$3,750,000 (2012).
Collaborator on project 5: "Multiple metabolic syndrome in SCI: The effect on autonomic regulation of the cardiovascular system".
2. Weir, J. P. (Principal). *Effect of Ibuprofen and Acetaminophen on fatigue and physiological responses to intense exercise*. Iowa Osteopathic Education and Research Foundation \$17,254 (2012).
3. Weir, J. P. (Principal). *Efficacy of the nutritional supplement Abdominal Cuts™ on resting metabolism and body composition over 8 weeks*. Corr-Jensen Labs \$15,000 (2011).
4. Weir, J. P. (Principal). *Relationship between quadriceps activation and force asymmetry in individuals post surgical ACL reconstruction*. Iowa Osteopathic Education and Research Foundation \$6,586 (2007).

5. Heiderscheit, B. (Principal), & Weir, J. *Objective measure of knee stiffness during locomotion*. Iowa Osteopathic Educational Foundation \$7,600 (2003).
6. Heiderscheit, B. (Principal), & Weir, J. *Onset timing of vastus medialis and lateralis at different weightbearing knee angles*. American Physical Therapy Association, Sports Physical Therapy Section, Small Grant Program \$1,500 (2003).
7. Weir, J. P. (Principal). *Immune response to acute exercise following cerebrovascular accident*. Iowa Osteopathic Education Foundation (IOEF) \$40,138 (1998).

Internal Award

Funded

1. Stumbo, T. (Principal), & Weir, J. P. (Co-Principal). *An objective measurement of craniosacral rhythm*. UOMHS Research and Grants Committee \$3,000 (1999).
2. Weir, J. P. (Principal). *Acute blood pressure response to resistance training exercise: Effect of inter-repetition rest interval*. UOMHS \$13,160 (1996).
UOMHS In-house Grant Award.

Dissertation/Thesis Supervision

University of Kansas

Dissertation Defense Committee Member

- William Hawkins, "Effects of Instrument Assisted Soft Tissue Mobilization on Physiological and Structural Properties of Human Skeletal Muscle. 2017
- Jacob Siedlik, "Immunoendocrine interactions and T cell proliferation responses to layered physical and psychological stressors. 2016
- Zachary Graham, "The Role of the Focal Adhesion Following Varying Types of Muscle Loading," Status: completed. 2014
- Michael Lane, "Myosin Heavy Chain Characteristics and Their Relationship to Exercise Performance," Status: completed. 2014

Teachers College, Columbia University

Dissertation Defense Committee Chair

- A. McDonough, "The effect of icing anterior knee structures on torque production and alpha motoneuron excitability in the quadriceps femoris. (Sponsor)," Status: completed. 1996

Dissertation Defense Committee Member

- M. Balke, "A multi-case study of elementary physical education resource teachers: a description of their staff development practices". 1995
- D. Grimm, "Autonomic dysfunction in spinal cord injury". 1995
- M. J. Myslinski, "Psychophysiological response to a cognitive stressor in trained and untrained patients with coronary artery disease,". 1995
- J. L. Redding, "A descriptive study of personal trainers,". 1994
- C. H. Wing, "The physiologic and symptomatic responses of females to circuit weight training during phase II (early outpatient) cardiac rehabilitation,". 1994

Z. Zheng, "Effects of cyclic AMP and neurotrophins on *Xenopus* development nerve cells in vitro,". 1993

Professional Service

Editorial Board Member/Editor Responsibilities

Editorial Board Member

Medicine and Science in Sports and Exercise. (2009 - Present)

Editor, Senior Associate

Journal of Strength and Conditioning Research. (2012 - Present)

Other Professional Service

Co-Chair

ACSM Biostatistics Interest Group. (2001 - 2003)

Member

National Strength and Conditioning Association Research Committee. (2008 - 2010)

President

Strength and Conditioning Foundation. During my term as NSCAF president, 1) the NSCAF assets grew from zero to nearly 3 million dollars, 2) the NSCAF developed a long term investment portfolio; 3) the NSCAF developed a long term spending policy, and 4) the NSCAF oversaw the review and funding of numerous scholarships and research grants. (2006 - 2009)

Reviewer, Abstracts

National Strength and Conditioning Association. Reviewer for years 2003, 2005, 2006, 2007, and 2012. (2012)

Reviewer, Ad Hoc Journal

Journal of the International Society of Sports Nutrition.

Physiological Measurement.

PLOS One.

Reviewer, Grant Proposal

NSCA Graduate Research Grant Reviewer. Reviewer for the years 2005-2011.

NSCA Young Investigator Award. Reviewer for the years 2007, 2009, 2010, 2011.

National Institute on Disability Research and Rehabilitation (NIDRR). (2002)

Student Research Award Reviewer

National Strength and Conditioning Association. (2003)