

Mitchel A. Magrini
*PhD, CSCS,*D, NSCA-CPT,*D*
Curriculum Vitae

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Education

- Doctorate of Philosophy** in Health and Human Performance **2015-2019**
Oklahoma State University - Stillwater, OK
Advisor: Jason DeFreitas, PhD
Dissertation Title: The Physiological Determinants of Rate of Force Production Across the Life Span.
- Master of Sciences** in Sports Medicine **2013-2015**
University of Colorado Colorado Springs - Colorado Springs, CO
Advisor: Jay Dawes, PhD, CSCS,*D, FNSCA
- Bachelor of Science** in Physical Education **2009-2013**
Doane College - Crete, NE

Employment

Professional Appointments

- 2019–Present **Assistant Professor** – Creighton University – Exercise Science and Pre-Health Professions, Omaha, NE
- EXS 111 – Human Anatomy for Nursing
- 2015–2019 **Graduate Teaching/Research Associate**, Oklahoma State University, Department of Health, Leisure and Human Performance, Stillwater, OK
- HHP 4773 – Exercise Testing and Prescription
 - HHP 3363 – Biomechanics
 - HHP 3114 – Physiology of Exercise
 - HHP 2654 – Applied Anatomy
 - HHP 2802 – Medical Terminology
 - HHP 3010 – Principles of Personal Training
 - HHP 2602 – First Aid
- 2013–2015 **Teaching Assistant**, University of Colorado Colorado Springs, Colorado Springs, CO
- HSCI 2060 – Statistics
 - HSCI 1020 – Personal Fitness and Wellness
- 2013- 2015 **Personal Trainer/Fitness Instructor**, Iron Horse Fitness Center, Fort Carson, CO
- 2014 **Volunteer Strength and Conditioning Coach**, Colorado College, Colorado Springs, CO
- Health Promotion Intern**, Center for Active Living, Colorado Springs, CO
- Performance Center Intern**, National Strength and Conditioning Association, Colorado Springs, CO
- 2012-2014 **Strength and Conditioning Intern**, U.S. Army World Class Athlete Program, Ft. Carson, CO

Scholarship/Recognition/Awards

- 2018 Oklahoma State University Application Center ‘From Research to App Competition – First Place – 2018
- College of Education, Health and Aviation Student Spotlight – 2018
- Oklahoma State University Outstanding Graduate Research Assistant for the School of Kinesiology, Applied Health and Recreation in the College of Education, Health and Aviation – 2017-2018
- College of Education Aix B. Harrison Endowed Scholarship Recipient - 2017
- NSCA Foundation Challenge Scholarship - 2016
- Oklahoma State University Research Symposium Best in Poster, College of Education, Oklahoma State University - 2016

Funding

External Funding – Total amount requested: \$7,460 Total amount Awarded: \$2,000

- May 2018 **Central States ACSM Student Research Grant**
 Project Title: The physiological determinants of explosive force production capacity across the lifespan.
Role: Principal Investigator
*Award Requested: \$1,500. Award Amount: **\$1,000 – Funded***
- January 2018 **ACSM Foundation Doctoral Student Research Grant**
 Project Title: Neural and contractile determinants of explosive force production capacity across the lifespan.
Role: Principal Investigator
 Faculty Supervisor: Dr. Jason DeFreitas
Award Amount: \$4,960 – Not Funded
- October 2015 **Stillwater Medical Center: Heart of the Community Wellness Grant**
 Project Title: Maximal strength, power output, and muscle activation across the age span.
 Principle Investigator/Faculty Supervisor: Dr. Jason DeFreitas (OSU)
Role: Study Coordinator/Student Investigator
*Award Amount: **\$1,000 – Funded***

Internal Funding - Total amount requested: \$6,200 Total amount Awarded: \$6,200

- Summer 2018 **Oklahoma State University Graduate College’s Robberson Summer Dissertation Fellowship Grant**
 Project Title: Age-Related Changes in the Neural and contractile determinants of explosive force production.
 Principle Investigator: **Mitchel Magrini**
*Award Amount: **\$6,000 – Awarded***
- September 2016 **Graduate and Professional Student Government Association Research Materials Grant**
 Project Title: Sensory and motor function assessment across the age span.
 Principle Investigator: **Mitchel Magrini**
*Award Amount: **\$200 – Awarded***

Research

Research Interests

- Non-invasive assessment of neuromuscular function and physiology using peripheral nerve stimulation, voluntary strength and power testing, ultrasonography, surface electromyography and electromyographic signal decomposition, and mechanomyography.
- The effects of age on neuromuscular function.
- The effects of resistance training on neuromuscular function in a variety of populations.
- Identification and evaluation of variables with which to assess the impacts of age and disease on muscle function and functional ability.
- Fall Risk and Prevention
- Sensorimotor integration and function in healthy and diseased population across the age span

Articles in Refereed Scientific Journals

Published/Accepted:

1. Tomko, P.M., Colquhoun, R.J., Banks, N.F., **Magrini, M.A.**, Muddle, T.W.D., Jenkins, N.D.M. (2019) Maximal contraction methods influence the magnitude and reliability of global electromyographic signal characteristics. *J Electro Kinesiology*, July, 2019.
2. Hester, G.M., **Magrini, M.A.**, Colquhoun, R.J., Barrera-Curiel, A., Estrada, C.A., Olmos, A., Bailly, A., Ha, Phuong, DeFreitas, J.M. (2019) Cross-education: Effects of age on rapid and maximal contractile characteristics. *Eur J Appl Physiol*. March, 2019.
3. Muddle, T.W.D., **Magrini, M.A.**, Colquhoun, R.J., Luera, M., Tomko, P.M., Jenkins, NDM. (2018) Impact of fatiguing, submaximal high- versus low- torque isometric exercise on acute muscle swelling and echo intensity in resistance-trained men. *J Strength Cond Res*. Accepted Nov 2018.
4. **Magrini, M.A.**, Dawes J.J., Elder C, Orr, R.M., Smith, D.B. (2018) Influence Of Compression Garments On Selected Physiological, Perceptual And Performance Measures While Traversing Extreme Terrain At Altitude. *Sports Exerc Med Open J*. 4(3): 83-89.
5. Colquhoun, R.J., Tomko, P.M., **Magrini, M.A.**, Muddle, T.W.D., Jenkins, NDM. (2018) The influence of input excitation on the inter-and intra-day reliability of the motor unit firing rate versus recruitment threshold relationship. *J Neurophysiol*. Accepted Oct, 2018.
6. Jenkins, N.M.D., Colquhoun, R.J., Tomko, P.M., Gradnigo, T., **Magrini, M.A.**, Muddle, T.W.D., Fleming, S., Ferrell, M.C., El-Sohemy, A. (2018) Genetic variant in the β 2-Adrenergic Receptor (Arg16Gly) Influences Fat Free Mass, Muscle Strength, and Motor Unit Behavior in Young Men. *Exp Physiol*, Accepted Sept. 2018.
7. Moghaddam, M., Estrada, C.A., Muddle, T.W.D., **Magrini, M.A.**, Jenkins, N.M.D., Jacobson, B.H. (2018) Ultrashort versus short high-intensity interval training for anaerobic and aerobic performance. *J Strength Cond Res*. Accepted Sept. 2018.
8. Tomko, P.M., Colquhoun, R.J., **Magrini, M.A.**, Muddle, T.W.D., Jenkins, N.D.M. (2018) Global electromyographic signal characteristics depend on maximal contraction method. *J Electromyogr Kinesiol*. 42: 111-116.
9. Tomko, P.M., Muddle, T.W.D., **Magrini, M.A.**, Colquhoun, R.J., Luera, M.J., Jenkins, N.D.M. (2018) Reliability and differences in quadriceps femoris muscle morphology using ultrasonography: The effects of body position and rest time. *Ultrasound*. 26(4): 214-221.

10. Muddle T.W.D, Colquhoun R.J., **Magrini M.A.**, Luera M.J., DeFretias J.M., Jenkins N.D.M. (2018) Effects of fatiguing submaximal high- versus low-torque isometric exercise on motor unit recruitment and firing behavior. *Physiol Rep.* 6 (8): e13675
11. **Magrini, M.A.**, Thiele, R.M., Colquhoun, R.J., Barrera-Curiel, A., Blackstock, T.S., DeFreitas, J.M. (2018) The reactive limb drop: a simple and novel sensory-motor assessment to predict fall risk in older individuals. *J Neurophysiol.* 119: 1556-1561.
12. **Magrini, M.A.**, Colquhoun, R.J., Barrera-Curiel, A., Thiele, R.M., DeFreitas, J.M., Smith, D.B., Jenkins, N.D.M. (2018) Muscle size, strength, power, and echo intensity, but not specific tension, are affected by age in physically active adults. *Isokinet Exerc Sci.* 26 (2): 95-103.
13. Luera, M.J., Muddle, T.W.D, Dowling, B, **Magrini, M.A.**, Colquhoun, R.J., Jenkins, NDM. (2018) Rotational kinematics may play an important role in minimizing elbow varus torques for professional versus high school pitchers. *Ortho J Sports Med.* 6 (3): 2325967118760780
14. Colquhoun, R.J., **Magrini, M.A.**, Haun, C.T., Muddle, T.W.D., Tomko, P.M., Vann, C.G., Martin, J.S., Young, K.C., DeFreitas, J.M., Roberts, M.D., Jenkins, N.D.M. (2018) Muscle Phenotype Influences Motor Unit Behavior of the Vastus Lateralis during Maximal Isometric Contractions. *Physiol Rep.* 6 (5), e13636.
15. Hester, G.M., Pope, Z.K., **Magrini, M.A.**, Colquhoun, R.J., Curiel, A.B., Estrada, C.A., DeFreitas, J.M. (2018) Age does not attenuate maximal velocity adaptations in the ipsilateral and contralateral limbs during unilateral resistance training. *J Aging Phys Act.* (Accepted, Feb 2018)
16. **Magrini, M.A.**, Colquhoun, R.J., Sellers, J.H., Conchola, E.C., Hester, G.M., Thiele, R.M., Pope, Z.K., Smith, D.B. (2017) Can squat jump performance differentiate starters vs. nonstarters in division I female soccer players? *J Strength Cond Res.* 32 (8): 2348-2355.
17. **Magrini, M.A.**, Dawes, J.J, Spaniol, F, Roberts, A. (2017) Speed and Agility Training for baseball/softball. *Accepted* for publication in the *Strength Cond J.* 40:1, 68-74. (**Invited Manuscript**)
18. **Magrini, M.A.**, Colquhoun R.J., Dawes J.J., Smith D.B. (2016) Effects of a pre-workout energy drink on upper body muscular endurance. *Int J Exercise Sci.* 9: 5, Article 13.
19. Gillett, J.S., Dawes, J.J., Spaniol, F.J., Rhea, M.R., Rogowski, J.P., **Magrini, M.A.**, Simao, R., Bunker, D.J. (2016) A Description and Comparison of Cardiorespiratory Fitness Measures in Relation to Pitching Performance Among Professional Baseball Pitchers. *Sports*, 4, 14.
20. **Magrini, M.A.**, Dawes J.J., Elder C., Kluge, M.A. (2015) Power training and functional performance in middle aged women: a pilot study. *Int J Exercise Sci.* 9: 3, Article 8.

In Review:

1. Hester, G.M., Colquhoun, R.J., **Magrini, M.A.**, Barrera-Curiel, A., Estrada, C.A., Ha, P.L., Olmos, A.A., Bailly, A.R., DeFreitas, J.M. (2019) Short-term resistance training adaptations in maximal motor unit firing rates across the recruitment threshold in young and older males. Submitted to *GeroScience*, March 2019.

2. Colquhoun, R.J., **Magrini, M.A.**, Haun, C.T., Muddle, T.W.D., Mackey, C.S., Luera, M.J., Martin, J.S., Young, K.C., Roberts, M.D., Jenkins, N.D.M., DeFreitas, J.M. (2018) A Skeletal Muscle Biopsy Alters Motor Unit Firing Behavior in the Vastus Lateralis. Submitted to *Scand J Med Sci Sports*, Oct 2018.
3. **Magrini, M.A.**, Barrera-Curiel, A., Colquhoun, R.J., Ferrell, M.C., Hernandez-Sarabia, J.S., Thiele, R.M., Jenkins, N.D.M., DeFreitas, J.M. (2018) Identifying the underlying physiological determinants of age differences in the reactive leg drop. Submitted to *Eur J Appl Physiol*, April, 2018.
4. Colquhoun, R.J., **Magrini, M.A.**, Tomko, P.M., Muddle, T.W.D., Jenkins, N.D.M. (2018) Neuromuscular Alterations in Collegiate Powerlifters during a Competition Period. Submitted to *Int J Sports Physiol Performance*, August 2018.

Books and Book Chapters

1. **Magrini, M.A.**, & Dawes, J. (2020) ACSM's Resources for the Personal Trainer, 6th Edition. (In Progress)

National Abstract Presentations * = Undergraduate Mentee

1. **Magrini, M.A.**, Colquhoun, R.J., Ferrell, M.C.* , Fleming, S.R., Jenkins, N.D.M., DeFreitas, J.M. The effects of velocity and muscle size on knee extension mean power in younger and older men. Accepted for presentation at the 2019 NSCA National Conference, Washington, D.C.
2. Blackstock, T.S.* , **Magrini, M.A.**, Colquhoun, R.J., Ferrell, M.C.* , Fleming, S.R., Jenkins, N.D.M., DeFreitas, J.M. Does age related loss of muscle size and motor units affect the speed of sensorimotor integration? A pilot study. Accepted for presentation at the 2019 NSCA National Conference, Washington, D.C.
3. Ferrell, M.C.* , **Magrini, M.A.**, Colquhoun, R.J., Fleming, S.R., Jenkins, N.D.M., DeFreitas, J.M. Examination of rate of torque development, rate of activation, and muscle size in young and older men. Accepted for presentation at 2019 NSCA National Conference, Washington, D.C.
4. Fleming, S.R., Colquhoun, R.J., Tomko, P.M., **Magrini, M.A.**, Banks, N.F., Ferrell, M.C.* , Jenkins, N.D.M. Effects of Caffeine Supplementation on Maximal Strength is not Influenced by CYP1A2 Genotype. Accepted for presentation at 2019 NSCA National Conference, Washington, D.C.
5. Colquhoun, R.J., Tomko, P.T., **Magrini, M.A.**, Fleming, S.R., Banks, N.F., Ferrell, M.C.* , Jenkins, N.D.M. Acute Caffeine Supplementation Does Not Alter Motor Unit Behavior, Regardless of CYP1A2 Genotype. Accepted for presentation at 2019 NSCA National Conference, Washington, DC.
6. Muddle, T.W.D., Tomko, P.M., Colquhoun, R.J., **Magrini, M.A.**, Banks, N.F., Jenkins, N.D.M. Test-retest reliability of bioimpedance spectroscopy for the analysis of body composition in physically active males. Accepted for presentation at the 2019 ACSM Annual National Conference.
7. **Magrini, M.A.**, Colquhoun, R.J., Jenkins, N.D.M., DeFreitas, J.M. Neural and Contractile Determinants of Rate of Force Development: A Preliminary Analysis. Accepted for presentation at the 2019 ACSM annual National Conference.
8. Colquhoun, R.J., Tomko, P.M., **Magrini, M.A.**, Fleming, S.R., Ferrell, M.C.* , Banks, N.F., Gradnigo, T, Jenkins, N.D.M. Reliability of motor unit behavior during a maximal voluntary isometric contraction of the knee extensors. Accepted for presentation at the 2019 ACSM Annual National Conference.

9. Banks, N.F., Tomko, P.M., Colquhoun, R.J., Muddle, T.W.D., **Magrini, M.A.**, Emerson, S.R., Jenkins, N.D.M. ADORA2A, but not CYP1A2, Genotype Influences Caffeine's Effect on Glucose Responses to a Carbohydrate Feeding. Accepted for presentation at the 2019 ACSM Annual National Conference.
10. 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 thematic poster presentation at the American College of Sports Medicine national conference. 2018.
11. Ha, P.L., 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 thematic poster presentation at the American College of Sports Medicine national conference. 2018
12. **Magrini, M.A.**, Barrera-Curiel, A, Colquhoun, R.J., Hernandez-Sarabia, J.A., Tomko, P.M., Jenkins, N.D.M., Thiele, R.M., DeFreitas, J.M. Age-related differences in isometric, dynamic and a stretch-shortening cycle electromechanical delay assessment. Accepted for presentation at the 2018 NSCA annual conference.
13. **Magrini, M.A.**, Barrera-Curiel, A, Colquhoun, R.J., Ferrell, M.C. *, Hernandez-Sarabia, J.A., Tomko, P.M., Jenkins, N.D.M., Thiele, R.M., DeFreitas, J.M. Torque producing muscular architectural characteristics do not account for any variance in the reactive leg drop performance. Accepted for presentation at the 2018 NSCA annual conference.
14. Colquhoun, R.J., Tomko, P.M., **Magrini, M.A.**, Fleming, S., Ferrell, M.C., Gradnigo, T., Muddle, T.W.D., Jenkins, N.D.M. Examination of the responder/non-responder response in maximal torque production following acute caffeine ingestion. Accepted for presentation at the 2018 NSCA annual conference.
15. Colquhoun, R.J., **Magrini, M.A.**, Haun, C.T., Muddle, T.W.D., Tomko, P.M., Luera, M.J., Mackey, C.S., Vann, C.G., Martin, J.S., Young, K.C., DeFreitas, J.M., Roberts, M.R., Jenkins, N.D.M. Relationships between Motor Unit Behavior during Maximal Effort Contractions and Skeletal Muscle Phenotype. Accepted for presentation at the 2018 ACSM Annual conference.
16. Barrera-Curiel, A., **Magrini, M.A.**, Thiele, R.M., Hernandez-Sarabia, J.A., Ryan J. Colquhoun, Tomko, P.M., Jenkins, N.D.M., DeFreitas, J.M. Antagonist coactivation during a reactive leg drop in young and older adults. Accepted for presentation at the 2018 ACSM National Conference.
17. **Magrini, M.A.**, Barrera-Curiel, A., Thiele, R.M., Hernandez-Sarabia, J.A., Colquhoun, R.J., Tomko, P.M., Jenkins, N.D.M., DeFreitas, J.M. Both slower sensory response time and electromechanical delay explain age-related differences in the reactive leg drop. Accepted for presentation at the 2018 ACSM National Conference.
18. Moghaddam, M., Muddle, T.W.D., Estrada, C.A., **Magrini, M.A.**, Jenkins, N.D.M., Jacobson, B.H. Comparison of ultrashort versus short high intensity interval training for body composition, anaerobic, and aerobic performance. Accepted for presentation at the 2018 ACSM National Conference. Minneapolis, MN.
19. Hernandez Sarabia J.A., Barrera-Curiel A., Pope Z.K., Colquhoun R.J., **Magrini M.A.**, and J.M. DeFreitas. Estimating the proprioceptive contribution to balance: validation with measures of stretch reflex function. Accepted for presentation at Neuroscience 2017 - Annual Meeting for the Society for Neuroscience (SfN).
20. **Magrini, M.A.**, Thiele, R.M., Colquhoun, R.J., Barrera-Curiel, A., Blackstock, T.S. *, DeFreitas, J.M. The reactive leg drop: A simple and novel sensory-motor assessment to predict fall risk in older individuals. Accepted for 2017 NSCA National Conference.
21. Colquhoun, R.J., **Magrini, M.A.**, Estrada, C.A., Hernandez Sarabia, J.A., Muddle, T.W.D., Jenkins, N.D.M., DeFreitas, J.M. Changes in motor unit action potential morphology from

- high- and low-load resistance exercise to failure. Accepted for 2017 NSCA National Conference.
22. Muddle T.W.D., **Magrini M.A.**, Colquhoun R.J., Luera M.J., Jenkins N.D.M. Effects of fatiguing high-vs. low-force isometric contractions on acute muscle swelling and echo intensity. Accepted for 2017 NSCA National Conference.
 23. Muddle T.W.D., **Magrini M.A.**, Colquhoun R.J., Luera M.J., Jenkins N.D.M. Effects of fatiguing high- vs. low-force isometric contractions on motor unit recruitment and firing behavior. Accepted for 2017 NSCA National Conference.
 24. Hester, G.M., Pope, Z.K., **Magrini, M.A.**, Colquhoun, R.J., Barrera-Curiel, A., Estrada, C.A., DeFreitas, J.M. Age does not attenuate cross education during resistance training. Accepted for 2017 NSCA National Conference.
 25. **Magrini, M.A.**, Colquhoun, R.J., Barrera-Curiel, A., Thiele, R.M., Muddle, T.D.W., Smith, D.B., Jenkins, N.D.M. (2017) Relationships Among and Differences between Muscle Quality and Functional Performance in Younger and Older Women. *Medicine & Science in Sports & Exercise*. 49 (5): S38.
 26. Luera, M.J., **Magrini, M.A.**, Muddle, T.W.D., Colquhoun, R.J., DeFreitas, J.M., Dowling, B., Jenkins, N.D.M. (2017) Professional Pitchers Achieve Higher Fastball Velocities But Lower Varus Elbow Torque Than High School Pitchers. *Medicine & Science in Sport & Exercise*. 49 (5): S551.
 27. Mackey, C.M., Thiele, R.M., **Magrini, M.A.**, DeFreitas, J.M. Relationship between estimated muscle fiber type and peak velocity for the upper and lower extremity. *Medicine & Science in Sports & Exercise*. 49 (5S): 801-802.
 28. Colquhoun, R.J., Haun, C.T., Mumford, P.W., Roberson, P.A., Pascoe, D.D., Feeny, M.P., Young, K.C., Martin, J.S., Roberts, M.D., Muddle, T.W.D., Riffe, J.J., Luera, M.J., **Magrini, M.A.**, Mackey, C.S., Stock, M.S., Jenkins, N.D.M., DeFreitas, J.M. (2017) The effects of a muscle biopsy on motor unit firing properties. *Medicine and Science and Sports and Exercise*. 49 (5): S459.
 29. Estrada, C.A., Colquhoun, R.J., **Magrini, M.A.**, Speer, A.G., Jacobson, B.H., DeFreitas, J.M. Intra-and Inter-Set Velocity Characteristics During High- and Low-Load Resistance Training to Failure. Accepted for 2017 ACSM conference.
 30. Sellers, J.H., Monaghan, T.M., Schnaiter-Brasche, J.A., Miller, M.M., **Magrini, M.A.**, & Jacobson, B.H. (2017) Efficacy of Normobaric Intermittent Hypoxic Training to Improve VO_{2peak} During Acute Hypobaric Hypoxia Exposure. *Medicine & Science in Sports & exercise*. 49: 246.
 31. Muddle T.W.D., **Magrini M.A.**, Colquhoun, R.J., Thiele, R.M., Jenkins N.D.M. (2017) Comparison of quadriceps femoris muscle morphology using ultrasonography during two different body positions. *Medicine & Science in Sport & Exercise*. 49 (5): S350.
 32. Olmos, A.A., Hester, D.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 in Older Adults. *Medicine & Science in Sports & Exercise*. 49: 129-130.
 33. **Magrini, M.A.**, Thiele, R.M., Palmer, T.B., Smith, D.B. Effects of neuromuscular fatigue on maximal velocity of the shoulder internal rotators. Accepted for thematic poster presentation at the 2016 NSCA National Conference.
 34. **Magrini, M.A.**, Hester, G.M., Pope, Z.K., Colquhoun, R.J., Benik, F.M., DeFreitas, J.M. Rapid velocity and muscle activation characteristics of the knee extensors in young and old males. Accepted for presentation at the 2016 NSCA National Conference.
 35. Mackey, C.S., **Magrini, M.A.**, Thiele, R.M., DeFreitas, J.M. An examination of wrist flexor fatigue following a neutral-grip elbow flexor/extensor exercise protocol. Accepted for thematic poster presentation at the 2016 NSCA National Conference.

36. Colquhoun, R.J., Hester, G.M., Pope, Z.K., **Magrini, M.A.**, Benik, F.M., DeFreitas, J.M. Short-term adaptations of early- and late-phase strength characteristics during 4 weeks of strength training. Accepted for presentation at the 2016 NSCA National Conference.

Regional Abstract Presentations

1. **Magrini, M.A.** The Physiological Determinants of Rate of Force Production Across the Life Span. Accepted for oral presentation at the Central States American College of Sports Medicine 2018 annual conference. October, 2018.
2. Muddle, T.W.D., Tomko, P.M., Colquhoun, R.J., **Magrini, M.A.**, Banks, N.F., Jenkins, N.D.M. Test-retest reliability of bioimpedance spectroscopy for the analysis of body composition in physically active males. Submitted for poster presentation at the Central States American College of Sports Medicine 2018 annual conference. October 2018.
3. Moghaddam, M., Estrada, C.A., Muddle, T.W.D., **Magrini, M.A.**, Jenkins, N.D.M., Jacobson, B.H. Similar adaptations following two high intensity interval training configurations: 10s:5s Versus 20s:10s work to rest ratio. Submitted for poster presentation at the Central States American College of Sports Medicine 2018 annual conference. October, 2018.
4. 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 poster presentation at the 2018 American College of Sports Medicine Southeast chapter regional conference.
5. 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 poster presentation at the 2018 American College of Sports Medicine Southeast chapter regional conference.
6. 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 In Older Adults. Submitted to the 2017 Southeast ACSM conference.
7. **Magrini, M.A.**, Schnaiter, J.A., Thiele, R.M., & Smith, D.G. Acute time course recovery of peak power after a hypertrophic bout of back squats in anaerobically trained females. Accepted for presentation at the 2015 ACSM Central States Regional Chapter Conference.
8. Schnaiter, J.A., Thiele, R.M., **Magrini, M.A.**, & Smith, D.G. Effects of an Explosive Back Squat Exercise on Maximal Power Output during Vertical Jump Assessments. Accepted for presentation at the ACSM Central States Regional Chapter Conference.

Local Abstract Presentations

1. **Magrini M.A.**, Dawes J. Jay., Elder C., Kluge M.A., Smith D.B. Effect of a six week power training program on functional performance in middle aged women. Accepted for presentation at the Oklahoma State University Research Symposium, Stillwater, OK, February 15-16, 2016.

Service

Undergraduate Mentorship

- Matt Ferrell – Undergraduate Major: BioChem – Oklahoma State University – 2017-Present
- Taryn Blackstock – Undergraduate Major: Exercise Science – Oklahoma State University – 2016-Present
- Genevieve Humphrey – Undergraduate Major: Exercise Science – Oklahoma State University 2015-2017

University Service

- Search Committee Student Member. Assistant Professor. School of Kinesiology, Applied Health, and Recreation, Oklahoma State University. Fall 2019.
- Scholar Development Symposium Presentation Judge, Oklahoma State University - 2016

Professional Service

- NSCA Research Consortium Member - 2016-present
- NSCA National Conference Research Poster Judge – 2018-2019
- ACSM Aging Special Interest Group member – 2018
- ACSM Non-Invasive Investigation of the Neuromuscular System Special Interest Group – 2018
- Spanish Cove Health Fair – 2017
- President of the Board – HSP Performance LLC – 2017-present

Faculty Development

- Creighton Connect Training – 8/2019

External Reviewer

- Journal of Neural Engineering
- Physiological Measurements
- Journal of Strength and Conditioning Research
- Strength and Conditioning Journal
- International Journal of Exercise Science
- National Strength and Conditioning Association Website Education Content
- Biology of Sport

Certifications & Professional Memberships

Certifications

- National Strength and Conditioning Association Certified Strength and Conditioning Specialist, Recertified with Distinction (CSCS,*D), 2013-Present
- National Strength and Conditioning Association Certified Personal Trainer, Recertified with Distinction (NSCA-CPT, *D), 2013-Present
- Adult and Pediatric First Aid/CPR/AED Instructor – American Red Cross 2016-Present

Current Professional Memberships

- American Geriatrics Society – 2018-Present
- National Strength and Conditioning Assoc. – 2015-Present
- American College of Sports Medicine – 2015-Present
- Student member of the Central States Chapter of the American College of Sports Medicine 2015-Present

Laboratory and Computer Skills

- Biodex System 3, 4 Dynamometry
- Surface Electromyography (sEMG)
- Musculoskeletal Ultrasonography Assessment, GE Logiq S8
- Power testing: Tendo Weightlifting Analyzer Unit, Jump Mat, Gymaware linear transducer
- Delsys EMGworks
- LabView
- Biopac Signal Processing
- AcqKnowledge
- Adobe Photoshop
- Image J
- Movement Dynamics Athlete Development assessment
- Endnote
- SPSS
- Canvas
- Blackboard
- Desire2Learn
- Brightspace
- MS PowerPoint, Word, Excel

Professional References

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