

VITA

Jeffrey M. Willardson, PhD, CSCS
Fortin Center 126
Rocky Mountain College
Billings, MT 59102
jeffrey.willardson@rocky.edu
217-508-0090

Education

- Doctor of Philosophy in Exercise and Wellness; Arizona State University; May 2005.
 - Advisor: Lee N. Burkett, PhD
 - Dissertation: *The Effect of Rest Interval Length on Bench Press Performance with Heavy versus Light Loads* (published JSCR).
- Master of Science in Exercise Science; Utah State University; May 2001.
 - Advisor: Eadric Bressel, EdD
 - Thesis: *Predicting Equivalent Workloads between the Free Weight Parallel Squat and 45-Degree Angled Leg Press* (published JSCR).
- Bachelor of Science in Exercise Science; Utah State University; August 1998.

Professional Experience

- Associate Professor; Health and Human Performance Department; Rocky Mountain College; Billings, Montana; August 2016-present.
 - Faculty Teaching Assignment
 - Biomechanics (HHP 320).
 - Physiology of Exercise (HHP 356).
- Professor; Kinesiology and Sports Studies Department; Eastern Illinois University; Charleston, Illinois; August 2005-July 2016.
 - Faculty Teaching Assignment:
 - Advanced Biomechanics of Resistance Training (KSS 5860).
 - Biomechanics of Human Motion (KSS 3800).
 - Principles of Exercise Physiology (KSS 4340).
 - Principles of Resistance Training (KSS 4460).
 - Lifetime Fitness (online delivery; KSS 1150).

Graduate Assistantships and Internships

- Arizona State University
 - Academic Years 2002-2005.
 - Graduate Assistantship Teaching Assignment:
 - Kinesiological Foundations of Movement
 - Physical Activity and Healthy Lifestyles
 - Concepts of Wellness and Fitness
 - Research Statistics

- Cooper Aerobics Center Internship; Dallas, Texas; May 2000-August 2000.
 - Supervision of resistance exercise area Cooper Fitness Center.

- Utah State University
 - Academic Years 1998-2001.
 - Graduate Assistantship Teaching Assignment:
 - Exercise Physiology
 - Dynamic Fitness
 - Weight Training
 - Body Conditioning

Scholarly Endeavors

Studies in Progress or Under Review

Acute effects of strength training with different exercise orders and rest intervals on blood pressure and heart rate variability.

Influence of very short rest period lengths on repeated 1-RM bench press performance.

Carbohydrate mouth rinsing and resistance training.

Effects of daily and flexible non-linear strength training periodizations on maximal and submaximal strength, vertical jump and speed performance.

Neuromuscular fatigue indices adopting different rest intervals between sets during leg press exercise performed with submaximal loads.

Maximal strength performance and muscle activation for the bench press and triceps extension exercises adopting dumbbell, barbell and machine bench press over multiple sets.

Blood lactate levels and strength performance consistency adopting different recovery periods between training sessions with trained men.

Refereed Publications (total manuscripts to date: 75).

Wallace, M., G. Paz, L. Mendes, M. Maia, J.B. Winchester, V. Lima, **J.M. Willardson**, and H. Miranda. Myoelectric activity of the quadriceps during leg press exercise performed with differing techniques. *Journal of Strength and Conditioning Research* (in press).

Spinetti, J., T. Figueiredo, **J.M. Willardson**, V.B. Oliveira, M. Assis, L.F. de Oliveira, H. Miranda, and R. Simão. Comparison between traditional strength training and complex contrast training on repeated-shuttle-sprint ability and muscle architecture in male elite soccer players. *The Journal of Sports Medicine and Physical Fitness* (in press).

Matta, T.T., F.X. Nascimento, G.S. Trajano, R. Simao, **J.M. Willardson**, and L.F. Oliveira. Selective hypertrophy of the quadriceps musculature after 14 weeks of isokinetic and conventional resistance training. *Clinical Physiology and Functional Imaging* (in press).

Figueiredo, T., **J.M. Willardson**, H. Miranda, C.M. Bentes, V.M. Reis, B.F. de Salles, and R. Simão. Influence of rest interval length between sets on blood pressure and heart rate variability after a strength training session performed by prehypertensive men. *Journal of Strength and Conditioning Research*. 30(7): 1813-1824. 2016.

Marocolo, M., **J.M. Willardson**, I.C. Marocolo, G.R. da Mota, R. Simão, and A.S. Maior. Ischemic preconditioning and placebo intervention improves resistance exercise performance. *Journal of Strength and Conditioning Research*. 30(5): 1462-1469. 2016.

Scudese, E., R. Simão, G. Senna, J.L. Vingren, **J.M. Willardson**, M. Baffi, and H. Miranda. Long rest interval promotes durable testosterone responses in high intensity bench press. *Journal of Strength and Conditioning Research*. 30(5): 1275-1286. 2016.

Figueiredo, T., H. Miranda, **J.M. Willardson**, A. Schneider, B.F. de Salles, J. Spinetti, G.A. Paz, H. Santana, and R. Simão. Influence of Exercise Order on One and Ten Repetition Maximum Loads Determination. *Journal of Exercise Physiology Online*. 19(2): 84-90. 2016.

Senna, G.W., E. Scudese, R. Simão, C. Queiroz, R. Avelar, E.H.M. Dantas, and **J.M. Willardson**. Effect of different inter-set rest intervals on performance of single and multi-joint exercises with near maximal loads. *Journal of Strength and Conditioning Research*. 30(3): 710-716. 2016.

Garcia, P., D.C. Nascimento, R.A. Tibana, M.M. Barboza, **J.M. Willardson**, and J. Prestes. Comparison between the multiple set plus 2 weeks of tri-set and traditional multiple set method on strength and body composition in trained women: A pilot study. *Clinical Physiology and Functional Imaging*. 36: 47-52. 2015.

Maia, M.F., G.A. Paz, H. Miranda, V. Lima, C.M. Bentes, J.S. Novaes, P.S. Vigario, and **J.M. Willardson**. Maximal repetition performance, rating of perceived exertion, and muscle fatigue during paired set training performed with different rest intervals. *Journal of Exercise Science and Fitness*. 13: 104-110. 2015.

Pope, Z.K., **J.M. Willardson**, B.J. Schoenfeld, J. Emmett, and J.D. Owen. Hypertrophic and strength responses to eccentric resistance training with blood flow restriction: A pilot study. *International Journal of Sports Science & Coaching*. 10(5): 919-931. 2015.

Scudese, E., **J.M. Willardson**, R. Simão, G. Senna, B.F. de Salles, and H. Miranda. The effect of rest interval length on repetition consistency and perceived exertion during near maximal loaded bench press sets. *Journal of Strength and Conditioning Research*. 29(11): 3079-3083, 2015.

Figueiredo, T., **J.M. Willardson**, H. Miranda, C.M. Bentes, V.M. Reis, R. Simão. Influence of load intensity on postexercise hypotension and heart rate variability after a strength training session. *Journal of Strength and Conditioning Research*. 29(10): 2941–2948, 2015.

Maiores, A.S., R. Simão, M.S.R. Martins, B.F.d. Salles, and **J.M. Willardson**. Influence of blood flow restriction during low-intensity resistance exercise on the postexercise hypotensive response. *Journal of Strength and Conditioning Research*. 29(10): 2894–2899, 2015.

Tajra, V., D.C.L. Vieira, R.A. Tibana, T.G. Teixeira, A.O. Silva, D.L. Farias, D.C. Nascimento, N.M.F. de Sousa, **J.M. Willardson**, and J. Prestes. Different acute cardiovascular stress in response to resistance exercise leading to failure versus not to failure in elderly women with and without hypertension: A pilot study. *Clinical Physiology and Functional Imaging*. 35: 127-133. 2015.

Schoenfeld, B.J., B.T. Contreras, **J.M. Willardson**, F.E. Fontana, and G. Tiryaki-Sonmez. Muscle activation during low- versus high-load resistance exercise in well-trained men. *European Journal of Applied Physiology*. 114(12): 2491-2497. 2014.

Schoenfeld, B.J., B.T. Contreras, G. Tiryaki-Sonmez, **J.M. Willardson**, and F.E. Fontana. An electromyographic comparison of a modified version of the plank with a long-lever and posterior tilt versus the traditional plank exercise. *Sports Biomechanics*. 13(3): 296-306. 2014.

Tajra, V., R.A. Tibana, D.C. Vieira, D.L. Farias, T.G. Teixeira, S.S. Funghetto, A. de Oliveira Silva, N.F. Sousa, **J.M. Willardson**, M.G. Karnikowski, and J. Prestes. Identification of high responders for interleukin-6 and creatine kinase following acute eccentric resistance exercise in elderly obese women. *Journal of Science and Medicine in Sport*. 17: 662-666. 2014.

Maia, M.F., **J.M. Willardson**, G.A. Paz, and H. Miranda. Effects of different rest intervals between antagonist paired sets on repetition performance and muscle activation. *Journal of Strength and Conditioning Research*. 28(9): 2529-2535. 2014.

Souza, D.B., R. Poton, J. Casonatto, **J.M. Willardson**, and M.D. Polito. Acute effect of caffeine intake on hemodynamics after resistance exercise in young non-hypertensive subjects. *Research in Sports Medicine: An International Journal*. 22(3): 253-264. 2014.

Tabana, R.A., D.C. Viera, V. Tajra, M. Bottaro, B.F. de Salles, **J.M. Willardson**, and J. Prestes. Effects of rest interval length on smith machine bench press performance and perceived exertion in trained men. *Perceptual & Motor Skills*. 117(3): 682-695. 2014.

de Souza-Junior, T.P., A.K. Yamada, R. Simao, R. Curi, M.P. Barros, Z.K. Pope, and **J.M. Willardson**. Supra-physiological doses of testosterone affect membrane oxidation of human neutrophils monitored by the fluorescent probe C₁₁BIOPIDY^{581/591}. *European Journal of Applied Physiology*. 113(5): 1241-1248. 2013.

Pope, Z.K., **J.M. Willardson**, and B. Schoenfeld. Brief Review: Exercise and blood flow restriction. *Journal of Strength and Conditioning Research*. 27(10): 2914-2926. 2013.

Paz, A., **J.M. Willardson**, R. Simao, and H. Miranda. Effects of different antagonist manipulation protocols on repetition performance and muscle activation. *Medicina Sportiva*. 17(3): 100-106. 2013.

Assumpcao, C.O., R.A. Tibana, L.C. Viana, **J.M. Willardson**, and J. Prestes. Influence of exercise order on upper body maximum and sub-maximal strength gains in trained men. *Clinical Physiology and Functional Imaging*. 33: 359-363. 2013.

Balsamo, S., L. Santos-Neto, F.S. de Santana, J. Prestes, D.C. Balsamo, D. Nascimento, O. Nobrega, and **J.M. Willardson**. A Brief Review: Effectiveness of exercise on cognitive impairment and Alzheimer's disease. *International Journal of General Medicine*. 6: 387-391. 2013.

Simão, R., R.D. Leite, G.F.F. Speretta, A.S. Maior, B.F. de Salles, T.P. de Souza Jr, J.L. Vingren, and **J.M. Willardson**. Influence of upper body exercise order on the hormonal responses in trained men. *Applied Physiology, Nutrition, and Metabolism*. 38: 177-181. 2013.

Willardson, J.M., R. Simão, and F.E. Fontana. The effect of load reductions on repetition performance for commonly performed multi-joint resistance exercises. *Journal of Strength and Conditioning Research*. 26(11): 2939-2945. 2012.

Machado, M., R. Pereira, and **J.M. Willardson**. Short intervals between sets and individuality of muscle damage response. *Journal of Strength and Conditioning Research*. 26(11): 2946-2952. 2012.

Di Naso, J.J., B.L. Pritschet, J.D. Emmett, J.D. Owen, **J.M. Willardson**, T.W. Beck, J. M. DeFreitas, and F.E. Fontana. Comparing thigh cross-sectional area and squat strength among Olympic lifters, power lifters, and bodybuilders. *International Sports Medicine Journal*. 13(2): 48-57. 2012.

Simao, R., T. Figueiredo, R.D. Leite, A. Jansen, and **J.M. Willardson**. Influence of exercise order on repetition performance during low intensity resistance exercise. *Research in Sports Medicine*. 20: 263-273. 2012.

Machado, M., A.J. Koch, and **J.M. Willardson**. Creatine kinase activity weakly correlated to the volume completed following upper body resistance exercise. *Research Quarterly for Exercise and Sport*. 83(2): 276-281(6). 2012.

Simão, R., B.F. de Salles, T. Figueiredo, I. Dias, and **J.M. Willardson**. Exercise order in resistance training: Review article. *Sports Medicine*. 42(3): 251-265. 2012.

Sandberg, J.B., Wagner, D.R., **J.M. Willardson**, and G.M. Smith. Acute effects of antagonist stretching on jump height, torque, and electromyography of the agonist musculature. *Journal of Strength and Conditioning Research*. 26(5): 1249-1256. 2012.

de Souza Junior, T.P., **J.M. Willardson**, S.J. Fleck, P.R. de Oliveira, R.D. Leite, R. Simão, R.J. Bloomer. Strength and hypertrophy responses to constant and decreasing rest intervals in trained men using creatine supplementation. *Journal of the International Society of Sports Nutrition*. 8: <http://www.jissn.com/content/8/1/17>. 2011.

Senna, G., **J.M. Willardson**, B.F. Salles, E. Scudese, F. Carneiro, A. Palma, and Roberto Simao. The effect of rest interval length on multi- and single joint exercise performance and perceived exertion. *Journal of Strength and Conditioning Research*. 25(11): 3157-3162. 2011.

Willardson, J.M. Point/Counterpoint: Is training to failure a safe and effective method for improving athletic performance? *Strength and Conditioning Journal*. 33(4): 19-21. 2011.

Behm, D., E. Drinkwater, **J.M. Willardson**, and P.M. Cowley. The role of instability rehabilitative resistance exercise for the core musculature. *Strength and Conditioning Journal*. 33(3): 72-81. 2011.

Machado, M., A.J. Koch, **J.M. Willardson**, L.S. Pereira, M.I. Cardoso, M.K.S. Motta, and A.N. Monteiro. Effect of varying rest intervals between sets of assistance exercises on creatine kinase and lactate dehydrogenase responses. *Journal of Strength and Conditioning Research*. 25(5): 1339-1345. 2011.

Willardson, J.M., D.G. Behm, S.Y. Huang, M. Rehg, M.S. Kattenbraker, and F.E. Fontana. Comparison of trunk muscle activation: Ab Circle versus traditional modalities. *Journal of Strength and Conditioning Research*. 24(12): 3415-3421. 2010.

Willardson, J.M. Manuscript clarification: Incorrect variables reported. *Journal of Strength and Conditioning Research*. 24(10): 1-2. 2010 (published online only).

Salles, B.F., R. Simão, H. Miranda, M. Bottaro, F.E. Fontana, and **J.M. Willardson**. Strength increases in upper and lower body are larger with longer inter-set rest intervals in trained men. *Journal of Science and Medicine in Sport*. 13: 429-433. 2010.

Machado, M., and **J.M. Willardson**. Short recovery augments the magnitude of muscle damage in high responders. *Medicine and Science in Sports and Exercise*. 42(7): 1370-1374. 2010.

Rodrigues, B.M., E. Dantas, B.F. Salles, H. Miranda, A.J. Koch, **J.M. Willardson**, and R. Simão. Creatine kinase and lactate dehydrogenase responses after upper body resistance exercise with different rest intervals. *Journal of Strength and Conditioning Research*. 24(6): 1657-1662. 2010.

Miranda, H., R. Simão, P.S. Vigário, B.F. Salles, M.T.T. Pacheco, and **J.M. Willardson**. Exercise order interacts with rest interval during upper body resistance exercise. *Journal of Strength and Conditioning Research*. 24(6): 1573-1577. 2010.

Willardson, J.M., L. Norton, and G. Wilson. Training to failure and beyond in mainstream resistance exercise programs. *Strength and Conditioning Journal*. 32(3): 21-29. 2010.

Willardson, J.M. Commentary: Comparing stabilization training with balance training in recreationally active individuals. *International Journal of Therapy and Rehabilitation*. 17(5): 253. 2010.

Barreto, A.C., A.S. Maior, P. Menezes, **J.M. Willardson**, A.J. Silva; V.M. Reis; R. Simão, and J. Novaes. Effect of different resistance exercise repetition velocities on excess post-exercise oxygen consumption and energy expenditure. *International Sports Medicine Journal*. 11(1): 235-243. 2010.

Willardson, J.M., M.S. Kattenbraker, M. Khairallah, and F.E. Fontana. Research note: Effect of load reductions over consecutive sets on repetition performance. *Journal of Strength and Conditioning Research*. 24(3): 879-884. 2010.

Machado, M., A.J. Koch, **J.M. Willardson**, F.C. dos Santos, V.M. Curty, L.N. Pereira, and J.G. Barreto. Caffeine does not augment markers of muscle damage or leukocytosis following resistance exercise. *International Journal of Sports Physiology and Performance*. 5: 18-26. 2010.

D. Behm, E. Drinkwater, **J.M. Willardson**, and P.M. Cowley. Canadian Society for Exercise Physiology Position Stand: The use of instability to train the core in athletic and non-athletic conditioning. *Applied Physiology Nutrition and Metabolism*. 35: 109-112. 2010.

D. Behm, E. Drinkwater, **J.M. Willardson**, and P.M. Cowley. A literature review: The use of instability to train the core musculature. *Applied Physiology Nutrition and Metabolism*. 35: 91-108. 2010.

Bressel, E., B. Thompson, **J.M. Willardson**, and F.E. Fontana. Effect of instruction, surface stability, and load intensity on trunk muscle activity. *Journal of Electromyography and Kinesiology*. 19(6): e500-e504. 2009.

Miranda, H., R. Simão, J.A.A. Souza, L.M. Moreira, M.T.T. Pacheco, B.F. Salles, and **J.M. Willardson**. Effect of rest interval length on the volume completed during upper body resistance exercise. *Journal of Sports Science and Medicine*. 8: 388-392. 2009.

Salles, B.F., F.M. Ribeiro, J.S. Novaes, A. Lemos, R. Simão, and **J.M. Willardson**. Rest interval between sets in strength training: Review article. *Sports Medicine*. 39(9): 1-12. 2009.

Willardson, J.M., F.E. Fontana, and E. Bressel. Effect of surface stability on core muscle activity during dynamic resistance exercises. *International Journal of Sports Physiology and Performance*. 4: 1-14. 2009.

Willardson, J.M., J. Emmett, J.A. Oliver, and E. Bressel. Effect of short-term failure versus non-failure training on lower body muscular endurance. *International Journal of Sports Physiology and Performance*. 3: 279-293. 2008.

Willardson, J.M. National Strength and Conditioning Association Hot Topic Series: *Core Stability for Athletes*. 2008.

Willardson, J.M. A Brief Review: How Much Rest between Sets? *Strength and Conditioning Journal*. 30(3): 44-50. 2008.

Willardson, J.M. A periodized approach for core training. *ACSM's Health and Fitness Journal*. 12(1): 7-13. Jan/Feb 2008.

Willardson, J.M., and L.N. Burkett. The effect of different rest intervals between sets on volume components and strength gains. *Journal of Strength and Conditioning Research*. 22(1): 146-152. 2008.

Willardson, J.M. Core stability training for healthy athletes: A different paradigm for fitness professionals. *Strength and Conditioning Journal*. 29(6): 42-49. 2007.

Willardson, J.M. A brief review: Core stability training—applications to sports conditioning programs. *Journal of Strength and Conditioning Research*. 21(3): 979-985. 2007.

Willardson, J.M. Brief review: The application of training-to-failure in periodized multiple-set resistance exercise programs. *Journal of Strength and Conditioning Research*. 21(2): 628-631. 2007.

Burt, J., R. Wilson, and **J.M. Willardson**. A comparison of once versus twice per week training on leg press strength in women. *Journal of Sports Medicine and Physical Fitness*. 47(1): 13-17, 2007.

Willardson, J.M. A brief review: Factors affecting the length of the rest interval between resistance exercise sets. *Journal of Strength and Conditioning Research*. 20(4): 978-984, 2006.

Willardson, J.M., and L.N. Burkett. The effect of rest interval length on bench press performance with heavy versus light loads. *Journal of Strength and Conditioning Research*. 20(2): 400-403, 2006.

Willardson, J.M., and L.N. Burkett. The effect of rest interval length on the sustainability of squat and bench press repetitions. *Journal of Strength and Conditioning Research*. 20(2): 396-399, 2006.

Willardson, J.M. National Strength and Conditioning Association Hot Topic Series: *Unstable Resistance Exercises*. 2005.

Willardson, J.M. Response. Letter to the Editor regarding "The effectiveness of resistance exercises performed on unstable equipment". *Strength and Conditioning Journal*. 27(4): 11-13, 2005.

Willardson, J.M., and C. Tudor-Locke. Survival of the strongest: A brief review examining the association between muscular fitness and mortality. *Strength and Conditioning Journal*. 27(3): 80-85, 2005.

Willardson, J.M., and L.N. Burkett. A comparison of three different rest intervals on the exercise volume completed during a workout. *Journal of Strength and Conditioning Research*. 19(1): 23-26, 2005.

Willardson, J.M. Sarcopenia and exercise: Mechanisms, interactions, and application of research findings. *Strength and Conditioning Journal*. 26(6): 26-31, 2004.

Willardson, J.M. The effectiveness of resistance exercises performed on unstable equipment. *Strength and Conditioning Journal*. 26(5): 70-74, 2004.

Willardson, J.M., and E. Bressel. Predicting a 10 Repetition maximum for the free weight parallel squat using the 45 degree angled leg press. *Journal of Strength and Conditioning Research*. 18(3): 567-571, 2004.

Abstracts

Salles, B.F., R. Simao, H. Miranda, M. Bottaro, F.E. Fontana, and **J.M. Willardson**. Upper and lower body strength increases consequent to different inter-set rest intervals in trained men. Presented at the National Strength and Conditioning Association Annual Conference. Las Vegas, NV, July 8-11, 2009.

Bressel, E., B. Thompson, **J.M. Willardson**, and F.E. Fontana. Core muscle activity during the free weight squat: effect of instruction, surface stability, and load. Presented at the

National Strength and Conditioning Association Annual Conference. Las Vegas, NV, July 9-12, 2008.

Books

Willardson, J.M. Core Anatomy and Biomechanics (pp 3-18). In: National Strength and Conditioning Association Sports Performance Series: *Developing the Core*. **J.M. Willardson, Editor**. Human Kinetics, Champaign, IL. 2014.

Other Creative Works

- Guest appearances WEIU PBS television series: *Being Well*. 2011-2012. episodes available:
 - http://www.youtube.com/watch?v=xNi24Gv64YM&list=PL3632DB13C870558B&index=21&feature=plpp_video
 - http://www.youtube.com/watch?v=GyGSKXjkbjI&list=PL3632DB13C870558B&index=30&feature=plpp_video
- Completion of DVD-ROM; 3D ANATOMY: Resistance Training; Available through Primal Pictures Ltd. Spring 2010.
 - <https://www.primalpictures.com/anatomy-for-resistance-training.aspx>
- Completion of motion graphics online learning materials for Manual of Structural Kinesiology textbook; Available through McGraw-Hill Spring 2009. Available:
 - <http://www.mhhe.com/hhp/supp2olc/StructuralKinesiology/>
- Completion 60 minute instructional DVD's; Available through Coaches Choice/Healthy Learning Company beginning Spring 2008.
 - DVD 1: Scientific Basis of Core Stability Training: Separating Fact from Fiction.
 - DVD 2: Programming Recovery Intervals during Resistance Exercise Workouts.
 - DVD 3: Core Stability Training for Athletic Performance.

Professional Presentations

- International Congress of Strength Training and Sports Medicine; Rio de Janeiro, Brazil; November 22, 2015.
- International Meeting of Resistance Training; Recife and Sao Luis; November 21 and 28, 2015.

- International Meeting of Resistance Training; Teresina and Fortaleza, Brazil; March 14-15 and 21-22, 2015.
- National Meeting of Physical Activity; Belo Horizonte, Brazil; August 15-17, 2014.
- International Sports Science Symposium; Sao Paulo, Brazil; October 4-6, 2012.
- Invited presentation Brigham Young University Hawaii; March 9, 2012.
- NSCA Illinois Personal Trainer Clinic; November 5, 2011.
- Invited presentation Brigham Young University Idaho, Exercise and Sports Science Department; March 2, 2011.
- NSCA Illinois State Clinic; May 29, 2010.
- NSCA Personal Trainer Conference; March 16, 2009.
- NSCA National Conference; July 11, 2008.
- NSCA Sports Specific Conference; January 5, 2008.
- NSCA Illinois State Clinic; February 17, 2007.
- ACSM Southwest Chapter Annual Meeting; November 8, 2003.
- AAHPERD Southwest District Conference; February 13, 2003.

Professional Memberships and Certifications

- Member National Strength and Conditioning Association
 - Certified Strength and Conditioning Specialist.
- The Cooper Institute for Aerobics Research; Dallas, Texas; Certified Master Fitness Specialist.
- Certified American Red Cross AED and CPR.

Service Committees

- Education Board Member; Collegiate Strength and Conditioning Coaches Association (CSCCa); Fall 2012 – present.

- Associate Editor; The Journal of Strength and Conditioning Research; Fall 2007 – present.
- Eastern Illinois University
 - NSCA Personal Trainer Education Recognition Committee and Department Representative; Fall 2011- present.
 - EIU Commencement Speaker Committee; Spring 2013 – Fall 2013.
 - Exercise Science Faculty Search Committee; Fall 2012 and Fall 2104.
 - Head Strength and Conditioning Coach Search Committee; Summer 2012.
 - Mr. EIU/Ms. EIU Fitness, Honorary Judge; Spring 2011, Spring 2012.
 - Student Wellness Committee; Fall 2010- Spring 2013.
 - Producer of four exercise instructional videos for the Total EIU website:
 - <http://castle.eiu.edu/totaleiu/videos.php>.
 - Conducted free instructional sessions for new resistance exercise equipment.
 - Research and Creative Activity Advisory Board; Fall 2007- Spring 2009.
 - Department of Kinesiology and Sports Studies Personnel Committee (Committee Chair 2008-2009); Fall 2007- Spring 2009.
 - Minority Recruitment and Retention Committee; Fall 2005 - Spring 2007.
 - Graduate Thesis Chair
 - Anthony Warpecha, 2014-2015: *Effect of Whole Body-Vibration versus no Vibration during a Glute Bridge on parameters of Multiple Jump Performance.*
 - Tyler Mink, 2013-2014: *Comparison of Muscular Strength and Hypertrophy in High Repetition Verses Low Repetition Training for the Bench Press Exercise.*
 - Franklin Benik, 2012-2013: *The Effects of Combining Whole Body Vibration Technology and Heavy Back Squat on Vertical Jump Height in Collegiate Level Volleyball Players.*

- Zachary Pope, 2011-2012: *Effect of Eccentric Training and Partial Vascular Occlusion on Elbow Flexor Strength and Cross-Sectional Area* (literature review published JSCR; study published IJSSC).
- Alex Hoffman, 2010-2011: *Full Range versus Partial Range Back Squats with Supramaximal Loads on Acute Vertical Jump Height*.
- Maranda Rehg, 2009-2010: *Abdominal Muscle Activation and Caloric Expenditure: Ab Circle Versus Traditional Exercise Modalities* (published JSCR).
- Maureen Khairallah, 2008-2009: *Effect of Load Reductions over Consecutive Sets on Repetition Performance during Lower Body Resistance Exercise* (published JSCR).
- Patrick McKee, 2008-2009: *Effect of Mechanical Vibration versus Traditional Warm-up Modalities on Vertical Jump Performance*.
- Stephanie James, 2007-2008: *Progress Checks as a Motivational Tool for Adult Fitness Participants*.
- Cara McQueen, 2007-2008: *General Health and Fitness Knowledge and Exercise Behaviors of College Students*.

Awards and Recognition

- Eastern Illinois University Faculty Achievement and Contribution Award: *Research and Creative Activity*, November 2014.
- Thesis Chair for Zachary Pope, awarded the *Thesis Award of Excellence; Eccentric Resistance Training and Blood Flow Restriction*; College of Education and Professional Studies, Eastern Illinois University. April 2013.
- Eastern Illinois University Faculty Achievement and Contribution Award: *Research and Creative Activity*, November 2012.
- Eastern Illinois University Graduate Student Showcase: Thesis Chair for Zachary Pope, selected as a *Distinguished Graduate Student*, College of Education and Professional Studies. Spring 2012.
- Interview—New York Times (reporter: Anahad O’ Connor) regarding research on strength training. November 14th, 2011.
- Shake Weight exercise device promotional advertisement for research; Spring 2011. Available: <http://ireport.cnn.com/docs/DOC-613563>.

- Eastern Illinois University Graduate Student Showcase: Thesis Chair for Alex Hoffman, selected to represent the College of Education and Professional Studies for thesis research; *Full Range versus Partial Range Back Squats with Supramaximal Loads on Acute Vertical Jump Height*. Spring 2011.
- Featured in *Journal Gazette & Times-Courier*; Studies For A Better World: Fit or Fad? Fitness Equipment Put To The Test Against Traditional Exercise Without Machines; Friday April 30, 2010.
- Eastern Illinois University Graduate Student Showcase: Thesis Chair for Maranda Rehg, selected to represent the College of Education and Professional Studies for thesis research; *Abdominal Muscle Activation and Caloric Expenditure: Ab Circle Versus Traditional Exercise Modalities*. Spring 2010.
- Featured in Eastern Illinois University's *Center for Academic Technology and Support Newsletter*. December 2009.
- Eastern Illinois University Faculty Achievement and Contribution Award: *Research and Creative Activity*, November 2009.
- Thesis Chair for Maureen Khairallah, awarded the *Thesis Award of Excellence; Effect of Load Reductions over Consecutive Sets on Repetition Performance*; College of Education and Professional Studies, Eastern Illinois University. November 2009.
- Featured in Eastern Illinois University's *Center for Academic Technology and Support Newsletter*. April 2008.
- Featured in Eastern Illinois University's *Daily Eastern News*. January 9th, 2008.
- Cover model—American College of Sports Medicine Health and Fitness Journal. Jan/Feb issue 2008.
- Interview—Super Human Radio August 25th 2007. Available: <http://www.podfeed.net/episode/Super+Human+Radio+Show+-+08-25-2007/863627> .
- Eastern Illinois University Faculty Achievement and Contribution Award: *Research and Creative Activity*, November 2007.
- Featured in Eastern Illinois University's *Research and Sponsored Program News*. 3(2), July 2006.
- Outstanding Graduating Doctoral Scholar Award; Department of Exercise and Wellness, Arizona State University, May 2005.
- Graduated Magna Cum Laude; Utah State University, August 1998.

External Contracts—Total to date (documentation available upon request): \$178,162.

- Bootati Exercise Device Analysis 2014; \$8,062.
- UFC Workout Program Analysis 2014; \$500.
- Bokwa Exercise Program Analysis 2013-2014; \$4,000.
- Biggest Loser Resorts Weight Loss Analysis 2013; \$1,100.
- Ab Wave Equipment Analysis 2013; \$1,000.
- Literature Review: Examining the mechanical and physiological rationale for Shake Weight exercise 2011; \$6,000.
- Shake Weight Longitudinal Trial 2011; \$31,000.
- Shake Weight Athletic Performance Intervention 2011; \$25,000.
- Shake Weight Exercise Intervention 2011; \$21,000.
- Ab Circle Exercise Intervention 2010; \$13,000.
- Ab Circle Equipment Analysis 2009; \$11,000.
- Primal Pictures Resistance Exercise Instructional Video 2009; \$15,000.
- Perfect Sit-up Equipment Analysis 2009; \$7,000.
- Primal Pictures Resistance Exercise Animations DVD-ROM 2009; \$15,000.
- McGraw-Hill Kinesiology Motion Graphics 2008; \$20,000.

Internal Grants—Total to date (documentation available upon request): \$10,160,40.

- Eastern Illinois University Redden Grant 2014; Biomechanics lab equipment; \$1,499.00.
- Eastern Illinois University Redden Grant 2013; Biomechanics lab equipment; \$1,470.45.
- Eastern Illinois University Redden Grant 2008; Biomechanics lab equipment; \$1,495.00.
- Eastern Illinois University Summer Research 2008; Effect of Surface Stability on Core Muscle Activity during Dynamic Resistance Exercises; \$4,000.

- Eastern Illinois University College of Education and Professional Studies Development 2007; Effect of Surface Stability on Core Muscle Activity during Dynamic Resistance Exercises; \$800.
- Eastern Illinois University Redden Grant 2007; Biomechanics lab equipment; \$1,274.95.
- Eastern Illinois University Redden Grant 2006; Biomechanics lab equipment; \$1,120.

Scholarly Service

2016

- Manuscript Reviewer; A review of the acute effects and chronic adaptations of single- and multi-joint exercises during resistance training. *Sports Medicine*. Summer 2016.
- Manuscript Reviewer; Post-exercise blood flow restriction attenuates muscle hypertrophy. *Sports Medicine*. Summer 2016.
- Manuscript Reviewer; Effect of abdominal bracing training on strength and power development of trunk and lower limb muscles. *European Journal of Applied Physiology*. Summer 2016.
- Manuscript Reviewer; The Training Octagon: Training the anterior and posterior serape. *Strength and Conditioning Journal*. Spring 2016.
- Manuscript Reviewer; Effects of drop height and surface instability on neuromuscular activation during drop jumps. *Scandinavian Journal of Medicine and Science in Sports*. Spring 2016.

2015

- Manuscript Reviewer; MRI T2 relaxation time in lumbar muscle training. *Journal of Strength and Conditioning Research*. Fall 2015.
- Manuscript Reviewer; The influence of exercise load with and without different levels of blood flow restriction on acute muscle swelling and lactate. *Journal of Sports Sciences*. Fall 2015.
- Manuscript Reviewer; A comparison of volume equated knee extensions to failure vs. 5 x 5 training upon strength adaptations. *Journal of Strength and Conditioning Research*. Summer 2015.
- Manuscript Reviewer; A comparison of gluteus maximus, biceps femoris, and vastus lateralis EMG activity in the back squat and barbell hip thrust exercises. *Journal of Applied Biomechanics*. Summer 2015.

- Manuscript Reviewer; Effects of strength training using unstable surfaces on strength, power and balance performance across the lifespan: a systematic review and meta-analysis. *Sports Medicine*. Spring 2015.
- Manuscript Reviewer; The Anterior and Posterior Serape: The Rotational Core. *Strength and Conditioning Journal*. Spring 2015.
- Manuscript Reviewer; Safety and efficiency of core muscles training programs for motor control and injury prevention: A review. *Strength and Conditioning Journal*. Spring 2015.
- Manuscript Reviewer; Stable, Unstable, and Metastable States of Equilibrium: Definitions and Applications to Human Movement. *Journal of Strength and Conditioning Research*. Spring 2015.
- Manuscript Reviewer; Influence of Hamstring Fatigue on the Estimated Percentage of Fast-Twitch Muscle Fibers for the Vastus Lateralis. *Journal of Strength and Conditioning Research*. Spring 2015.

2014

- Manuscript Reviewer; Upper body muscle activation during low- versus high-load resistance exercise in the bench press. *Journal of Sports Sciences*. Fall 2014.
- Manuscript Reviewer; Effect of repetition duration during resistance training on muscle hypertrophy: A systematic review and meta-analysis. *Sports Medicine*. Fall 2014.
- Manuscript Reviewer; Resistance Training for Shoulder Complex Stabilization; *International Journal of Sports Science and Coaching*. Summer 2014.
- Manuscript Reviewer; A Discussion on Occlusion Training Induced Muscular Hypertrophy. *Sports Medicine*. Summer 2014.
- Manuscript Reviewer; Eccentric Exercise, Exercise Induced Muscle Damage and the Repeated Bout Effect. *Strength and Conditioning Journal*. Spring 2014.
- Manuscript Reviewer; Effects of BOSU ball(s) during sit-ups with body-weight and added resistance on core muscle activation. *Journal of Strength and Conditioning Research*. Spring 2014.
- Manuscript Reviewer; Cardiovascular responses and hemodynamics during lower-limb resistance exercise with blood flow restriction. *Journal of Strength and Conditioning Research*. Spring 2014.

- Manuscript Reviewer; Acute effects of antagonist static stretching in the inter-set rest period on resistance training and muscle activation. *Research in Sports Medicine*. Spring 2014.
- Manuscript Reviewer; Metastability in Plyometric Training on Unstable Surfaces: A pilot study. *BMC Sports Science, Medicine and Rehabilitation*. Spring 2014.
- Manuscript Reviewer; Acute effects of antagonist static stretching in the inter-set rest period on resistance training and muscle activation. *Research in Sports Medicine*. Spring 2014.
- Manuscript Reviewer; Effects of replacing free-weights with elastic band resistance in squats on trunk muscle activation. *Journal of Strength and Conditioning Research*. Spring 2014.
- Manuscript Reviewer; Acute and Chronic Cardiovascular Response to 16-weeks of Combined Eccentric or Traditional Resistance and Aerobic Training in Elderly Hypertensive Women: A Randomized Controlled Trial. *Journal of Strength and Conditioning Research*. Spring 2014.
- Manuscript Reviewer; The impact of bilateral and unilateral execution and base of support in row exercises on core muscle activation. *European Journal of Applied Physiology*. Spring 2014.

2013

- Manuscript Reviewer; The Effect of Inter-set Rest Intervals on Resistance Exercise Induced Muscle Hypertrophy. *Sports Medicine*. Fall 2013.
- Manuscript Reviewer; The Effects of a Seven-week Practical Blood Flow Restriction Program on Well-trained Collegiate Athletes. *Journal of Strength and Conditioning Research*. Fall 2013.
- Manuscript Reviewer; Occlusion training and muscle function: A review. *Sports Medicine*. Fall 2013.
- Manuscript Reviewer; Is electromyostimulation an effective recovery mode irrespective of muscle fatigue? *Journal of Strength and Conditioning Research*. Summer 2013.
- Manuscript Reviewer; Physiological and biochemical responses to cycling on land versus water-based exercises in postmenopausal women. *Journal of Strength and Conditioning Research*. Summer 2013.
- Manuscript Reviewer; Effects of surface instability on neuromuscular performance during drop jumps and landings. *European Journal of Applied Physiology*. Summer 2013.

- Manuscript Reviewer; Consistency of Peak and Mean Concentric and Eccentric Force Using a Novel Squat Testing Device. *Journal of Applied Biomechanics*. Summer 2013.
- Manuscript Reviewer; Is There a Minimum Intensity Threshold for Resistance Training-Induced Hypertrophic Adaptations? *Sports Medicine*. Spring 2013.
- Manuscript Reviewer; Does performing drop jumps with additional eccentric loading improve jump performance? *Journal of Strength and Conditioning Research*. Spring 2013.

2012

- Manuscript Reviewer; Comparison of EMG activity in the rectus abdominis and rectus femoris during supine un-weighted abdominal crunch exercise and a weighted seated abdominal crunch exercise. *Journal of Sports Sciences*. Fall 2012.
- Manuscript Reviewer; The influence of a resistance training apparatus on vertical jump and 40-yard sprint performance. *Journal of Strength and Conditioning Research*. Fall 2012.
- Manuscript Reviewer; Kinetic assessments of jumping and change of direction performance in college soccer players. *Journal of Strength and Conditioning Research*. Summer 2012.
- Manuscript Reviewer; Influence of Isometric Contraction Duration on Postactivation Potentiation Response. *Journal of Strength and Conditioning Research*. Summer 2012.
- Manuscript Reviewer; Short-term effects of proprioceptive training with unstable platform on athletes' stabilometry. *Journal of Strength and Conditioning Research*. Summer 2012.
- Manuscript Reviewer; Intra-Set rest intervals in resistance training: Physiological basis, acute and long term effects. *Journal of Strength and Conditioning Research*. Summer 2012.
- Manuscript Reviewer; Potential Mechanisms for a Role of Metabolic Stress in Hypertrophic Adaptations to Resistance Training. *Sports Medicine*. Summer 2012.
- Manuscript Reviewer; Kinematics of the trunk and the lower extremities during restricted and unrestricted squats. *Journal of Strength and Conditioning Research*. Spring 2012.
- Manuscript Reviewer; Comparison between bench press and leg press for changes in creatine kinase activity and muscle soreness. *Research Quarterly for Exercise and Sport*. Spring 2012.

- Manuscript Reviewer; Effect of inter-repetition rest periods on power clean technique. *Journal of Applied Biomechanics*. Spring 2012.
- Manuscript Reviewer; Muscle force output and electromyographic activity in squats with various unstable surfaces. *Journal of Strength and Conditioning Research*. Spring 2012.
- Manuscript Reviewer; Mechanical response of the flexor and extensor muscles of the knee in Bodyboarders of high level during the competition. *Journal of Strength and Conditioning Research*. Spring 2012.

2011

- Manuscript Reviewer; A comparison of cardiovascular responses to stable versus unstable surface training workouts. *European Journal of Sport Science*. Fall 2011.
- Manuscript Reviewer; Effect of different rest intervals between sets on muscle performance in leg-press exercise in trained older women. *Journal of Strength and Conditioning Research*. Fall 2011.
- Book Reviewer; ACSM's Foundations of Strength Training and Conditioning. Lippincott Williams & Wilkins, Spring 2011.
- Manuscript Reviewer; An adequate interset rest period for strength recovery during a common isokinetic test. *Journal of Strength and Conditioning Research*. Fall 2011.
- Manuscript Reviewer; Effect of specific resistance training on musculoskeletal pain symptoms: Dose-response relationship. *Journal of Strength and Conditioning Research*. Summer 2011.
- Book Reviewer; Concepts of Physical Fitness: Active Lifestyles for Wellness. McGraw-Hill, Summer 2011.
- Book Reviewer; Exercise Physiology: Integrating Theory and Application. Lippincott Williams & Wilkins, Spring 2011.
- Manuscript Reviewer; Low-intensity eccentric contractions attenuate muscle damage induced by maximal eccentric contractions for 2 weeks. *Journal of Applied Physiology*. Spring 2011.
- Manuscript Reviewer; The use of specialized training techniques to maximize muscle hypertrophy. *Strength and Conditioning Journal*. Spring 2011.

2010

- Manuscript Reviewer; Influence of weight distribution asymmetry on the biomechanics of a barbell back squat. *Journal of Strength and Conditioning Research*. Fall 2010.

- Manuscript Reviewer; Determining the optimal whole-body vibration dose-response on muscular performance. *Journal of Strength and Conditioning Research*. Fall 2010.
- Manuscript Reviewer; 8 Weeks Low to Moderate Intensity Plyometric Training Improves Sprint and Jump Performance but not Multidirectional Agility in Adolescent Male Soccer Players. *Journal of Strength and Conditioning Research*. Fall 2010.
- Manuscript Reviewer; Pedaling power and speed production versus technical factors and track difficulty in BMX cycling. *Journal of Strength and Conditioning Research*. Spring 2010.
- Manuscript Reviewer; Impact of isolated and combined aerobic and anaerobic interval training on selected speed parameters among man soccer players. *Journal of Strength and Conditioning Research*. Spring 2010.

2009

- Manuscript Reviewer; Response time to stimuli in division I soccer players. *Journal of Strength and Conditioning Research*. Fall 2009.
- Manuscript Reviewer; Squatting kinematics and kinetics and their application to exercise performance. *Journal of Strength and Conditioning Research*. Summer 2009.
- Manuscript Reviewer; Effect of recovery mode on exercise-time to exhaustion, cardiorespiratory responses and blood lactate after prior, intermittent, supramaximal exercise. *Journal of Strength and Conditioning Research*. Spring 2009.

2008

- Manuscript Reviewer; Influence of exercise order on maximum strength and muscle volume in untrained men. *Journal of Science and Medicine in Sport*. Fall 2008.
- Manuscript Reviewer; The Use of Occlusion Training to Produce Muscle Hypertrophy. *Strength and Conditioning Journal*. Fall 2008.

2007

- Associate Editor; The Journal of Strength and Conditioning Research (JSCR). 2007-present.
- NSCA Research Grant Review Panel. Spring 2007.
- Manuscript Reviewer; Effect of instability and resistance on unintentional squat lifting kinetics. *International Journal of Sports Physiology and Performance*. Spring 2007.

- Manuscript Reviewer; Conceptual considerations for high school and college weight training courses: Ideas for practitioners and pre-service physical educators. *Illinois Journal for Health, Physical Education, Recreation & Dance*. Spring 2007.

2006

- Book Reviewer; *Dynatomy: Dynamic human anatomy*. *Illinois Journal for Health, Physical Education, Recreation & Dance*. 57: 11, Spring 2006.

Reference Contacts

- Dr. Nich Pertuit; Department Head: Health and Human Performance Department; Rocky Mountain College; 406-665-5280; nich.pertuit@rocky.edu.
- Dr. Mark Kattenbraker; Department Head: Kinesiology and Sports Studies; Eastern Illinois University; 217-581-2215; mskattenbraker@eiu.edu.
- Dr. Eadric Bressel; Professor of Biomechanics: Utah State University; 435-797-7216; eadric.bressel@usu.edu.
- Dr. David Behm; Professor of Biomechanics: Memorial University of Newfoundland; 709-737-3408; dbehm@mun.ca.
- Dr. Fabio Fontana; Assistant Professor of Motor Learning: Northern Iowa University; 217-218-1334; fabio.fontana@uni.edu.
- Dr. Chuck Stiggins; Executive Director: Collegiate Strength and Conditioning Coaches Association; 801-375-9400; info@cscqa.org.