

# Curriculum Vitae

Arkansas State University  
Gregory S. Cantrell PhD, CSCS  
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## Education

### Doctor of Philosophy

Health and Exercise Science  
Degree: Exercise Physiology  
University of Oklahoma  
Norman, OK  
Graduation Date: May 12, 2017

**Dissertation: Relationship between soleus H reflex and balance metrics in people with multiple sclerosis.**

Chair: Rebecca Larson, PhD.

### Master of Science in Education

Health and Sport Sciences  
Degree: Exercise and Sports Science  
University of Memphis  
Memphis, TN  
Graduation Date: August 12, 2013

**Project Title: Maximal strength, power, and aerobic endurance adaptations to concurrent strength and sprint interval training.**

### Bachelor of Science in Education

Health and Human Performance  
Degree: Health and Sport Sciences  
Concentration: Exercise Science  
University of Memphis  
Memphis, TN  
Graduation Date: May 08, 2011

**Senior Project: Effects of 2-nitrooxy ethyl 2-amino 3-methylbutanoate gel on resistance exercise performance and blood nitrate/nitrite in resistance trained men.**

## **Teaching**

### **University of Oklahoma**

HES 3873 – Principles of Personal Training  
HES 4883 – Exercise Physiology Testing Labs

### **Northern State University**

HLTH 422/522 – Nutrition (F-2-F and online)  
IDL 190 – Freshman Seminar  
PE 100 – Weight Training  
PE 350 – Exercise Physiology  
PE 400 – Exercise Testing & Prescription  
PE 451 – Tests & Measurements  
PE 452 – Motor Learning and Development  
PE 454 – Biomechanics  
PE 482/582 – Theories of Strength and Conditioning  
PE 752 – Analysis and Mechanical Principles of Sport Skill  
EDER 761 – Research Design

### **Arkansas State University**

ES 3653 – Techniques of Aerobic Conditioning  
ES 3713 – Cardiovascular Physiology  
ES 4673 – Exercise Testing and Prescription for Special Populations

## **Invited Lectures**

Northern State University – “Statistical Methods to Soleus Hoffmann Reflex Examination in Multiple Sclerosis”  
Primrose Retirement Community – “It’s Never Too Late To Exercise” (Spring 2018)

## **Memberships**

Pinnacle National Honors Society (2011-2012)  
National Education Association/Tennessee Education Association (2012-2013)  
National Strength and Conditioning Association (2011-2015)  
American Physiological Society (2014 – 2018)  
American College of Sports Medicine (2014 –  
National MS Consortium (2016 – 2018)

## **Certifications**

Certified Strength and Conditioning Specialist (NSCA-CSCS) 2011 -  
CPR/AED (American Heart Association) 2010 -  
Collaborative Institutional Training Initiative (CITI) 2011 -

## **Research/Travel Grants**

### **Internal (University of Oklahoma)**

College of Arts and Sciences Grant 2017  
Requested: \$750.00  
Approval: Funded (\$250.00)

Robberson Conference Presentation and Creative Exhibition Travel Grant  
Requested: \$1000.00  
Approval: Funded (\$157.86)

Graduate Student Senate Conference Grant 2017  
Requested: \$750.00  
Approval: Funded (\$600.00)

Robberson Research and Creative Endeavor Grant Fall 2016  
Requested: \$1000.00  
Approval: Funded (\$1000.00)

Graduate Student Senate Conference Grant 2015  
Requested: \$750.00  
Approval: Funded (\$438.75)

College of Arts and Sciences Grant 2015  
Requested: \$750.00  
Approval: Funded (\$750.00)

#### External

NCSA Master's Graduate Research Award  
Applied March 2012  
Title of Project: Concurrent strength and high intensity endurance training  
Approval: Funded (\$5,000)

## **Awards**

University of Memphis

- Graduate Research Assistant (Fall 2011 – Spring 2013)

University of Oklahoma

- Graduate Teaching Assistant (Fall 2013 – Spring 2017)

## **Book Chapters**

Larson, R.D., **Cantrell, G.S.**, Farrell III, J.W., Lantis, D.J., Pribble, B.A. Assessment, Consequence and Clinical Implication of Asymmetry. In Watson, R. (ed.) **Multiple Sclerosis: Food and Lifestyle in Neurological Autoimmune**. Elsevier, 2016.

## **Peer Reviewed Manuscripts**

**Cantrell, G.S.**, Lantis, D.J., Bemben, M.G., Black, C.D., Larson, D.J., Pardo, G., Fjeldstad-Pardo, C. and Larson, R.D. Relationship between soleus H-reflex asymmetry and postural control in multiple sclerosis. *Disability and Rehabilitation*. (2020).

Farrell III, J.W., Dunn, A., **Cantrell, G.S.**, Lantis, D.J., Larson, D.J., Larson, R.D. The effects of group running on the training intensity distribution of collegiate cross-country runners. *J Strength Cond Res.* (2019).

Larson, R.D., Barton, M., Farrell III, J.W., **Cantrell, G.S.**, Lantis, D.J., Black, C. D., Ade, C.J. Evaluation of oxygen uptake kinetic asymmetries in patients with multiple sclerosis: A pilot study. *IJKSS* (2018) 6:4 doi: <http://dx.doi.org/10.7575/aiac.ijkss.v.6n.4p.21>

Farrell III, J.W., Lantis, D.J., Ade, C.J., **Cantrell, G.S.**, Larson, R.D. Aerobic Exercise Supplemented with Muscular Endurance Training Improves Onset of Blood Lactate Accumulation. *J Strength Cond Res.* (2018) 32: 1376-82.

Lantis, D.J., Farrell III, J.W., **Cantrell, G.S.**, Larson, R.D. Eight Weeks of High Volume Resistance Training Improves Onset of Blood Lactate in Trained Individuals. *J Strength Cond Res.* (2017) 31: 2176-82.

Larson R.D., **Cantrell G.S.\***, Ade C.J., Farrell III J.W., Lantis D.J., Barton M.A., Larson D.J. (2015) Physiologic Responses to Two Distinct Maximal Cardiorespiratory Exercise Protocols. *Int J Sports Exerc Med* 1:013.

DeForest, B.A., **Cantrell, G.S.**, and Schilling, B.K. (2014) Muscle Activity in Single- vs. Double-Leg Squats, *International Journal of Exercise Science: Vol. 7: Issue 4, Article 6.*

**Cantrell G.S.\***, Schilling B.K., Paquette M.R., Murlasits Z. Maximal strength, power, and aerobic endurance adaptations to concurrent strength and sprint interval training. *Eur J Appl Physiol.* (2014) 114: 763 – 771.

Bloomer R.J., Alleman Jr., R.J., **Cantrell G.S.**, Farney T.M., Schilling B.K.. Effects of 2-nitrooxy ethyl 2-amino 3-methylbutanoate gel on resistance exercise performance and blood nitrate/nitrite in resistance trained men. *J Strength Cond Res.* (2012) 26:1680-7.

\*denotes corresponding author

## Refereed Conference Abstracts

Pribble, B.A., Farrell III, J.W., **Cantrell, G.S.**, Lantis, D.J., Bemben, D.A., Black, C.D., Larson, D.J., Larson, R.D. Body Composition In Persons With Multiple Sclerosis Vs. Healthy Controls, *Medicine & Science in Sports & Exercise*, 52:S7 2020.

Lantis, D.J., **Cantrell, G.S.**, Hintz, J.P., Owens, C.D., Bemben, D.A., Black, C.D., Larson, D.J., Larson, R.D. The Effects of Fatigue on Peak Torque During Dorsiflexion Between Limbs in Multiple Sclerosis Patients. *Medicine and Science in Sport and Exercise*, 51:S5, 2019.

Owens, C., Lantis, D., **Cantrell, G.S.**, Bemben, D., Black, C., Larson, D., & Larson, R. Effects Of Fatigue On Isometric And Isokinetic Dorsiflexion Strength Asymmetry In Multiple Sclerosis. *Medicine and Science in Sport and Exercise*, 51:S5, 2019.

Farrell III, J.W., Ade, C.J., Lantis, D.J., **Cantrell, G.S.**, Pribble, B.A., Larson, D.J., Larson, R.D. Impact of Exercise Intensity Domain on Bilateral Asymmetry in Multiple Sclerosis. *ISPRM* 2018.

**Cantrell, G.S.**, Lantis, D.J., Bemben, M.G., Black, C.D., Larson, D.J., Larson, R.D. Relationship between Soleus H Reflex and Balance Metrics in People with Multiple Sclerosis. *Medicine and Science in Sport and Exercise*, 50:S5, 2018.

Lantis, D.J., **Cantrell, G.S.**, Hintz, J.P., Owens, C.D., Bemben, D.A., Black, C.D., Larson, D.J., Larson, R.D. Relationship Between Dorsiflexion Strength Asymmetry, Walking Performance, and Disability in Multiple Sclerosis Patients. *Medicine and Science in Sport and Exercise*, 50:S5, 2018.

\*Korvela, A., **Cantrell, G.S.** Effects of Beetroot Juice Supplementation on Aerobic- Trained and Anaerobic-Trained Female Athletes. National Collegiate Honors Council, 2018.

**Cantrell, G.S.**, Lantis, D.J., Farrell III, J.W., Pribble, B.A., Larson, D.J., Larson, R.D. Relationship Between Peak Power Asymmetry and Self-Reported Measures of Fatigue in People with Multiple Sclerosis. *Medicine and Science in Sport and Exercise*, 49:S5, 2017.

Farrell III, J.W., Lantis, D.J., **Cantrell, G.S.**, Bemben, D.A., Larson, R.D. Tracking of blood lactate response across eight sessions of muscular endurance resistance training. *Medicine and Science in Sport and Exercise*, 49:S5, 2017.

Lantis, D.J., **Cantrell, G.S.**, Hintz, J.P., Larson, D.J., Farrell III, J.W., Pribble, B.A., Larson, R.D. Knee extensor asymmetry in multiple sclerosis patients before and after single-leg cycling. *Medicine and Science in Sport and Exercise*, 49:S5, 2017.

Larson, R.D., Farrell III, J.W., **Cantrell, G.S.**, Lantis, D.J., Pribble, B.A., Larson, D.J., Ade, C. Evaluation of Oxygen Uptake Kinetic Asymmetries: A Pilot Study. ECTRIMS 2016.

**Cantrell, G.S.**, Barton, M., Larson, D., Lantis, D., Farrell III, J., Shipman, S., and Larson, R. Physiological Responses of 2 Distinct VO<sub>2</sub>max protocols: A validation study. *Medicine and Science in Sport and Exercise*, 47:S5, 2015.

Farrell III, J.W., Lantis, D.J., Barton, M.A., Shipman, S.R., **Cantrell, G.S.**, Bemben, D.A., & Larson, R.D. Effects of High Repetition/low Resistance Training with 30 seconds of Rest Intervals on Lactate Threshold. *Medicine and Science in Sport and Exercise*, 47:S5, 2015.

Ann Dunn, Farrell III, J.W., Lantis, D.J., Barton, M.A., Shipman, S.R., **Cantrell, G.S.**, Campbell, J.A., Bemben, M.G., Larson, D.J., & Larson, R.D. Training Intensity Distribution in Collegiate Cross Country Runners. *Medicine and Science in Sport and Exercise*, 47:S5, 2015.

Barton, M.A., Larson, D.J., Lantis, D.J., Farrell III, J.W., **Cantrell, G.S.**, Shipman, S.R., & Larson, R.D. Comparison Between VO<sub>2</sub> Max Cycling Protocols (standard vs. ramp). *Medicine and Science in Sport and Exercise*, 46:S5, 2014.

\*Indicates Undergraduate Research

## Professional Service

### Northern State University

- Graduate Council Member: Fall 2018 – Spring 2020
- School of Education Scholarship Committee: Spring 2019

### Ad Hoc Manuscript Reviewer

- Sports Medicine 2020 -
- Applied Physiology, Nutrition, and Metabolism 2016 -
- European Journal of Sports Science 2016 -