

Garrett M. Hester

Curriculum Vitae

Office: Kennesaw State University
Dept. of Exercise Science and Sport Management
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Kennesaw, GA 30144
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Education

Doctorate of Philosophy in Health and Human Performance, July '16
Oklahoma State University; Stillwater, OK
Mentor: Dr. Jason M. DeFreitas
Dissertation: Effects of short-term resistance training on motor unit properties and neuromuscular function in young and old men

Master of Science in Health and Human Performance, Dec '12
Oklahoma State University; Stillwater, OK
Advisor: Dr. Doug B. Smith
Thesis: The evaluation of a position-specific task in NCAA division I linemen

Bachelor of Science in Health and Human Performance, Dec '10
Northeastern State University; Tahlequah, OK

Professional Experience

Academia

Associate Professor of Exercise Science; May '21 – Present
Graduate Faculty; July '17 – Present
Assistant Professor of Exercise Science; Aug '16 – April '21
Department of Exercise Science and Sport Management
Kennesaw State University

Graduate Teaching:

- EHS 6540: Bioenergetic and Neuromuscular Aspects of Exercise (Fall '20)
- EHS 7760: Directed Study (Fall '18; Fall '19)

Undergraduate Teaching:

- ES 4500: Physiology of Exercise II (Fall '16 – Summer '20)
 - ES 4300: Physiology of Exercise and Aging (Spring '17; Fall '17; Spring '18; Spring '20)
 - ES 4650: Exercise Testing (Fall '16; Summer '17; Spring '19)
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- ES 4600: Exercise Prescription (Summer '19; Fall '20)
- ES 4550: Introduction to Exercise Science Laboratory Techniques (Summer '20)
- BIOL 4400: Directed Study in Neuromuscular Physiology Research (undergraduate) (Summer '19 – Spring '20)

Undergraduate Research Internships:

- ES 3398: Internship in Exercise Science (Summer '17, 1 student; Fall '17, 1 student; Spring '18, 3 students; Summer '18, 1 student)

Graduate Teaching Assistant; Aug '13 – July '16

Department of Health and Human Performance

Oklahoma State University

Primary Instructor:

- HHP 3663: Biomechanics (Fall '15)
- HHP 4773: Principles of Exercise Testing and Prescription (Fall '14; Summer '16)
- HHP 4010: Principles of Strength and Conditioning (online) (Summer '14)
- HHP 2602: First Aid (Summer '14 – Summer '16)
- HHP 2802: Medical Terminology (online) (Fall '13 – Spring '14)

Teaching Assistant:

- HHP 3114: Physiology of Exercise Laboratory (Fall '13 – Spring '14)
- HHP 2654: Applied Anatomy Laboratory (Spring '16)

Graduate Research Assistant; Jan '15 – June '15

Department of Health and Human Performance

Oklahoma State University

Principal Investigator: Dr. Jason M. DeFreitas

Grant-Funded Project: Muscle spindle and motor function with aging

Responsibilities: Subject recruitment, data collection, analysis, and interpretation

Other professional experience

Personal Trainer/Group Fitness Instructor; Aug '11 – July '16

Department of Wellness

Oklahoma State University

Graduate Assistant; Aug '12 – Aug '13

Department of Wellness

Oklahoma State University

Research

Research Interests:

- Effects of aging on neuromuscular function and physical performance
- Influence of fatigue on neuromuscular function
- Influence of aging and resistance training on motor unit properties
- Neuromuscular adaptations to resistance training
- Cross-education

Peer Reviewed Journal Publications † Indicates corresponding author/faculty mentor for student first author.

In Press

1. Mangine, G.T., McNabb, J.A., Feito, Y., VanDusseldorp, T.A., **Hester, G.M.** (2020). Increased resisted sprinting load decreases bilateral asymmetry in sprinting kinetics among rugby players. *J Strength Cond Res*.

In Print

1. Ha, P.L., Dalton, B.E., Alesi, M.G., Smith, T.M., VanDusseldorp, T.A., Feito, T., **Hester, G.M.**† (2021). Isometric vs. isotonic contractions: Sex differences in the fatigability and recovery of isometric strength and high-velocity contractile parameters. *Physiol Rep*.
2. **Hester, G.M.**, Ha, P.L., Dalton, B.E., VanDusseldorp, T.A., Olmos, A.A., Stratton, M.T., Bailly, A.R., Vroman, T.M. (2021). Rate of force development as a predictor of mobility in older adults. *J Geriatr Phys Ther*.
3. Smith, T.M., **Hester, G.M.**†, Ha, P.L., Olmos, A.A., Stratton, M.T., VanDusseldorp, T.A., Feito, Y., Dalton, B.E. (2020). Sit-to-stand kinetics and correlates of performance in young and older males. *Arch Gerontol Geriatr*.
4. Mangine, G.T., VanDusseldorp, T.A., **Hester, G.M.**, Julian, J.M., Feito, Y. (2020). The addition of β -hydroxy β -methylbutyrate (HMB) to creatine monohydrate supplementation does not improve anthropometric and performance maintenance across a collegiate rugby season. *J Int Soc Sports Nutr*.
5. Olmos, A.A., Stratton, M.T., Ha, P.L., Dalton, B.E., VanDusseldorp, T.A., Mangine, G.T., Feito, Y., Poisal, M.J., Jones, J.A., Smith, T.M., **Hester, G.M.**† (2020). Early and late rapid torque characteristics and select physiological correlates in middle-aged and older males. *PLoS One*.
6. Stratton, M.T., Tinsley, G.M., Alesi, M.G., **Hester, G.M.**, Olmos, A.A., Serafini, P.R., Modjeski, A.S, Mangine, G.T., King, K., Savage, S.N., Webb, A.T., VanDusseldorp, T.A. (2020). Four Weeks of Time-Restricted Feeding Combined with Resistance Training Does Not Differentially Influence Measures of Body Composition, Muscle Performance, Resting Energy Expenditure, and Blood Biomarkers. *Nutrients* 12(4), 1126.

7. VanDusseldorp, T.A., Stratton, M.T., Bailly, A.R., Holmes, A.J., Alesi, M.G., Feito, Y., Mangine, G.T., **Hester, G.M.**, Esmat, T.A., Barcala, M., Tuggle, K.R., Modjeski, A.S. (2020). Clinical safety parameters of methylberine (Dynamine™) with and without TeaCrine® in humans. *Nutrients*. 12(3), 654.
8. Olmos, A.A., Stratton, M.T., Ha, P.L., VanDusseldorp, T.A., Bailly, A.R., Feito, Y., Mangine, G.T., Poisal, M.J., Jones, J.A., Dalton, B.E., Smith, T.M., **Hester, G.M.**† (2019). Neuromuscular function of the plantar flexors and predictors of peak power in middle-aged and older males. *Exp Gerontol*. 125. 110677.
9. **Hester, G.M.**, Magrini, M.A., Colquhoun, R.J., Barrera-Curiel, A., Estrada, C.A., Olmos, A.A., Bailly, A.R., Ha, L.P. DeFreitas, J.M. (2019). Cross-education: Effects of age on rapid and maximal voluntary contractile characteristics in males. *Eur J Appl Physiol*. 119(6) 1313-1322.
10. **Hester, G.M.**, Pope, Z.K., Magrini, M.A., Colquhoun, R.J., Curiel, A.B., Estrada, C.A., Olmos, A.A., DeFreitas, J.M. (2019). Age does not attenuate maximal velocity adaptations in the ipsilateral and contralateral limbs during unilateral resistance training. *J Aging Phys Act*. 27(1), 1-8.
11. Gunn, S.M., Mangine, G.T., VanDusseldorp, T.A., **Hester, G.M.** (2018). Influence of sport specialization on athletic performance and injury risk in collegiate swimmers. *The Kennesaw Journal of Undergraduate Research*
12. Magrini, M.A., Colquhoun, R.J., Sellers, J.H., Conchola, E.C., **Hester, G.M.**, Thiele, R.M., Pope, Z.K., Smith, D.B. (2018). Can Squat Jump Performance Differentiate Starters vs. Nonstarters in Division I Female Soccer Players? *J Strength Cond Res*. 32(8), 2348-2355.
13. Jacobson, B.H., **Hester, G.M.**, Palmer, T.B., Conchola, E.C., Sellers, J.H., Bond-Williams, K.E., Woolsey, C.L., Pope, Z.K., Estrada, C. (2018). Effect of energy drink consumption on power and velocity on selected sport performance activities. *J Strength Cond Res*, 32(6), 1613-1618.
14. **Hester, G.M.**, Pope, Z.K., Sellers, J.H., Thiele, R.M., DeFreitas, J.M. (2017). Potentiation: effect of ballistic and heavy exercise on vertical jump performance. *J Strength Cond Res*, 31(3): 660-666.
15. Schoenfeld, B.J., Pope, Z.K., Benik, F.M., **Hester, G.M.**, Sellers, J.H., Nooner, J.L., Schnaiter, J.A., Bond-Williams, K.E., Carter, A.S., Ross, C.L., Just, B.L., Henselmans, M., Kreiger, J.W. (2016). Longer inter-set rest periods enhance muscle strength and hypertrophy in resistance-trained men. *J Strength Cond Res*, 30(7): 1805-1812.
16. Pope, Z.K., **Hester, G.M.**, Benik, F.M., DeFreitas, J.M. (2016). Action potential amplitude as a non-invasive indicator of motor unit specific hypertrophy. *J Neurophysiol*, 115(5): 3608-2614.

17. **Hester, G.M.**, Conchola, E.C., Thiele, R.M., and DeFreitas, J.M. (2014). Power output during a high-volume power-oriented back squat protocol. *J Strength Cond Res*, 28(10): 2801–2805.
18. **Hester, G.M.**, Jacobson, B.H., Palmer, T.B., Smith, D.B., O'Brien, M.S. (2014). Position-specific task, strength, and performance comparisons between NCAA division I offensive and defensive linemen. *Sport Journal, The*.
19. Jacobson, B.H., Hughes, P.P., Conchola, E.C., **Hester G.M.**, Woolsey, C.L. (2015). Effect of energy drinks on selected fine motor tasks. *Perceptual and Motor Skills*, 121(1), 170-178.

Peer Reviewed Abstract Presentations

1. Dalton, B.E., VanDusseldorp, T.A., Kiani, K., Ha, P.L., Olmos, A.A., Bailly, A.R., Bryantsev, A., **Hester, G.M.**† Age-related reduction in high-velocity power and myofiber morphology and composition. Accepted for presentation American College of Sports Medicine Southeast chapter regional conference. Feb. 18-19, 2021. *Abstract was also accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. December 3, 2020.
2. Cooper, M., Ha, P.L., Olmos A.A., Dalton, B.E., Bailly, A.R., VanDusseldorp, T.A., Bryantsev, A., **Hester, G.M.**† Age-related differences in absolute and relative maximal strength at different velocities. Accepted for presentation American College of Sports Medicine Southeast chapter regional conference (virtual). Feb. 18-19, 2021. *Abstract was also accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. December 3, 2020.
3. Ha, P.L., Dalton, B.E., Alesi, M.G., Smith, T.M., Conroy, A.G., VanDusseldorp, T.A., Feito, Y., **Hester, G.M.**† Sex differences in the fatigability of high-velocity contractile parameters after isometric and dynamic contractions. *Accepted for oral presentation at the Canadian Society for Exercise Physiology (virtual). Oct. 21-22, 2020.
4. Jabbari, M., Kiani, K., **Hester, G.M.**, VanDusseldorp, T.A., Bryantsev A. Validating a microbiopsy sampling technique for morphological analysis of human muscles. Accepted for presentation at the National Council on Undergraduate Research. Bozeman, MT. March 26-28, 2020 (Not presented due to COVID-19).
5. Ha, P.L., Olmos, A.A., Stratton, M.T., VanDusseldorp, T.A., Bailly, A.R., Feito, Y., Mangine, G.T., Dalton, B.E., Smith, T.M., **Hester, G.M.**† Age-related differences in rapid neuromuscular parameters in the plantar flexors and correlations with physical function. Accepted for presentation American College of Sports Medicine Southeast chapter regional conference. Jacksonville, FL. Feb. 13-15, 2020. *Abstract was also accepted for presentation at the American College of Sports Medicine national conference. San Francisco, CA. May 26-30, 2020 (Not presented due to COVID-19).

6. Dalton, B.E., Olmos, A.A., Stratton, M.T., Ha, P.L., VanDusseldorp, T.A., Bailly, A.R., Feito, Y., Mangine, G.T., Smith, T.M., **Hester, G.M.**† Early and late rapid neuromuscular parameters of the plantar flexors in middle-aged and older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Jacksonville, FL. Feb. 13-15, 2020. Jacksonville, FL. 2020. *Abstract was also accepted for presentation at the American College of Sports Medicine national conference. San Francisco, CA. May 26-30, 2020. *Presented virtually during the Aging Interest Group meeting.
7. Smith, T.M., Ha, P.L., Olmos, A.A., Stratton, M.T., VanDusseldorp, T.A., Bailly, A.R., Feito, Y., Poisal, M.J., Jones, J.A., Dalton, B.E., **Hester, G.M.**† Rate of force development parameters in young and older males during a chair rise. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Jacksonville, FL. Feb. 13-15, 2020. *Abstract was also accepted for presentation at the American College of Sports Medicine national conference. San Francisco, CA. May 26-30, 2020 (Not presented due to COVID-19). *Abstract was also accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. April 16, 2020.
8. Stratton, M.T., Tinsley, G.M., Alesi, M.G., **Hester, G.M.**, Olmos, A.A., Serafini, P.R., A.J., Modjeski, Mangine, G.T., King, K., Savage, S., Webb, A., VanDusseldorp, T.A. Effect of time restricted feeding on measures of body composition, muscle performance, resting energy expenditure, and blood biomarkers. Accepted for presentation at the International Society for Sports Nutrition national conference. Las Vegas, NV. 2019. *Awarded 1st place in Master's division poster presentation competition
9. Alesi, M.G., Stratton, M.T., Bailly, A.R., Holmes, A.J., Modjeski, A., Barie, M., Feito, Y., Mangine, G.T., Tuggle, K.R., Esmat, T.A., **Hester, G.M.**, Hayes, K., VanDusseldorp, T.A. Effect of dynamine with and without teacrine over four weeks of continuous use on cardiovascular function and psychometric parameters of healthy males and females. Accepted for presentation at the International Society for Sports Nutrition national conference. Las Vegas, NV. 2019
10. Boone, J.B., Olmos, A.A., Ha, P.L., Stratton, M.T., Bailly, A.R., Poisal, M.J., Jones, J.A., Dalton, B.E., Smith, T.M., VanDusseldorp, T.A., Feito, Y. **Hester, G.M.**† Power and velocity parameters during the sit-to-stand in young and older males. Accepted for presentation at the International Society for Sports Nutrition national conference. Las Vegas, NV. 2019
11. Olmos, A.A., Ha, P.L., Stratton, M.T., Bailly, A.R., Poisal, M.J., Jones, J.A., Dalton, B.E., Haire, A.N., VanDusseldorp, T.A., Feito, Y. **Hester, G.M.**† Contractile parameters of the knee extensors in young, middle-aged, and older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 14-16, 2019. *Abstract was also accepted for presentation at the National American College of Sports Medicine conference. Orlando, FL. May 28-June 1, 2019.
12. Ha, P.L., Olmos, A.A., Stratton, M.T., Bailly, A.R., Poisal, M.J., Jones, J.A., Dalton, B.E., Haire, A.N., VanDusseldorp, T.A., Feito, Y. **Hester, G.M.**† Age-related comparisons of

dynamic postural stability and maximal rapid torque parameters. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 14-16, 2019.

13. Stratton, M.T., Olmos, A.A., Ha, P.L., Bailly, A.R., Poisal, M.J., Jones, J.A., Dalton, B.E., Haire, A.N., VanDusseldorp, T.A., Feito, Y. **Hester, G.M.**† Rate of velocity, torque, and power development in middle-aged and older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 14-16, 2019. *Awarded 2nd place in Master's division poster presentation competition *Abstract was also accepted for presentation at the National American College of Sports Medicine conference. Orlando, FL. May 28-June 1, 2019.
14. Poisal, M.J., Stratton, M.T., Olmos, A.A., Ha, P.L., Bailly, A.R., Jones, J.A., Dalton, B.E., Haire, A.N., VanDusseldorp, T.A., Feito, Y. **Hester, G.M.**† Relationship between contractile parameters and functional performance in middle-aged and older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 14-16, 2019.
15. Stratton, M.T., Holmes, A.J., Bailly A., Modjeski, A., Barie, M., Serafini, P., Feito, Y., Mangine, G.T., Tuggle, K., Esmat, T.A., **Hester, G.M.**, VanDusseldorp, T.A. Effect of dynamine with and without teacrine over four weeks of continuous use on cardiovascular function and psychometric parameters: A pilot study. Accepted for presentation at the International Society of Sports Nutrition Annual Conference. Clearwater, FL. June 7-9, 2018.
16. Olmos, A.A., **Hester, G.M.**, Pope, Z.K., Magrini, M.A., Colquhoun, R.J., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Ipsilateral and contralateral rapid torque adaptations to unilateral resistance training in young and older males. Accepted for presentation at the American College of Sports Medicine national conference. Minneapolis, MN. May 28-June 1, 2018.
17. Ha, L.P., **Hester, G.M.**, Colquhoun, R.J., Magrini, M.A., Pope, Z.K., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Effects of resistance training on maximum motor unit firing rates in young and older males. Accepted for presentation at the American College of Sports Medicine national conference. Minneapolis, MN. May 28-June 1, 2018.
18. Olmos, A.A., **Hester, G.M.**, Pope, Z.K., Magrini, M.A., Colquhoun, R.J., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Effects of short-term resistance training on maximal and rapid torque characteristics in older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.
19. Ha, L.P., **Hester, G.M.**, Pope, Z.K., Colquhoun, R.J., Magrini, M.A., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Effects of short-term resistance training on motor unit-specific properties in older males. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.

20. Stratton, M., Mangine, G.T., Olmos, A.A., VanDusseldorp, T.A., Feito, Y., **Hester, G.M.** Effect of β -hydroxy β -methylbutyrate supplementation on body composition and muscle strength during a rugby season. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.
21. Holmes, A., VanDusseldorp, T.A., Lee, M., **Hester, G.M.**, Mangine, G.T. Effect of β -hydroxy β -methylbutyrate and creatine supplementation on creatine kinase and cortisol levels during a rugby season. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.
22. McNabb, J., VanDusseldorp, T.A., **Hester, G.M.**, Feito, Y., Mangine, G.T. Increased resisted sprinting load decreases bilateral asymmetry in sprinting kinetics. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018. *Abstract was also accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. April 20, 2017.
23. Hayes, K.L., Julian, J.M., VanDusseldorp, T.A., **Hester, G.M.**, Feito, Y., Mangine, G.T. Effect of β -hydroxy β -methylbutyrate and creatine supplementation on sprint kinetics across a collegiate rugby season. Accepted for presentation at the American College of Sports Medicine national conference. Minneapolis, MN. May 28-June 1, 2018. *Abstract was also accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.
24. **Hester, G.M.**, Pope, Z.K., Magrini, M.A., Colquhoun, R.J., Barrera-Curiel, A., Estrada, C., DeFreitas, J.M. Age does not attenuate cross-education during resistance training. Accepted for thematic poster presentation at the National Strength and Conditioning Association national conference. Las Vegas, NV. July 12-15, 2017.
25. Lee, M., VanDusseldorp, T.A., Holmes, A., **Hester, G.M.**, Feito, Y., Mangine, G.T. β -Hydroxy β -methylbutyrate supplementation does not reduce serum cortisol and creatine kinase following fall and spring seasons of rugby. Accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Chattanooga, TN. Feb. 15-17, 2018.
26. **Hester, G.M.**, Pope, Z.K., Barrera-Curiel, A., DeFreitas, J.M. Motor unit action potential size in young and old males. Accepted for presentation at the American College of Sports Medicine national conference. Denver, CO. May 30-June 3, 2017. *Med Sci Sport Excs*, 49 (5 suppl.). *Abstract was also accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 16-18, 2017.
27. Olmos, A.A., **Hester, G.M.**, Pope, Z.K., Colquhoun, R.J., Magrini, M.A., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Maximal velocity adaptations during unilateral resistance training. Accepted for presentation at the American College of Sports Medicine national conference. Denver, CO. May 30-June 3, 2017. *Med Sci Sport Excs*, 49 (5 suppl.).

*Abstract was also accepted for presentation at the American College of Sports Medicine Southeast chapter regional conference. Greenville, SC. Feb. 16-18, 2017.*Abstract was also accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. April 20, 2017.

28. Jacobson, B.H., **Hester, G.M.**, Palmer, T.B., Williams, K., Pope, Z.K., Sellers, J.H., Conchola, E.C., Woolsey, C., Estrada, C. Effect of energy beverage consumption on peak power and peak velocity. Accepted for presentation at the American College of Sports Medicine national conference. Denver, CO. May 30-June 3, 2017. *Med Sci Sport Excs*, 49 (5 suppl.).
29. Boyett, T., VanDusseldorp, T.A., **Hester, G.M.**, Feito, Y., Mangine, G.T. Interrater reliability for DXA and BIA analysis for measuring total and regional lean mass. Accepted for presentation at the American College of Sports Medicine national conference. Denver, CO. May 30-June 3, 2017. *Med Sci Sport Excs*, 49 (5 suppl.).
30. Schnaiter-Brasche, J.A., Sellers, J.H., **Hester, G.M.**, Monaghan, T., Bounds, E.M., Jacobson, B.H. Assessment of sprint performance following the use of resistance training masks during dynamic warm-up. Accepted for presentation at the American College of Sports Medicine national conference. Denver, CO. May 30-June 3, 2017. *Med Sci Sport Excs*, 49 (5 suppl.).
31. **Hester, G.M.**, Pope, Z.K., Benik, F.M., DeFreitas, J.M. Effects of short-term strength training on maximal motor unit firing rates and antagonist co-activation. American College of Sports Medicine national conference. Boston, MA. May 31-June 4, 2016. *Med Sci Sport Excs*, 48 (5 suppl.).
32. Pope, Z.K., **Hester, G.M.**, DeFreitas, J.M. Action potential amplitude as a non-invasive indicator of motor unit specific hypertrophy. American College of Sports Medicine national conference. Boston, MA. May 31-June 4, 2016. *Med Sci Sport Excs*, 48 (5 suppl.).
33. Mackey, C.S., **Hester, G.M.**, Pope, Z.K., Benik, F.M., DeFreitas, J.M. Effects of short-term strength training on maximal velocity characteristics and rate of muscle activation. American College of Sports Medicine national conference. Boston, MA. May 31-June 4, 2016. *Med Sci Sport Excs*, 48 (5 suppl.).
34. Mackey, C.S., **Hester, G.M.**, Pope, Z.K., Benik, F.M., DeFreitas, J.M. Effects of unilateral low-velocity resistance training with ballistic-intent on maximal and rapid torque development of the trained and untrained knee extensors. Accepted for presentation at the Central States Chapter of ACSM regional conference. Warrensburg, MO. October 15-16, 2015. *International Journal of Exercise Science*.
35. Pope, Z.K., **Hester, G.M.**, Benik, F.M., Sellers, J.H., DeFreitas, J.M. The effect of strength training on maximal motor unit discharge properties. Accepted for presentation at the Society for Neuroscience annual conference. Chicago, IL. October 17-21, 2015.
36. Miller, M.M., Pope, Z.K., Benik, F.M., **Hester, G.M.**, DeFreitas, J.M. Effects of rest period duration on muscle echogenicity and cross-sectional area. Accepted for presentation

at the Central States Chapter of ACSM regional conference. Warrensburg, MO. October 15-16, 2015. *International Journal of Exercise Science*.

37. Monaghan, T.P., Sellers, J.H., Jacobson, B.H., Schnaiter, J.A., **Hester, G.M.**, Pope, Z.K. Effectiveness of a ventilator training mask on aerobic capacity in reserve officers' training corps cadets. Accepted for presentation at the Central States Chapter of ACSM regional conference. Warrensburg, MO. October 15-16, 2015. *International Journal of Exercise Science*.
38. Sellers, J.H., Monaghan, T.P., Jacobson, B.H., Schnaiter, J.A., **Hester, G.M.**, Pope, Z.K. Efficacy of a ventilator training mask to improve anaerobic capacity in reserve officers' training corps cadets. Accepted for presentation at the Central States Chapter of ACSM regional conference. Warrensburg, MO. October 15-16, 2015. *International Journal of Exercise Science*.
39. Smith, D.B., Conchola, E.C., Thiele, R.M., **Hester, G.M.**, Sellers, J.H., Pope, Z.K., Palmer, T.B., Warren, A.J. Strength and torque-time characteristics comparisons between adolescent females and males. Accepted for presentation at the National Strength and Conditioning Association national conference. Orlando, FL. July 8-11, 2015.
40. **Hester, G.M.**, Pope, Z.K., Benik, F.M., Schnaiter, J.A., Sellers, J.H., DeFreitas, J.M. Comparison of morphological, strength, and rapid-torque measures between moderately- and highly-resistance trained males. Accepted for presentation at the American College of Sports Medicine national conference. San Diego, CA. May 26-30, 2015.
41. Sellers, J.H., **Hester, G.M.**, Monaghan, T.P., Jacobson, B.H., Schnaiter, J.A., Benik, F.M. Anthropometric and physiological profile differences in reserve officers' training corps cadets. Accepted for presentation at the American College of Sports Medicine national conference. San Diego, CA. May 26-30, 2015.
42. **Hester, G.M.**, Pope, Z.P., Sellers, J.H., Thiele, R.M., DeFreitas, J.M. The acute effects of a ballistic and heavy exercise on vertical jump performance. Accepted for presentation at the Central States Chapter of ACSM regional conference. Overland Park, KS. October 23-24, 2014. *International Journal of Exercise Science*.
43. Conchola, E.C., Thiele, T.M., **Hester, G.M.** Effects of dynamic fatigue on maximal and rapid velocity capacities of the leg extensors in college-aged males. Accepted for presentation at the Central States Chapter of ACSM regional conference. Overland Park, KS. October 23-24, 2014. *International Journal of Exercise Science*.
44. Jacobson, B.H., Hughes, P.P., Conchola, E.C., **Hester, G.M.** The effect of energy shots on hand steadiness and reaction time. Accepted for presentation at the Central States Chapter of ACSM regional conference. Overland Park, KS. October 23-24, 2014. *International Journal of Exercise Science*.
45. **Hester, G.M.**, Conchola, E.C, Thiele, R.M., Thompson, B.J., and DeFreitas, J.M. An examination of the relationship between electromechanical delay and muscle quality in

college-aged males. Accepted for presentation at the American College of Sports Medicine national conference. Orlando, FL. May 27-31, 2014.

46. **Hester, G.M.**, Conchola, E.C, Thiele, R.M., Palmer, T.B., Smith, D.B., and DeFreitas, J.M. Examination of power output during a high-volume power-oriented back squat protocol. Accepted for presentation at the Central States Chapter of ACSM regional conference Warrensburg, MO. October 17, 2013. *International Journal of Exercise Science*.
47. **Hester, G.M.**, Jacobson, B.H., Palmer, T.B., Hawkey, M.J., Smith, D. B., O'Brien, M.S., and Ruedy, Z.J. Relationship between power clean and a sport-specific task in division I collegiate football linemen. Accepted for presentation at the American College of Sports Medicine national conference. Indianapolis, IN. May 31st 2013. *Med Sci Sport Excs*, 45 (5 suppl.). *Abstract was also accepted for presentation at the Central States Chapter of ACSM regional conference. Columbia, MO. October 18-19, 2012.
48. Behara, B.J., Jacobson, B.R., Sellers, J.S., **Hester, G.M.** The acute effects of lower-body deep tissue foam rolling on peak and average muscular torque. Accepted for presentation at the Central States Chapter of ACSM regional conference. Warrensburg, MO. October 17, 2013. *International Journal of Exercise Science*.
49. Conchola, E.C., Thiele, R.M., Thompson, B.J., **Hester, G.M.**, Wood, M.G., Hawkey, M.J., Palmer, T.B., and Smith, D.B. The effects of two different training intensity protocols using the free weight squat on maximal and rapid torque characteristics of the leg extensors. Accepted for presentation at the National Strength and Conditioning Association national conference. Las Vegas, NV. July 10-13, 2013.
50. Conchola, E.C., Hawkey, M.J., Palmer, T.B., **Hester, G.M.**, Fiddler, R.E., and Smith, D.B. Effects of an off-Season workout on anaerobic performance in female collegiate soccer players. Accepted for presentation at the American College of Sports Medicine national conference. Indianapolis, IN. May 31, 2013. *Med Sci Sport Excs*, 45 (5 suppl.).
51. Hawkey, M.J. Palmer, T.B., Conchola, E.C., **Hester, G.M.**, and Smith D.B. Power output comparison between different age groups for female youth soccer players. Accepted for presentation at the Central States Chapter of ACSM regional conference. Columbia, MO. Oct. 18-19, 2012. *Abstract was also accepted for oral presentation at the Oklahoma State University Research Symposium. Stillwater, OK. February 21, 2013.
52. Conchola, E.C., **Hester, G.M.**, Hawkey, M.J., Palmer, T.B., Emerson, S.R., Mackey, C.S., Thompson, B.J., and Smith, D.B. Effects of two high intensity training protocols on caloric expenditure during free weight squats. Accepted for presentation at the Central States Chapter of ACSM regional conference. Columbia, MO. Oct. 18-19, 2012.

Non-Peer Reviewed Abstract Presentations

1. Ha, P.L., Dalton, B.E., Alesi, M.G., Smith, T.M., VanDusseldorp, T.A., Feito, Y., Conroy, A.G., **Hester, G.M.**† Effects of isometric and dynamic fatigue on isometric strength and

contractile properties of the plantar flexors. Accepted for oral presentation at the Kennesaw State University annual symposium of student scholars. April 16, 2020. *First runner-up for top graduate student presentation.

2. Dalton, B.E., Ha, P.L., Alesi, M.G., Smith, T.M., VanDusseldorp, T.A., Feito, Y., Conroy, A.G., **Hester, G.M.**† Fatigue-induced sex differences for explosive neuromuscular characteristics of the plantar flexors. Accepted for poster presentation at the Kennesaw State University annual symposium of student scholars. April 16, 2020.
3. Conroy, A.G., Ha, P.L., Dalton, B.E., Alesi, M.G., Smith, T.M., VanDusseldorp, T.A., Feito Y., **Hester, G.M.**† Effects of dynamic fatigue on rate of velocity and torque development in males and females. Accepted for poster presentation at the Kennesaw State University annual symposium of student scholars. April 16, 2020.
4. Jones, J.A., Ha, P.L., Stratton, M.T., Olmos, A.A., Bailly, A.R., Poisal, M.J., Dalton, B.E., Haire, A.N., VanDusseldorp, T.A., Feito, Y., **Hester, G.M.**† Relationship between rate of force development and physical performance in older adults. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019
5. Dalton, B.E., Olmos, A.A., Stratton, M.T., Ha, P.L., Bailly, A.R., Poisal, M.J., Jones, J.A., Haire, A.N., VanDusseldorp, T.A., Feito, Y., **Hester, G.M.**† Voluntary contractile characteristics of the plantar flexors in middle-aged and older Males. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019.
6. Krueger, A., Holmes, A.J., **Hester, G.M.**, Feito, Y., Bailly, A.R., Stratton, M.T., Ha, P.L., Gagnon, H., Persaud, K., Modjeski, A., Esmat, T., Gottschall, J.S., VanDusseldorp, T.A. Effect of eight weeks of impact versus low-impact high-intensity group exercise on peak aerobic capacity. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019.
7. Gagnon, H., Holmes, A.J., **Hester, G.M.**, Feito, Y., Bailly, A.R., Stratton, M.T., Ha, P.L., Krueger, A., Persaud, K., Modjeski, A., Esmat, T., Gottschall, J.S., VanDusseldorp, T.A. Effect of eight weeks of impact versus low-impact high-intensity group exercise on body composition. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019.
8. Alesi, M., Stefan, B.N., Stratton, M.T., **Hester, G.M.**, Poisal, M.J., Gandhi, R.B., Mangine, G.T., Jensen, B.M., Olmstead, B.C., VanDusseldorp, T.A. Effect of twenty weeks of non-contact boxing on upper-and lower-body muscular performance in two individuals with Parkinson's disease. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019.
9. Stefan, B.N., Stratton, M.T., **Hester, G.M.**, Poisal, M.J., Gandhi, R.B., Alesi, M., Mangine, G.T., Jensen, B.M., Olmstead, B.C., VanDusseldorp, T.A. Effect of Twenty Weeks of Non-Contact Boxing on Walking Velocity in Two Individuals with Parkinson's Disease. Accepted for presentation at the National Conference on Undergraduate Research. Kennesaw, GA. April 10-13, 2019.

10. Bailly, A.R., Olmos, A.A., Epperson, B.T., **Hester, G.M.**† Age does not attenuate maximal strength and acceleration adaptations to unilateral resistance training. Accepted for poster presentation at the Kennesaw State University annual symposium of student scholars. April 19, 2018.
11. Gunn, S.M., Mangine, G.T., VanDusseldorp, T.A., **Hester, G.M.** The effect of sport specialization on the athletic performance and the risk of injury in collegiate swimmers. Accepted for poster presentation at the Kennesaw State University annual symposium of student scholars. April 20, 2017.
12. Emerson, S.R., Conchola, E.C., **Hester, G.M.**, Mackey, C.S., and Smith, D.B. Comparison of single-set versus multiple-set caloric expenditure rate in free weight barbell squats. Oral presentation at the OSU Research Symposium. Stillwater, OK. Feb. 20-22, 2013.

Invited Oral Presentations

1. **Hester, G.M.** Neuromuscular Function: Effects of aging and resistance training. Oral presentation given to geriatrics seminar (50 min). Emory University. December 10th, 2018.
2. **Hester, G.M.** Neuromuscular Function: Effects of aging and resistance training. Oral presentation given to Molecular Biosciences Interest Group (50 min). Kennesaw State University. September 1, 2017
3. **Hester, G.M.** Assessment of Neuromuscular Function. Oral/instructional presentation given to graduate course ES 6530: Advanced Laboratory Techniques Exercise Physiology (45 min). Kennesaw State University. March 1, 2017.
4. **Hester, G.M.** Institutional Review Board: What is it? What does it do? Oral/slide presentation given to HHP 5553: Research Methods in Athletic Healthcare (45 min). Oklahoma State University. February 26, 2015.

Master's Thesis Committees

1. Dalton, B.E. (2019 – 2021). Neuromuscular fatigue and recovery after ballistic and ramp isometric knee extensions. **Hester, G.M. (Chair)**, VanDusseldorp, T.A., Feito, Y., Buresh, R.J.
2. Alesi, M. (2019 – Present). The effect of a creatine loading period on body composition, muscular strength, muscular fatigue, and gastrointestinal distress of women. VanDusseldorp, T.A., **Hester, G.M.**, Buresh, R.J., Candow, D, Smith-Ryan, A.E.
3. Ha, P.L. (2018 – 2020). Sex differences in neuromuscular fatigability and recovery of the plantar flexors. **Hester, G.M. (Chair)**, VanDusseldorp, T.A., Feito, Y.
4. Bailly, A.R. (2018 – 2020). The effect of quercetin on body composition, glucose regulation, bone mineral density, and bone turnover markers in postmenopausal women

with and without type II diabetes over a 3-month period. VanDusseldorp, T.A., **Hester, G.M.**, Feito, Y., Buresh, R.J.

5. Olmos, A.A. (2017 – 2019). Neuromuscular function of the plantar flexors and contributions to walking velocity in middle-aged, old, and very old males. **Hester, G.M. (Chair)**, VanDusseldorp, T.A., Feito, Y., Mangine, G.T.
6. Stratton, M.T. (2017 – 2019). The effect of time-restricted feeding with and without EAA supplementation on measures of body composition and muscular performance. VanDusseldorp, T.A., **Hester, G.M.**, Mangine, G.T., Tinsley, G.M.,
7. Holmes, A.J. (2017 – 2019). Comparison of two Les Mills classes: BODYATTACK and SPRINT. VanDusseldorp, T.A., Feito, Y., **Hester, G.M.**, Esmat, T.A., Gottschall, J. *3-minute thesis winner, Kennesaw State University

Undergraduate Research Mentorship

1. Roman-Soto, J. (2020 – 2021). First-Year Scholars Program. Office of Undergraduate Research. Faculty Mentor: **Hester, G.M.**
2. Conroy, A. (2019 – 2020). First-Year Scholars Program. Office of Undergraduate Research. Faculty Mentor: **Hester, G.M.**
3. Smith, T.M. (2019 – 2020). Age-related differences in force parameters, power, and velocity during a sit-to-stand task, and correlates of dynamic balance. Honors Capstone Thesis. Faculty Mentor: **Hester, G.M.**
4. Dalton, B., Haire, A. Poisal, M., Jones, J. (2018 – 2019). Neuromuscular determinants of mobility and fall risk in middle-aged, old, and elderly adults. Creative Activities and Research Experiences for Teams (Research Assistants). Office of Undergraduate Research. Faculty Mentor: **Hester, G.M.**
5. Gunn, S.M. (2017 – 2018). Influence of sport specialization on athletic performance and injury risk in collegiate swimmers. Honors Thesis Committee Member: **Hester, G.M.**

Funding

Internal Funding

1. Dalton, B.E., & **Hester, G.M.**, (2020). Research Enhancement Grant. Department of Exercise Science and Sport Management. Kennesaw State University. \$1,120
Project Title: Neuromuscular fatigue and recovery after ballistic and ramp isometric knee extensions.
2. **Hester, G.M.**, (2020). First-Year Scholars Program. Office of Undergraduate Research. Kennesaw State University. \$2,000

3. **Hester, G.M.**, (2019). First-Year Scholars Program. Office of Undergraduate Research. Kennesaw State University. \$2,000
4. **Hester, G.M.**, Principal Investigator. (2018). Creative Activities and Research Experiences for Teams. Office of Undergraduate Research. Kennesaw State University. \$8,000 requested, \$8,000 awarded
Project Title: Neuromuscular Determinants of Mobility and Fall Risk in Middle-aged, Old, and Elderly Adults
5. **Hester, G.M.**, Principal Investigator; VanDusseldorp, T.A., Co-Principal Investigator; Bryantsev, A.L., Co-Principal Investigator. (2017). Office of the Vice President for Research Pilot/Seed Grant, Kennesaw State University. \$14,962 requested, \$14,962 awarded
Project Title: Contributions of Cellular and Molecular Factors to Sarcopenia Severity and Neuromuscular Function in Humans
6. **Hester, G.M.**, Professional Development. Office of the Dean, WellStar College of Health & Human Services, Kennesaw State University. (Spring 2018). \$2,200
7. **Hester, G.M.**, Professional Development. Office of the Dean, WellStar College of Health & Human Services, Kennesaw State University. (Spring 2017). \$1,300
8. **Hester, G.M.**, Professional Development. Office of the Dean, WellStar College of Health & Human Services, Kennesaw State University. (Fall 2016). \$15,573
9. **Hester, G.M.**, Principal Investigator and DeFreitas, J.M., Co-Principal Investigator. (2015). Student Small Grant Support, School of Applied Health & Educational Psychology, Oklahoma State University. \$500 requested, \$500 awarded
10. **Hester, G.M.**, Principal Investigator and DeFreitas, J.M., Co-Principal Investigator. (2015). Research Materials Grant, Graduate and Professional Student Government Association, Oklahoma State University. \$200 requested, \$200 awarded

External Funding

1. Stratton, M.T., Student Investigator; VanDusseldorp, T.A., Principal Investigator; **Hester, G.M.**, Co-Principal Investigator; Mangine, G.T., Co-Principal Investigator. (2018) National Strength and Conditioning Association Master's Student Grant. \$7,500 requested, not awarded
Project Title: The effect of 13 weeks of fish oil supplementation on hypertrophy, physical function, and the muscle protein synthesis response to feeding in the elderly.
2. **Hester, G.M.**, Principal Investigator; VanDusseldorp, T.A., Co-Investigator; Mangine, G.T., Co-Investigator. (2017). American College of Sports Medicine Research Endowment. \$9,802 requested, not awarded
Project Title: Influence of sarcopenia severity on motor unit properties and physical functioning.

3. **Hester, G.M.**, Principal Investigator and DeFreitas, J.M., Co-Principal Investigator (2015). National Strength and Conditioning Association Foundation Doctoral Research Grant. *\$6,730 requested, not awarded*
Project Title: Effects of age on the neural and muscular adaptations to strength training

Awards/Honors

- Summer Research Fellow Program, Office of Research, Kennesaw State University; 2021
- GSSI-ACSM Young Scholar Travel Award (\$1,000), Gatorade Sports Science Institute; 2016
- OSU Foundation Distinguished Graduate Fellowship (\$2,200), College of Education, Oklahoma State University; 2015
- NSCA Foundation Challenge Scholarship (\$1,500), National Strength and Conditioning Association; 2015
- A.B. Harrison Endowed Scholarship Award (\$1,500), College of Education, Oklahoma State University; 2015
- OSU Foundation Distinguished Graduate Fellowship (\$2,200), College of Education, Oklahoma State University; 2014
- NSCA Foundation Challenge Scholarship (\$1,500), National Strength and Conditioning Association; 2014
- Outstanding Graduate Assistant Award, School of Applied Health and Educational Psychology, Oklahoma State University; 2014
- A.B. Harrison Endowed Scholarship Award (\$1,500), College of Education, Oklahoma State University; 2014

Institutional Service

- Faculty Sponsor, ACSM Student Quiz Bowl team, Kennesaw State University; 2019
- Institutional Review Board committee member, Office of Research, Kennesaw State University; 2019 – Present
- Department Faculty Council member, Department of Exercise Science and Sport Management; 2018 – Present
- Department Curriculum Committee member, Department of Exercise Science and Sport Management; 2016 – 2019; 2020 – Present
- Presentation judge, Symposium of Student Scholars, Kennesaw State University; 2017 and 2020
- Student member, Oklahoma State University, Department of Health and Human Performance, Faculty Search Committee; 2015
- Graduate Student IRB committee member, Oklahoma State University; 2014

- Poster Presentation Judge, Freshman Research Scholar Colloquium, Oklahoma State University; 2013 and 2015
- First year college student Mentor, First2Go Mentorship Program, Oklahoma State University; 2012 – 2013

Professional Service

- Office of Museum, History and Archives Committee, ACSM; 2015 – Present
- Abstract Reviewer, Student Research Award, Aging Interest Group, ACSM; 2019 – Present
- External Reviewer, Journal of Strength and Conditioning Research; 2018 – Present
- Abstract and Grant reviewer, NSCA; 2018 – Present
- Southeast ACSM abstract reviewer; 2017 – Present
- Moderator, Kennesaw State University International Society of Sports Nutrition conference; 2017 – 2019
- Reviewer, ACSM Exercise Testing and Prescription textbook, 2018
- External Reviewer, International Journal of Sports Medicine; 2018
- Student Quiz Bowl Judge, Southeast ACSM conference; 2018
- Reviewer, International Journal of Exercise Science; 2016

Certifications

- Online Course Development Workshop, Center for Excellence in Teaching and Learning, Kennesaw State University
- Certified Strength and Conditioning Specialist (CSCS), National Strength and Conditioning Association
- Certified Personal Trainer, American College of Sports Medicine
- CPR/AED for Professional Rescuers, American Red Cross

Professional Membership

- American College of Sports Medicine; 2009 – Present
- National Strength and Conditioning Association; 2011 – Present
- Southeast Region, American College of Sports Medicine; 2016 – Present
- Central States Region, American College of Sports Medicine; 2012 – 2016

Laboratory Testing Skills

- Biodex System 3 and 4 dynamometry
- Skeletal muscle microbiopsy
- Musculoskeletal ultrasound assessment

- Non-invasive assessment of motor unit properties
- Surface electromyography
- Biodex balance system
- Dual Energy X-ray Absorptiometry for assessment of body composition
- Tendo power and velocity analyzer
- AMTI force plate
- Electric goniometry for joint position analysis
- Graded exercise and indirect calorimetry testing
- Maximal and submaximal cycle ergometer testing
- Wingate testing
- Skinfold body composition testing

Computer Application Skills

- LabVIEW programming for digital signal analysis
- ImageJ for musculoskeletal analysis
- Delsys EMGworks for signal acquisition
- Biopac AcqKnowledge for signal acquisition
- EndNote
- G*Power
- SPSS/PASW