

TRISHA A. VANDUSSELDORP (MCLAIN)

Department of Exercise Science and Sport Management
Kennesaw State University
Kennesaw, GA 30144
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Education

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|---|-----------|
| Doctorate of Philosophy in Exercise Science
University of New Mexico
Albuquerque, New Mexico | July 2016 |
| Master of Science in Human Performance:
Exercise and Sport Science
University of Wisconsin- La Crosse
La Crosse, Wisconsin | May 2013 |
| Bachelor of Science in Exercise Science
Southwest Minnesota State University
Marshall, Minnesota | May 2011 |

Research and Professional Interests

- Cellular and molecular responses to exercise and nutritional interventions
- Resistance training and sports performance
- Muscle physiology: function, fatigue, and recovery from eccentric muscle damage
- Sports nutrition, nutrient timing, and ergogenic aids
- Hormonal influence on performance, energy metabolism, and body composition

Professional Certifications

- Certified Sports Nutritionist from the International Society of Sports Nutrition (CISSN); July 2014 - Present
- Certified Strength and Conditioning Specialist from the National Strength and Conditioning Association (NSCA CSCS); Nov. 2014 - Present

Professional Positions

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| Assistant Professor of Exercise Science
Kennesaw State University
Kennesaw, GA | August 2016-Present |
| Vice President
International Society of Sports Nutrition | June 2017-Present |
| Committee Member
ACSM Health Fitness Summit | April 2017-Present |

Board Member

NSCA Georgia State Advisory Board

Jan 2018-Present

Advisory Board Member

Dymatize Enterprises, LLC

March 2018-Present

Professional Memberships

- International Society of Sports Nutrition (ISSN)
- National Strength and Conditioning Association (NSCA)
- Southeast American College of Sports Medicine (SEACSM)
- American College of Sports Medicine (ACSM)

Professional Experience

8/2016 – Present

Assistant Professor

Department of Exercise and Sport Management

Kennesaw State University

Kennesaw, Georgia

Responsibilities: Work as part of the Exercise Science faculty teaching undergraduate coursework. Work with students and faculty within and outside the department on both applied and basic research studies. Dissemination of research via professional presentations and peer-reviewed publications. Serve on department committees and engage in service to the university. Currently provisional graduate faculty status.

8/2013 – 7/2016

Graduate Research and Teaching Assistant

Health, Exercise, and Sports Sciences

University of New Mexico

Albuquerque, New Mexico

Responsibilities: Worked as part of the Health, Exercise, and Sport Sciences department teaching undergraduate and graduate coursework, as well as labs. Worked as part of a research team in the UNM Exercise Physiology Lab (UNM EPL) to collect and disseminate research. Worked in the UNM EPL running community, student, and staff testing, including: hydrostatic weighing, BodPod, skinfolds, blood draws, stress testing, and VO₂max testing. Responsible for lab maintenance and upkeep (order and inventory supplies).

5/2014 – 6/2015

Graduate Research Assistant

Pope L. Moseley, MD; Karol Dokladny, PhD

Department of Internal Medicine/Clinical and Translational Science Center

University of New Mexico

Albuquerque, New Mexico

Responsibilities: Worked as part of the Department of Internal Medicine at UNM Hospital (Clinical and Translational Science Center) to conduct and disseminate scientific findings related to exercise and autophagy research. This research is now conducted in the UNM EPL.

- 1/2013 – 5/2013 Study Coordinator and Research Assistant
An electromyographic-based test for estimating neuromuscular fatigue during incremental treadmill running
 University of Wisconsin- La Crosse
 La Crosse, Wisconsin
Responsibilities: Coordinated and conducted data collection, data analysis, and manuscript preparation under the advisement of Dr. Clayton Camic.
- 8/2011 – 5/2013 Graduate Research and Teaching Assistant
 Exercise Sport Science: Human Performance
 University of Wisconsin- La Crosse
 La Crosse, Wisconsin
Responsibilities: Worked as part of a research team to conduct research related to exercise and biomechanics. Co-lectured and assisted with equipment set-up for undergraduate exercise science courses (Anatomy and Physiology, Exercise Physiology).
- 8/2010 – 5/2011 Undergraduate Teaching Assistant
 Exercise Science
 Southwest Minnesota State University
 Marshall, MN
Responsibilities: Co-lectured (Biomechanics and Kinesiology) and assisted with equipment set-up for undergraduate exercise science labs.

Teaching Experience

- 8/2016 – Present Assistant Professor
 Department of Exercise and Sport Management
 Kennesaw State University
Instructor of Record: Undergraduate Level
 - ES 4700 Clinical Exercise Physiology (Fall, 2018)
 - ES 3200 Research Methods (Fall, 2018)
 - ES 4600 Exercise Prescription (Spring, 2018) (**online**)
 - ES 2500 Principles of Nutrition (Fall, 2017) (**online**)
 - ES 4200 Nutrition and Performance (Spring, 2016; Fall 2017; Summer 2017; Spring 2018)
 - ES 4650 Exercise Testing (Fall, 2016)
 - ES 3900 Physiology of Exercise (Fall, 2016; Spring 2017; Summer 2017)
- 8/2013 – 7/2016 Graduate Teaching Assistant
 Department of Health, Exercise, and Sport Sciences
 University of New Mexico
Instructor of Record: Graduate Level Only
 - PEP 544 Physiology of Resistance Training (Spring, 2016)*Co-Lecturer/Teaching Assistant: Graduate and Undergraduate Level*
 - PEP 625 Writing for Publication (Spring, 2016)
 - PEP 502 Designs for Fitness (2 sections) (graduate and undergraduate)
 - PEP 508 Clinical Exercise Testing and Prescription (graduate and undergraduate) (2 sections)

- PT476 Health and Wellness (physical therapy doctoral students) (3 sections)

Instructor of Record: Undergraduate Level

- PEP 277 Kinesiology (Exercise Science Core Course; 1 section)
- PEP 289 Tests and Measurements (Exercise Science Core Course; 3 sections)
- PENP 114 Beginning Weight Training (1 section)
- PENP 114/115 Intermediate Weight Training (2 sections)
- PENP 101 Beginning Swimming (1 section)
- PENP 102 Intermediate Swimming (1 section)
- PENP 155/156 Pilates (2 sections)

Co-Lecturer: Undergraduate Level

- PEP 289 Tests and Measurements (Exercise Science Core Course, 1 section)

8/2011 – 5/2013

Graduate Research and Teaching Assistant
Department of Exercise and Sport Science/Human Performance Laboratory
The University of Wisconsin- La Crosse

Teaching Assistant

- ESS 205/206 Anatomy and Physiology Lab (8 sections)
- ESS 302 Exercise Physiology Lab (12 sections)
- ESS 100 Cross-Training (1 section)
- ESS 100 Trapshooting (3 sections)

Graduate Research Assistant

- Provided fitness testing (VO₂, muscular endurance, muscular strength, flexibility, body composition) to undergraduate students
- Assisted on graduate research conducted in the Human Performance Laboratory
- Instructed/aided undergraduate and graduate students with various laboratory/research techniques: Force treadmill testing/software, metabolic equipment/software, body composition (hydrostatic underwater weighing, skinfold, & goniometer), Polar Team heart rate monitor software, spirometry, and MATLAB/SPPS/Excel software usage

8/2010 – 5/2011

Undergraduate Teaching Assistant
Department of Exercise Science
Southwest Minnesota State University

- EXSC 100 Anatomical Kinesiology (2 sections)
- EXSC 300 Biomechanics (2 sections)

8/2008 – 5/2011

Assistant Coordinator and Tutor
The Center for Athletic Academic Resources
Southwest Minnesota State University

- EXSC 100 Kinesiology
- EXSC 300 Biomechanics
- BIOL 200 and 200L Biology
- MATH 200 Introduction to Statistics
- BIOL 305 and 306 Anatomy and Physiology I and II

Publications in Print/Accepted

1. Escobar, KA, Morales, J., **VanDusseldorp, TA**. Metabolic profile of a cross-fit training bout. *Journal of Human Sport & Exercise*, December 2017.
2. Stratton, MT, **VanDusseldorp, TA**, Kravitz, L. Protein supplements: Which whey to go? *Idea Fitness Journal*, October 2017.
3. Kerksick, CM, Schoenfeld, BJ, Arent, S, Stout, JR, Campbell, B, Wilborn, CD, Taylor, L, Kalman, D, Smith-Ryan, A, Kreider, RB, Willoughby, D, Arciero, PJ, **VanDusseldorp, TA**, Ormsbee, MN, Wildman, R, Antonio, J. International Society of Sports Nutrition Position Stand: Nutrient Timing Revisited. *JISSN*, August 2017.
4. Aragon, A, Schoenfeld, BJ, Wildman, R., Kleiner, S., **VanDusseldorp, TA**, Taylor, L, Earnest, CP, Arciero, P, Wilborn, C, Kalman, DS, Stout, JR, Willoughby, DS, Campbell, B, Arent, SM, Bannock, L, Smith-Ryan, AE, Antonio, J. International Society of Sports Nutrition Position Stand: Diet and Body Composition. *JISSN*, June 2017.
5. Beverly, JM, White, J, Beverly, ER, **VanDusseldorp, TA**, McCormick, JJ, Zuhl, M, Williams, JD, Mermier, CM. Harness suspension stress, narrowing the focus. *Journal of Sport and Human Performance*, June 2017.
6. Camic, CL, Kovacs, AJ, **VanDusseldorp, TA**, Hill, EC, Enquist, EA. Application of the neuromuscular fatigue threshold treadmill test to muscles of the quadriceps and hamstrings. *Journal of Sport and Health Sciences*, June 2017.
7. Escobar, KA, **VanDusseldorp, TA**, Kerksick, CM. Carbohydrate intake and resistance-based exercise: are current recommendations reflective of actual need? *British Journal of Nutrition*, 2016, doi:10.1017/S0007114516003949.
8. Nunez, TP, Beltz, NM, **VanDusseldorp, TA**, Mermier, CM, Kravitz, L. Designing the optimal suspension training circuit. *International Journal of Research in Exercise Physiology*, Feb 2017.
9. Mike, JN, Cole, N, Herrera, C, **VanDusseldorp, TA**, Kravitz, L, Kerksick, CM. The effects of eccentric contraction duration on muscle strength, power production, vertical jump and soreness. *JSCR*, 2016.
10. Carriker, CR, Vaughan, RA, **VanDusseldorp, TA**, Johnson, KE, Beltz, NM, McCormick, JJ, Cole, NH, Gibson, AL. Nitrate-containing beet juice reduces oxygen consumption during submaximal exercise in low but not high aerobically fit runners. *Journal of Exercise Nutrition and Biochemistry*, manuscript #2016-0029. Dec, 2016.
11. Salgado, RM, White, AC, Vaughan, RA, Parker, DL, Schneider, SM, Kenefick, RW, McCormick, JJ, Gannon, NP, **VanDusseldorp, TA**, Kravitz, LR, Mermier, CM. Mitochondrial efficiency and exercise economy following heat stress: a potential role of uncoupling protein 3. *Physiological Reports*. Feb 2017.
12. Escobar, KA, Morales, JM, **VanDusseldorp, TA**. The effect of a moderately-low and high carbohydrate intake on CrossFit performance. *Int J Exerc Sci*, 9(3), 2016.
13. Johnson, KE, Miller, B, **McLain, TA**, Gibson, AL, Otterstetter, R. A comparison of bioelectrical impedance and ultrasound to assess body composition in college-aged adults. *Journal of Advanced Nutrition and Human Metabolism*. 2(1), 1-5. 2016.
14. Johnson, KE, Miller B, Juvancic-Heltzel, JA, Gibson, AL, **McLain, TA**, Kappler, R, Otterstetter, R. A comparison of dual energy x-ray absorptiometry, air displacement plethysmography and ultrasound to assess body composition in college-aged adults. *Clinical Physiology and Functional Imaging*, advance online publication 24, 2016, doi: 10.1111/cpf.12351.
15. **McLain, TA**, Wright, GA, Camic, CL, Kovacs, AJ, Hegge, JM, Brice, GA. The development of an anaerobic sprint running test utilizing a nonmotorized treadmill. *JSCR*, 29(8), 2015.
16. **McLain, TA**, Escobar, KA, Kerksick, CM. Protein Applications in Sports Nutrition- Part I: Requirements, Quality, Source & Optimal Dose. *Strength and Conditioning Journal*, 37(2), 2015.
17. Escobar, KA, **McLain, TA**, Kerksick, CM. Protein Applications in Sports Nutrition- Part I: Timing and Protein Patterns, Fat-Free Mass Accretion and Fat Loss. *Strength and Conditioning Journal*, 37(3), 2015.
18. Camic, CL, Kovacs, AJ, Enquist, EA, **McLain, TA**, Hill, EC. Muscle activation of the quadriceps and hamstring during incremental running. *Muscle Nerve*, 52(6), 2015.

19. Carriker, CR, Mermier, CM, **McLain, TA**, Johnson, KE, Beltz, NM, Vaughan, RA, McCormick, JJ, Cole, NH, Witt, CC, Gibson, AL. Effect of acute dietary nitrate consumption on submaximal oxygen consumption in hypobaric hypoxia. *International Journal of Sport Nutrition and Exercise Metabolism*, 26(4), 2015.
20. White, AC, Salgado, RM, Astorino, TA, Loeppky, JA, Schneider, SM, McCormick, JJ, **McLain, TA**, Kravitz, L, Mermier, CM. The effect of ten days of heat acclimation on exercise performance in acute hypobaric hypoxia (4350 m). *Temperature*, 3(1), 2015.
21. **VanDusseldorp, TA**, Kravitz, L. Heart rate variability & overtraining: Can new research prevent an old-age paradigm? *IDEA Fitness Journal*, 2015.
22. Camic, CL, Kovacs, AJ, Enquist, EA, **VanDusseldorp, TA**, Hill, EC, Calantoni, AM, Yemm, AJ. An electromyographic-based test for estimating neuromuscular fatigue during incremental treadmill running. *Physiological Measurement*, 35, 2014.

Publications in Review

23. Mangine, GT, VanDusseldorp, TA, Feito, Y, Holmes, A, Serafini, PR, Box, AG, Gonzalez, AM. Testosterone and cortisol response to five high-intensity functional training competition workouts in recreationally active adults. *Physiological Reports*, *In Review*.
24. Escobar, KA, Cole, N, Mermier, CM, **VanDusseldorp, TA**. Autophagy and aging: Maintaining the proteome through exercise and caloric restriction. *Aging Cell*, *In review*.
25. **VanDusseldorp, TA**, Escobar, KA, Johnson, KE, McCormick, JJ, Moriarity, T, Stratton, M, Cole, N, Kerksick, CM, Vaughan, RA, Dokladny, K, Kravitz, L, Mermier, CM. Effect of branched-chain amino acid supplementation on markers of muscle damage and recovery following acute eccentric resistance exercise. *PLOS One*, *In review*.
26. Toohey, JC, Townsend, JR, Johnson, SB, Toy, AM, Vantrease, WC, Bender, D, Crimi, CC, Stowers, KL, Ruiz, MD, **VanDusseldorp, TA**, Feito, Y, Mangine, GT. The effects of probiotic (*Bacillus subtilis*) supplementation during offseason resistance training in female Division I athletes. *JSCR*, April 2018; *Manuscript revisions received*.
27. Gunn, SM, Mangine, GT, **VanDusseldorp, TA**, Hester, GM. Influence of sport specialization on athletic performance and injury risk in collegiate swimmers. *The Kennesaw Journal of Undergraduate Research*, *In Review*.
28. Mangine, GT, Escobar, KA, **VanDusseldorp, TA**, Stout, JR. The adequacy of high-quality protein sources for athletes: Do whey protein isolate and soy protein isolate meet the demands of increased physical activity? *The Journal of Nutrition*, Feb 2017; *Manuscript revisions received*.
29. McCormick, JJ, **VanDusseldorp, TA**, Dokladny, K, Ulrich, CG, La Coe, RL, Mosely, PL, Mermier, CM. The Effect of Aging on the Autophagic and Heat Shock Response in Human Peripheral Blood Mononuclear Cells. *Autophagy*, Nov 2016; *Manuscript revisions received*.

Manuscripts in Preparation

30. **VanDusseldorp, TA**, Tinsley, G, Chowlea, J, Kerksick, C, Campbell, B, Willoughby, D, Kalman, D, Antonio, J, et al.. Milk Proteins: A Systematic Review. *JISSN*, *Manuscript in preparation*.
31. Guest, N, **VanDusseldorp, TA**, Nelson, MT, Kalman, D, Campbell, B, Antonio, J. International Society of Sports Nutrition Position Stand: Caffeine. *JISSN*, *Manuscript in preparation*.
32. **VanDusseldorp, TA**, Escobar, KA, Kerksick, CM, Vaughan, RA, Stratton, MT, Kravitz, L, Mermier, CM. Branched-chain amino acid supplementation and recovery: an evidence-based review of both endurance and resistance-based research. *International Journal of Sports Nutrition and Exercise Metabolism*; *Manuscript in preparation*.
33. **VanDusseldorp, TA**, Escobar, KA, Johnson, KE, Stratton, M, Moriarity, T, Mangine, G, Holmes, A, Kerksick, CM, Mermier, CM. Effect of varying doses of fish oil supplements on recovery of exercise performance, indirect markers of damage, and perceived soreness following an acute bout of resistance exercise. *International Journal of Sports Nutrition and Exercise Metabolism*; *Manuscript in preparation*.

Book Chapters In Print

34. **McLain, TA**, Conn, CA. *Fat Needs for Children in Sport*. In: Sport Nutrition Needs for Child and Adolescent Athletes. CRC Press; Taylor & Francis Group. Boca Raton, FL; May, 2016.
35. Escobar, KA, **McLain, TA**, Kerksick, CM. *Protein Needs for Children in Sport*. In: Sport Nutrition Needs for Child and Adolescent Athletes. CRC Press; Taylor & Francis Group. Boca Raton, FL; May, 2016.

Book Chapters in Preparation

36. Kerksick, CM, Jagim, A, **VanDusseldorp, TA**. *Nutrition and Functional Foods for Extreme Sports*. Extreme and Rare Sports: Performance Demands, Drivers, Functional Foods and Nutrition. CRC Press/Taylor & Francis. Proposal accepted.

Oral and Poster Presentations

1. Stratton, MT, Feito, Y, **VanDusseldorp, TA**, Esmat, TA, Mangine, GT. A comparison of four methods of determining body composition in advanced and recreational fitness athletes. Poster presentation. NSCA 2018. Submitted.
2. McNabb, J, Sklaver, JM, Feito, Y, **VanDusseldorp, TA**, Wildman, R, and Mangine, GT. Relationship between sprint acceleration and broad jump kinetics in NFL draft prospects. Poster presentation. NSCA 2018. Submitted.
3. Almeda, CG, Feito, Y, **VanDusseldorp, TA**, Esmat, TA, Mangine, GT. Mid-thigh pull force-time characteristics in elite and recreational cross-fit athletes. Poster presentation. NSCA 2018. Submitted.
4. Hampton, FG, Sklaver, J, Feito, Y, **VanDusseldorp, TA**, Wildman, R, and Mangine, GT. Relationships between 40-m sprinting and vertical jump kinetics in national football league (NFL) draft prospects. Poster presentation. NSCA 2018. Submitted.
5. Mangine, GT, Feito, Y, **VanDusseldorp, TA**, Esmat, TA. Anthropometric and physiological performance predictors of a 20-minute fitness competition workout. Poster presentation. NSCA 2018. Submitted.
6. Boone, JB, Sklaver, J, Feito, Y, **VanDusseldorp, TA**, Wildman, R, and Mangine, GT. Positional comparisons in absolute and relative performance measures in national football league (NFL) draft prospects. Poster presentation. NSCA 2018. Submitted.
7. Nunez, T, Amorim, FT, Beltz, NM, Mermier, CM, Moriarty, TA, Nava, RC, **VanDusseldorp, TA**, Kravitz, L. Metabolic effects of two novel high-intensity circuit training protocols. National ACSM. 2018. Thematic poster presentation. Minneapolis, MN.
8. Rodriguez, A,
9. Lee, M, **VanDusseldorp, TA**, Hester, G, Mangine, G. Effect of β -hydroxy β -methylbutyrate and creatine supplementation on creatine kinase and cortisol levels across two rugby seasons. SEACSM 2018. Poster presentation. Chattanooga, TN.
10. McNabb, J, **VanDusseldorp, TA**, Hester, G, Feito, Y, Mangine, G. Increased resisted sprinting load decreases bilateral asymmetry in sprinting kinetics. SEACSM 2018. Poster presentation. Chattanooga, TN.
11. Hayes, K, Julian, J, **VanDusseldorp, TA**, Hester, G, Feito, Y, Mangine, G. Effect of β -hydroxy β -methylbutyrate and creatine supplementation on sprint kinetics across a collegiate rugby season. SEACSM 2018. Thematic poster. Chattanooga, TN.
12. Holmes, A, **VanDusseldorp, TA**, Hester, G, Mangine, G. Effect of β -hydroxy β -methylbutyrate and creatine supplementation on creatine kinase and cortisol levels during a rugby season. SEACSM 2018. Poster presentation. Chattanooga, TN.
13. **VanDusseldorp** and Stratton (undergrad). Got Supplements? Take these to enhance performance. Oral Presentation. ISSN-UCF. November 2017.
14. **VanDusseldorp, TA**. Intermittent Fasting: To Eat or Not to Eat. Motion Sports Nutrition Colombia. ISSN/Motion Sports. Medellin, Antioquia (Colombia). Oral Presentation. October 28, 2017.

15. **VanDusseldorp, TA.** Branched-Chain Amino Acids and Exercise. Motion Sports Nutrition Colombia. ISSN/Motion Sports. Medellin, Antioquia (Colombia). Oral Presentation. October 27, 2017.
16. **VanDusseldorp, TA.** BCAAs- Effective Ergogenic Aids? ISSN- Long Island University Conference. Oral Presentation. October 13, 2017.
17. **VanDusseldorp, TA.** Branched-chain amino acids and training. 1st Annual ISSN-KSU Nutrition and Training Conference. September 16, 2017.
18. Lee, M, **VanDusseldorp, TA,** Escobar, KA, Johnson, KE, Stratton, MT, Moriarty, T, McCormick, JJ, Mangine, GT, Holmes, A, Cole, N, Kerksick, CM, Mermier, C. Six grams of fish oil supplementation improves recovery of indirect markers of muscle damage following eccentric exercise. Poster Presentation: 2017 International Society of Sports Nutrition Annual Conference).
19. **VanDusseldorp, TA.** Effect of BCAA on recovery of markers of muscle damage, performance and perceived soreness. ISSN Data Blitz 2017 Annual Conference.
20. Townsend, JR, Toohey, JC, Johnson, SB, Crimi, CC, Stowers, KL, Bender, WD, Vantrease, WC, Toy, AM, Ruiz, MD, **VanDusseldorp, TA,** Fieto, Y, Mangine, GT. The effect of probiotic supplementation on body composition, muscle thickness, and athletic performance in Division I collegiate athletes. (Poster Presentation: 2017 International Society of Sports Nutrition Annual Conference).
21. **VanDusseldorp, TA,** Escobar, KA, Johnson, KE, Vaughan, RA, McCormick, JJ, Moriarty, T, Stratton, M, Cole, N, Dokladny, K, Kerksick, CM, Kravitz, L, Mermier, CM. Relationship between autophagy and heat shock response in peripheral blood mononuclear cells following resistance exercise. (Poster Presentation: 2017 Annual American College of Sports Medicine Conference).
22. Johnson, KE, **VanDusseldorp, TA,** Escobar, KA, Stratton, M, Moriarty, T, McCormick, JJ, Mangine, G, Nunez, T, Beltz, N, Cole, N, Endito, M, Kerksick, CM, Mermier, CM. Six grams of fish oil supplementation improves vertical jump performance following acute eccentric resistance training. (Poster Presentation: 2017 Annual American College of Sports Medicine Conference).
23. Holmes, A, **VanDusseldorp, TA,** Escobar, KA, Johnson, KE, Stratton, M, Moriarty, T, McCormick, JJ, Mangine, G, Nunez, T, Beltz, N, Cole, N, Endito, M, Kerksick, CM, Mermier, CM. Six grams of fish oil supplementation mitigates perceived muscle soreness following acute resistance exercise. (Poster Presentation: 2017 Annual American College of Sports Medicine Conference).
24. Boyett, TT, **VanDusseldorp, TA,** Hester, GM, Feito, Y, Mangine, GT. Interrater reliability for dual-energy X-ray absorptiometry and bioelectrical impedance analysis for measuring total and regional lean mass. (Poster Presentation: 2017 Annual American College of Sports Medicine Conference).
25. **VanDusseldorp, TA.** Intermittent Fasting: Molecular Mechanisms and Practical Applications in Exercise. 2nd Annual ISSN Sports Nutrition & Athletic Performance Workshop. Coastal Carolina University. March 25, 2017.
26. Mangine, GT, **VanDusseldorp, TA,** Holmes, AJ, Kliszczewicz, BM, Feito, Y. The cortisol response to known and unknown challenges during a 5-week online fitness competition. NSCA 2017.
27. Gunn, S, **VanDusseldorp, TA,** Hester, G, Mangine, G. The effect of sport specialization on the athletic performance of swimmers. KSU Symposium of Student Scholars. 2017.
28. Holmes, A, **VanDusseldorp, TA,** Escobar, KA, Johnson, KE, Stratton, M, Moriarty, T, McCormick, JJ, Mangine, G, Nunez, T, Beltz, N, Cole, N, Endito, M, Kerksick, CM, Mermier, CM. Six grams of fish oil supplementation mitigates perceived muscle soreness following acute resistance exercise. (Poster Presentation: 2017 SEACSM Conference).
29. Lee, M, **VanDusseldorp, TA,** Escobar, KA, Johnson, KE, Stratton, M, Moriarty, T, McCormick, JJ, Mangine, G, Nunez, T, Beltz, N, Cole, N, Endito, M, Kerksick, CM, Mermier, CM. Recovery in vertical jump performance is improved with six grams of fish oil supplementation prior to an eccentric resistance training bout. (Poster Presentation: 2017 SEACSM Conference).
30. **McLain, TA,** McCormick, JJ, Dokladny, K, LaCoe, RL, Ulrich, CG, Moseley, Mermier, CM. Autophagic response in older versus younger adults. (Poster Presentation: 2016 Annual American College of Sports Medicine Conference).
31. McCormick, JJ, **McLain, TA,** Dokladny, K, Ulrich, CG, Mermier, CM. The effect of a single exercise session on markers of autophagy in insulin-resistant individuals. (Oral Presentation: 2016 Annual American College of Sports Medicine Conference).

32. Carriker, CR, Vaughan, RA, Mermier, CM, **McLain, TA**, Johnson, KE, Beltz, NM, McCormick, JJ, Cole, NH, Witt, CC, Gibson, AL. Acute dietary nitrate supplementation does not attenuate oxidative stress or the hemodynamic response during submaximal exercise in hypobaric hypoxia. (Poster Presentation: March 2016 AHA Epidemiology and Prevention/Lifestyle and Cardiometabolic Health Scientific sessions).
33. Escobar, KA, **McLain, TA**, McCormick, JJ, Kerksick, CM, Mermier, CM. Effect of branched-chain amino acid supplementation on serum CK and exercise performance. (Poster Presentation: 2016 Annual American College of Sports Medicine Conference).
34. Nunez, TP, Beltz, NM, **McLain, TA**, Mermier, CM, Kravitz, LK. Energy Expenditure with Two Suspension Training Protocols. (Poster Presentation: 2016 Annual American College of Sports Medicine Conference).
35. Camic, CL, Kovacs, AJ, **McLain, TA**, Hill, EC, Enquist, EA. Application of the neuromuscular fatigue threshold to muscles of the thigh during incremental treadmill running. (Oral Presentation: 2016 Annual American College of Sports Medicine Conference).
36. Escobar, KE, **McLain, TA**. Carb up? Carb down? The Most Misunderstood Macro. (Oral Presentation Sept. 2015 at the 2015 Albuquerque Strength and Conditioning Clinic).
37. Camic, CL, Kovacs, AJ, Enquist, EA, **McLain, TA**, Hill, EC. Neuromuscular responses of the quadriceps femoris and hamstring muscles during incremental treadmill running. (Oral Presentation: 2015 Annual American College of Sports Medicine Conference).
38. McCormick, J, **McLain, TA**, Mermier, CM, Landphere, KR, Dokladny, K, Moseley, P. A comparison of the autophagic response in physically active and sedentary adults. (Poster Presentation: 2015 Annual American College of Sports Medicine Conference).
39. Beltz, N, Mermier, CM, Kerksick, CM, Johnson, KE, **McLain, TA**, Cole, N, Beuler, S, Gibson, A. Fitness Status and association between aerobic capacity, body composition, and cardiovascular disease risk factors in firefighters. (Poster Presentation: 2015 Annual American College of Sports Medicine Conference).
40. Johnson, KE, Beltz, N, McLain, TA, Cole, N, Mermier, CM, Gibson, AL. Ability to predict VO₂peak of urban and wildland firefighters based on height, age, and sex. (Poster Presentation: 2015 Annual American College of Sports Medicine Conference).
41. Purdom, T, **McLain, TA**, Johnson, KE, Kravitz, L. Acute weighted vest effect on running performance in middle distance runners. (Poster Presentation: 2015 Annual American College of Sports Medicine Conference).
42. **VanDusseldorp, TA**, Kravitz, L. Heart Rate Variability and Overtraining. (Oral Presentation; Accepted to present in April 2015 at the IDEA Personal Trainer Institute in Seattle, Washington)
43. **VanDusseldorp, TA**. (November, 2014). Exercise training and specificity for Firefighters. (Oral Presentation; Presented at the Santa Fe Fire Department in Santa Fe, New Mexico).
44. **VanDusseldorp, TA.**, McCormick, J., Mermier, CM, Dokladny, K., Moseley, P. (October, 2014). A comparison of the autophagic response in physically active and sedentary adults. (Poster Presentation; Presented at Southwest ACSM in Costa Mesa, California).
45. McCormick, J., **VanDusseldorp, TA**. (October, 2014). The effect of aging on markers of autophagy and heat shock responses in human peripheral blood mononuclear cells. *Norman James Research Award Recipient*. (Oral Presentation; Presented at Southwest ACSM in Costa Mesa, California).
46. White, AC, Salgado, RM, Astorino, TA, Loepky, JA, Schneider, S, McCormick, J, **VanDusseldorp, TA**, Kravitz, L, Mermier, CM. (October, 2014). The effect of 10 days of heat acclimation on exercise capacity at acute simulated hypobaric (4350 m). (Poster Presentation; Presented at Southwest ACSM in Costa Mesa, California).
47. Salgado, RM, White, AC, Vaughn, RA, McCormick, J, Gannon, NP, **VanDusseldorp, TA**, Schneider, S, Parker, DL, Kravitz, L, Mermier, CM. (October, 2014). The effect of 10 days of head acclimation on exercise economy and efficiency at 1600 m and 4350 m. (Poster Presentation; Presented at Southwest ACSM in Costa Mesa, California).
48. Gibson, AL, Beltz, N, Cole, N, Johnson, K, **VanDusseldorp, T**, Mermier, CM. (October, 2014). Ability to predict VO₂peak of urban firefighters based on height, age, and sex. (Poster Presentation; Presented at Southwest ACSM in Costa Mesa, California).

49. Purdom, T, **VanDusseldorp, TA**, Johnson, KE, Kravitz, L. (October, 2014). Acute weighted vest effect on running performance in middle distance runners. (Poster Presentation; Presented at Southwest ACSM in Costa Mesa, California).
50. Carriker, CR, **VanDusseldorp, TA**, Vaughan, RA, Beltz, N, Johnson, KE, Cole, N, Gibson, AL. (July, 2014). Effect of inorganic nitrate consumption on oxygen consumption during submaximal exercise in trained and untrained runners. (Poster Presentation; Presented at NSCA National Conferences in Las Vegas, NV).
51. Camic, CL, Kovacs, AJ, Enquist, EA, **VanDusseldorp, TA**, Hill, EC, Calantoni, AM, Yemm, AJ. (May, 2014). An electromyographic-based test for estimating neuromuscular fatigue during incremental treadmill running. (Presented at the Annual American College of Sports Medicine Conference in Orlando, Florida).
52. **VanDusseldorp, TA.**, & McLain, J. (May 2014). Bodyweight Exercises and Manual Resistance Training: Anytime, Anyplace, Anyone. (Oral Presentation; Presented at the NSCA New Mexico State Clinic in Albuquerque, New Mexico).
53. **VanDusseldorp, TA.** (March 2014). Exercise training recommendations for individuals with or recovering from prostate cancer. (Oral Presentation; Presented at the Prostate Cancer Support Center of New Mexico in Albuquerque, New Mexico).
54. **VanDusseldorp, TA.** (November, 2013). Adaptations to Anaerobic and Aerobic Training. (Guest Lecturer; Presented at The University of New Mexico).
55. **VanDusseldorp, TA.** (November, 2013). Energy Systems. (Guest Lecturer; Presented at The University of New Mexico).
56. **VanDusseldorp, TA.** (November, 2013). Flexibility. (Guest Lecturer; Presented at The University of New Mexico).
57. **VanDusseldorp, TA**, Wright, G., Camic, C., Brice, G., Kovacs, A., & Hegge, J. (April, 2013). The development of an anaerobic sprint running test utilizing a non-motorized treadmill. (Poster Presentation; Presented at the National Strength and Conditioning Association State Clinic in Waukesha, Wisconsin).
58. **VanDusseldorp, TA**, Wright, G., Camic, C., Brice, G., Kovacs, A., & Hegge, J. (April, 2013). The development of an anaerobic sprint running test utilizing a non-motorized treadmill. (Poster Presentation; Presented at the Graduate Research Conference at The University of Wisconsin- La Crosse).
59. **VanDusseldorp, TA**, Wright, G., Camic, C., Brice, G., Kovacs, Al., & Hegge, J. (April, 2013). The development of an anaerobic sprint running test utilizing a non-motorized treadmill. (Poster Presentation; Presented at the National Undergraduate Research Conference hosted at The University Wisconsin- La Crosse).
60. **VanDusseldorp, TA.** (January, 2013). Methods of Body Composition Testing. (Guest Lecturer; Presented at The University of Wisconsin- La Crosse).
61. **VanDusseldorp, TA.** (March, 2013). Exercise Sciences: Possible Career Choices. (Guest Lecturer; Presented at Southwest Minnesota State University, Marshall, Minnesota).
62. **VanDusseldorp, TA.** (April, 2011). Strength Training and Sport-Specific Power Generation in Collegiate Wheelchair Athletes: A pilot. (Guest Lecturer/Presenter; Presented at Southwest Minnesota State University, Marshall, Minnesota).
63. **VanDusseldorp, TA**, Popper, C., & Bell, J. (April, 2011). Strength Training and Sport-Specific Power Generation in Collegiate Wheelchair Athletes: A pilot. (Poster Presentation; Presented at Southwest Minnesota State University Science Conference, Marshall, Minnesota).
64. **VanDusseldorp, TA.** (February, 2010). Concussion Battery Comparison: The SCAT2, ImPACT, and Wii Fit Balance Test. (Guest Lecturer/Presenter; Presented at Southwest Minnesota State University, Marshall, Minnesota).

Research and Travel Grants/Funding Awards

- 2018 Primary Investigator- \$7,500 NSCA Master's Student Award (Matthew Stratton). *The effect of 13 weeks of fish oil supplementation on hypertrophy, physical function, and the muscle protein*

- synthesis response to feeding in the elderly.* National Strength and Conditioning Association. (In progress).
- 2018 Primary Investigator - \$7,800 *The Effect of Fish Oil Supplementation on the Leucine Threshold in Older Adults.* CARET Grant. Kennesaw State University (Awarded).
- 2018 2018 Faculty Investigator (Student, Alyssa Holmes Thesis Project)- \$4,060 *Comparison of Two HIIT Les Mills Group Exercise Programs.* Les Mills (Awarded).
- 2018 Primary Investigator- \$9,060 *Two projects: Comparison of two HIIT Les Mills Group Exercise Programs; Muscle protein synthetic response to 20, 40, and 60 grams of ingested whey protein.* KSU FY 2018 Professional Development (Awarded).
- 2018 Primary Investigator- \$44,200 *TeaCrine/Dynamine Human Safety Study.* Compound Solutions (Awarded).
- 2017 Co-Investigator - \$14,962 *Contributions of cellular and molecular factors to sarcopenia severity and neuromuscular function in humans.* KSU FY 18 OVPR Pilot/Seed Grant to Attract External Funding (Awarded).
- 2017 Co-Investigator - \$14,992 *Effect of abdominal adiposity and physical activity on metabolic health.* KSU FY 18 OVPR Pilot/Seed Grant to Attract External Funding (Awarded).
- 2017 Co-Investigator (PI of Study)- \$35,000 *Effect of a protein enzyme (Prohydrolase®) on amino acid profile, muscle protein synthesis and breakdown.* Deerland Enzymes Clinical Trials Program (In progress).
- 2017 Primary Investigator- \$7,640 *Time-restricted feeding combined with resistance training: effects on body composition, muscular performance, heart rate variability, dietary intake, and hormones.* KSU Spring 2017 Professional Development (Awarded).
- 2017 Co-Investigator- \$9,008.02 *Motor-unit specific properties and physical functioning in three different stages of sarcopenia.* American College of Sports Medicine Research Endowment, (not funded).
- 2016 Faculty Mentor (Alyssa Holmes)- \$500 *Six grams of fish oil supplementation mitigates perceived muscle soreness following acute resistance exercise.* KSU CETL Student Travel Award, (Awarded).
- 2016 Primary Investigator- \$11,975 *Dietary supplements (fish oil, HMB) and exercise research.* KSU Fall 2016 Professional Development (Awarded).
- 2015 Co-Investigator- \$9,871 *Resistance exercise and autophagy in younger and older adults.* American Aging Association, (not funded).
- 2015 Principal Investigator- \$2,440 *The effect of dietary supplementation with fish-oil and resistance exercise on markers of autophagy and mTOR in older adults.* New Mexico Research Grant, (Awarded).
- 2015 Principal Investigator - \$500 *The impact of fish oil supplements on glutathione following eccentric exercise.* UNM Student Research Grant, (Awarded).
- 2015 Principal Investigator - \$979 *Heart Rate Variability and Overtraining.* UNM Doctoral Research and Presentation Award, (Awarded).

- 2015 Principal Investigator - \$4,779 *The dose-response impact of fish oil supplementation damage, soreness, oxidative stress, inflammation, performance, and autophagy*. ISSN-MusclePharm, (Awarded).
- 2014 Co-Investigator - \$149,087 *Development of low cost ultrasound device and formulas for accurate in-home body composition*. STTR Phase I Grant, National Institute of Health (NIH), (not funded).
- 2014 Principal Investigator - \$2,187 *Exercise-mediated autophagic response following a bout of endurance exercise in individuals with glucose intolerance and age-matched controls*. New Mexico Research Grant, (Awarded).
- 2014 Principal Investigator - \$500 *A comparison of the autophagic response in physically active and sedentary adults*. UNM Student Research Grant, (Awarded).
- 2014 Co-Investigator (research assistant) - \$26,787 *The influence of exercise on autophagy in type 2 diabetics*. University of New Mexico Summer Research Grant, (Awarded).
- 2014 Co-Investigator - \$1,500 *LC3 as a marker of autophagy, cell integrity, and immune function in human PBMC cells during aging: A comparison of physically active and sedentary older adults*. University of New Mexico OFAC Grant, (Awarded).
- 2013 Principal Investigator - \$9,779 *The dose-response impact of fish oil supplementation damage, soreness, oxidative stress, inflammation, and performance*. ISSN-MusclePharm, (not funded).
- 2012 Principal Investigator - \$2,200 *The development of an anaerobic sprint running test utilizing a non-motorized treadmill*. University of Wisconsin- La Crosse RSEL Grant, (Awarded).

Laboratory Training

Human Metabolic and Exercise Testing Techniques- RMR and VO₂max (Parvomedics), Douglas Bag, Biodex, Wingate testing, Force treadmill testing/software, phlebotomy (blood draw and IV catheter placement) and blood hemodynamics, muscle biopsy, body composition (Bod-Pod, underwater weighing, skinfold, BIA, DEXA), EKG/stress testing, pulmonary function testing, feeding study design/implementation

Biomedical Research Techniques- qRT-PCR/PCR, Western blot/SimpleWes, ELISA, flow cytometry/cell sorting, spectrophotometry

Service and Advisement/Mentorship

- 8/2017 – Present Graduate Assistantship Advisor: Alyssa Holmes, Megan Barie, Matthew Stratton, Paul Serafini
- 8/2017 – Present Faculty Internship Advisor
Lisa Pha, Kevin Simmons, Jacob McNabb, Kristen Rann, Andrew Modjeski, Cameron Arcaro (KSU undergraduate students)
- 6/2017 – 8/2017 Faculty Internship Advisor
Matthew Stratton (University of New Mexico; Internship at KSU)

1/2017 – Present	Faculty Advisor: Physical Therapy Association (KSU CLUB)
1/2017 – 8/2017	Faculty Internship Advisor Matthew Lee and Alyssa Holmes, KSU undergraduate students
8/2016 – Present	Wellstar College of Health and Human Services Lab Safety Committee
8/2016 – Present	International Society of Sports Nutrition Scientific Advisor
1/2015 – 7/2016	Exercise Physiology Lab Mentor Students: Kayla Hahn (undergraduate student), Kurt Escobar (graduate student), Terence Moriarty (graduate student), & Sam Morrison (undergraduate student) University of New Mexico
12/2013 – 5/2016	Graduate Mentor Undergraduate Exercise Science Club University of New Mexico
10/2013 – 7/2016	Volunteer: Santa Fe Fire Department Fitness Testing Santa Fe, New Mexico
10/2012 – 5/2013	Student Member Student Advisory Council (SAC) The University of Wisconsin- La Crosse
5/2010 – 5/2011	Vice President Wellness and Human Performance Club Southwest Minnesota State University
8/2010 – 5/2011	Student Coursework and Research Mentor Joshua Watterson Southwest Minnesota State University
12/2009 – 5/2011	Special Olympics Coordinator Swimming and Track & Field Southwest Minnesota State University

Related Professional Experience

8/2012 – 5/2013	Group Fitness Instructor/Personal Trainer SNAP Fitness La Crosse, WI
5/2012 – 8/2012	Group Fitness Instructor/Personal Trainer WOW! Fitness Rochester, MN
5/2009 – 8/2009	Interim Sports and Fitness Director Mahaska County YMCA Oskaloosa, IA
8/2008 – 5/2011	Assistant Athletic Trainer Tech (Intern)

Southwest Minnesota State University
Marshall, MN

Selected Honors and Awards

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|------------------|---|
| 12/2016 | University of New Mexico: College of Education Outstanding Student |
| 7/2016 | Dissertation Defense Distinction: Effect of branched-chain amino acid supplementation on recovery of performance and muscle damage, & autophagy and heat shock protein response |
| 9/2015 | Exercise Science Doctoral Comprehensive Exams: Distinction |
| 8/2014 | Graduate Student Excellence Award
University of New Mexico |
| 8/2011 – 5/2013 | Human Performance Graduate Student Scholarship
University of Wisconsin- La Crosse |
| 8/2010 – 5/2011 | Exercise Science Annual Scholarship
Southwest Minnesota State University |
| 8/2008 – 5/2013 | Highest Honors Dean's List
Southwest Minnesota State University/The University of Wisconsin- La Crosse |
| 8/2008 – 5/2011 | Presidential Academic Scholarship
Southwest Minnesota State University |
| 8/2008 – 12/2010 | Intercollegiate Basketball Tuition Scholarship
Southwest Minnesota State University |

Professional References

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