

**CURRICULUM VITAE**  
**Christopher D. Black, Ph.D.**  
October, 2016

Assistant Professor  
Department of Health and Exercise Science  
University of Oklahoma  
Norman, OK  
Home: 706-255-3750  
Office: 706-255-3750  
Email: cblack@ou.edu

**Education**

Degree: **Doctor of Philosophy**  
Major Area: Exercise Physiology  
Institution: The University of Georgia; Athens, GA  
Begun: August 2003  
Date conferred: August 2007 (GPA – 4.00)  
Major Professor: Gary Dudley and Kevin McCully  
Dissertation Title: “Determinants of Exercise Induced Skeletal Muscle Injury Following Eccentric Exercise”

Degree: **Master of Arts**  
Major Area: Exercise Physiology  
Institution: The University of Georgia; Athens, GA  
Begun: August 2001  
Date Conferred: August 2003 (GPA – 4.00)  
Major Professor: Kevin McCully  
Thesis Title: “Effects of Four Weeks of Increased Physical Activity in Individuals with Chronic Fatigue Syndrome.”

Degree: **Bachelor of Arts** (Magna cum laude)  
Major Area: Biology  
Institution: Hendrix College; Conway, AR  
Begun: September 1996  
Date Conferred: May 2000 (GPA – 3.91)

**Professional Experience**

August 2013-present: University of Oklahoma, Norman, OK  
Assistant Professor  
Department of Health and Exercise Science

August 2011-July 2013: University of Mississippi, Oxford, MS  
Assistant Professor  
Department of Health, Exercise Science, and Recreation Management

August 2008-August 2011: Georgia College and State University, Milledgeville, GA  
Assistant Professor  
Department of Kinesiology

August 2007-July 2008: The University of Georgia, Athens, GA  
Post-Doctoral Research Fellow  
Department of Kinesiology

August 2001-August 2007: The University of Georgia, Athens, GA  
Graduate Teaching/Research Assistant  
Department of Exercise Science/Kinesiology

### **Teaching Experience**

#### **Assistant Professor; University of Oklahoma**

HES 3813: Principles of Health and Fitness  
HES 3980: Honors Research  
HES 4853: Chronic Disease Intervention  
HES 4953: Senior Capstone  
HES 5430: Internship – Health and Exercise Science  
HES 5823: Exercise Physiology  
HES 5960: Directed Readings  
HES 5990: Independent Study  
HES 6970: Graduate Seminar

#### **Assistant Professor; University of Mississippi**

HP 203: First Aid and CPR  
ES 348: Physiology of Exercise  
ES 391: Trends and Topics in Exercise Science (Physical Activity and Health)  
ES 456: Exercise Testing and Prescription  
ES 611: Exercise Physiology I  
ES 613: Health Aspects of Physical Activity  
ES 616: Exercise Physiology II  
ES 618: Advanced Muscle Physiology

#### **Assistant Professor; Georgia College and State University**

BIOL 2170: Anatomy and Physiology II  
HSCS 2823: Human Physiology  
KINS 3203: Physiology of Exercise  
KINS 3212: Clinical Experiences in Exercise Science I  
KINS 3223: Biomechanics  
KINS 3223: Biomechanics (On-line)

KINS 3233: Methods of Resistance Training  
 KINS 3262: Exercise Testing for Normal and Special Populations  
 KINS 3272: Clinical Experiences in Exercise Science II  
 KINS 3403: Motor Behavior  
 KINS 4203: Principles of Strength and Conditioning  
 KINS 4803: Special Topics: Physical Activity and Health  
 KINS 6603: Performance Physiology  
 KINS 6650: Design and Implementation of Strength and Conditioning Programs  
 KINS 6653: Sports Nutrition (On-line)  
 KINS 6833: Special Topics in Kinesiology

Graduate Teaching Assistant; The University of Georgia ( **Instructor of Record** )

EXRS 3700: Applied Exercise Physiology  
 EXRS 4690: Exercise Physiology I  
 EXRS 4630: Exercise Physiology II  
 PEDB 1400: Weight Training  
 PEDB 1230: Beginning Racquetball  
 PEDB 1240: Intermediate Racquetball  
 PEDB 1260: Softball  
 PEDB 1120: Beginning Golf

**Honors/Awards**

Georgia College and State University

- |   |      |
|---|------|
| ▪ 2010-2011 Excellence in Scholarship Award<br>(GCSU Foundation)                  | 2011 |
| ▪ Carnation Professor Award<br>(Phi Mu Fraternity)                                | 2010 |
| ▪ Crown Professor Award – College of Health Sciences<br>(Zeta Tau Alpha Sorority) | 2009 |

The University of Georgia (Post-Doctoral Fellow)

- |   |      |
|---|------|
| ▪ American Pain Society Young Investigator Travel Award | 2008 |
|---|------|

The University of Georgia (Masters/Doctoral Student)

- |  |            |
|--|------------|
| ▪ Graduate Teaching/Research Assistant   | 2001-2007  |
| ▪ Graduate School Dissertation Completion Award  | 2006-2007  |
| ▪ Louise Kindig Research Award<br>(Best doctoral research proposal)  | 2006-2007  |
| ▪ Achievement Reward for College Scientist (ARCS) Foundation<br>Scholarship: Atlanta Chapter<br>(Outstanding Biomedical and Health Science Graduate Student) | 2005-2007  |
| ▪ Graduate School Travel Award   | 2004, 2006 |
| ▪ Kinesiology Department Travel Award  | 2004, 2006 |

#### Hendrix College

- Phi Beta Kappa 2000
- Chairman Scholarship 1996-2000
- Robert C. Byrd Honor Scholarship 1996-2000

#### **Professional Membership**

- Phi Beta Kappa 2000 - present
- ACSM (American College of Sports Medicine) 2003 - present

#### **Funding Experience**

##### University of Oklahoma

##### ***College of Arts and Sciences Junior Faculty Fellowship***

“Central Nervous System Adaptations Underlying Cross-Education following Unilateral Resistance Exercise” Status: Funded (\$7000) Summer 2016

##### ***Titin Incorporated***

“Comprehensive evaluation of the performance and physiologic response elicited by a novel weighted compression shirt system” (Chris Black, Carl Ade, and Rebecca Larson ; Co-P.I.’s) Status: Not funded (July 2014; \$92,000 requested)

##### ***CRPDE Junior Faculty Fellowship***

“Neuromuscular function prior to and following graded exercise in chronic fatigue syndrome” Status: Funded (\$7000) Summer 2014

##### ***College of Arts and Science Travel Assistance Program***

2015 American College of Sports Medicine Annual Meeting (\$1,431)

2014 American College of Sports Medicine Annual Meeting (\$704)

##### ***Publication Subvention Support***

OU OVPR: \$200 (2015)

OU Provost Office: \$200

OU College of Art and Sciences: \$200

#### University of Mississippi

##### ***OVPR University Travel Grant***

Status: Funded (\$500) Summer 2013

##### ***School of Applied Sciences Summer Research Grant***

“The contribution of changes in spinal excitability to force loss following exercise-induced muscle damage.” (Chris Black, P.I.) Status: Funded (\$9,500) Summer 2012

## Georgia College and State University

### ***GCSU Faculty Research Grant***

“Effects of the battling ropes training system on excess-post exercise oxygen consumption and blood lactate.” (Chris Black, Co-P.I.) Status: Funded (\$1500) Fall 2010

“Relationship among running economy, lactate threshold and distance running performance.” (Chris Black, P.I.) Status: Funded (\$1000) Fall 2009

“The effects of delayed-onset muscle pain on maximal and submaximal exercise performance and quadriceps muscle activation”, (Chris Black, P.I.) Status: Not funded (\$7500) Spring 2009

“Effects of walking versus driving to and from class on daily physical activity in GCSU students”, (Chris Black, P.I.) Status: Not funded (\$700) Spring 2009

“The effects of inflammatory muscle pain on exercise performance”, (Chris Black, P.I.) Status: Funded (\$950) for Fall 2008 to Summer 2009

“Exploring admission and attrition in athletic training”, (Kirk Armstrong, P.I.; Chris Black, Co-P.I.) Status: Funded (\$750) for Fall 2008 to Spring 2009

## University of Georgia

### ***University of Georgia Intramural Funds***

UGA-Shepherd Center, “Vascular health in spinal cord injured patients”, (Kevin McCully, P.I.), 2003

- Role: Aided in experimental design and assisted in data collection and analysis.

### ***National Institute of Health***

The role of skeletal muscle blood flow in chronic fatigue syndrome. (Kevin McCully, P.I.)

- Role: Aided in experimental design, and carried out a study (Master Thesis) to determine the effects of increased physical activity on fatigue, mood, and cardiovascular measures in patients clinically diagnosed with chronic fatigue syndrome.

Muscle blood flow and spinal cord injury (Gary Dudley, P.I.; Kevin McCully Co-P.I.)

- Role: Aided in experimental design, supervised resistance training, assisted in data collection and analysis.

Skeletal muscle plasticity, fitness, and health (Gary Dudley, P.I.)

- Role: Aided in experimental design, supervised resistance training, assisted in data collection and analysis. Primarily responsible for experimental designs, data

collection, and data analysis for studies aimed at determining optimal stimulation parameters to limit fatigue and injury.

***Procter & Gamble Pharmaceuticals, Inc.***

Unilateral lower limb suspension and its effects on voluntary strength, skeletal muscle size and composition (Gary Dudley, P.I.)

- Role: Study coordinator. Responsible for experimental design, subject recruitment, and supervised all data collection and analysis.

***McCormick Science Institute***

Effects of consumption of selected dietary spices on health and performances outcomes (Pat O'Connor, P.I.)

- Role: Post-Doctoral Fellow. Contributed to experimental design, responsible for subject recruitment, data collection, and data analysis.

**Professional Service**

Central States American College of Sports Medicine Chapter

Secretary/Treasurer (Oct. 2015-Oct. 2017)

**Grant Reviewer**

North Carolina Biotech Center Multidisciplinary Research Grant (2013, 2014, 2015)

**Manuscript Reviewer**

Physiotherapy Theory and Practice (2006)

International Journal of Sport Nutrition and Exercise Metabolism (2008)

Archives of Physical Medicine and Rehabilitation (2008, 2015, 2016)

Journal of Psychosomatic Research (2009)

Journal of Applied Physiology (2009, 2010)

Phytotherapy Research (2009, 2010)

Molecules (2010)

Journal of Pharmacy and Pharmacology (2010)

Journal of Medicinal Food (2011)

Rheumatology (2011, 2013)

European Journal of Sport Sciences (2011)

Journal of Caffeine Research (2011, 2014, 2015, 2016)

Research Quarterly in Exercise Science (2011, 2012)

Clinical Journal of Pain (2011, 2012, 2014, 2015)

The Journal of Sports Medicine and Physical Fitness (2012, 2013, 2014, 2015)

Trainiology (2012)

Journal of Exercise Science and Fitness (2013, 2015)

Biomed Research International (2013)

Sports Medicine (2013)

European Journal of Applied Physiology (2013, 2014, 2015, 2016)

Journal of Sports Science (2014, 2015, 2016)

Menopause (2014)

American Journal of Physical Medicine & Rehabilitation (2014, 2105)  
 Muscle Nerve (2014)  
 International Journal of Exercise Science (2015)  
 Medicine & Science in Sport & Exercise (2015, 2016)  
 Journal of Strength and Conditioning Research (2015, 2016)  
 Scientific Reports (2015)  
 Annuals of Sports Medicine and Research (2015)  
 PLOS ONE (2015, 2016)  
 Applied Physiology, Nutrition, and Metabolism (2015)  
 Nutritional Research (2015)  
 Journal of Neurophysiology (2016)  
 Journal of Electromyography and Kinesiology (2016)  
 American Journal of Hypertension (2016)  
 Neuroscience Letters (2016)  
 Sports Medicine and Rehabilitation Journal (2016)  
 Physiological Reports (2016)

Academic Accreditation

Clayton State University Health and Fitness Management Academic Advisory Board –  
 COAES Accreditation Board (2009-2011)

University Service (University of Oklahoma)

College of Arts and Sciences Academic Appeals Panel	2015-present
University Student Conduct Hearing Panel	2014-present
HES Undergraduate Committee (Chair 2014-16)	2013-present
HES Research/Planning Committee	2013-present

University Service (University of Mississippi)

Graduate Student Council Research Forum Judge	2013
University Travel Grant Committee	2012-present
Search Committee Member: Exercise Science Instructor	2011-2012
Ad Hoc Committee Member: Comprehensive Exam Review	2011-2012
Co-Advisor to Exercise Science Club	2011-present

University Service (Georgia College and State University)

Search Committee Chair: Exercise Science Faculty Position	2010
Co-Advisor to Exercise Science Club	2008- 2011
Department of Kinesiology: Evaluation and Assessment Committee	2008 - 2011
College of Health Sciences: Bylaws Committee (Chair 2010-2011)	2008 - 2011
Georgia College and State University: Institutional Review Board	2009 - 2011
GCSU President's Scholars Competition Interviewer	2008 - 2011

Doctoral Committee Membership (University of Oklahoma)

Robby Hight (Chair)  
 Charity Cavazos (Member)  
 Nathan Wages (Member)

David Lantis (Member)  
Greg Cantrell (Member)  
John Farrell (Member)  
Jacob Caldwell (Member)  
Breanne Baker (Member)  
Jennifer Russel (Member)  
Samuel Buchanan (Member)  
Joshua Carr (Member)

*Doctoral Committee Membership (University of Mississippi)*

Nicole Dabbs (Member; Graduated: August 2013) “The effects of whole body vibration on muscle recovery and performance.”

*Masters Thesis Committee Membership (University of Oklahoma)*

Natalie Janzen  
Daniel Schubert  
Patriece Branch  
Garret Wardlow  
Macarena Ramos  
Brian Rollberg  
Brian Pribble

Marcin Szczyglowski (Chair; Graduated: May 2016) “Effects of Exercise-Induced Muscle Damage on Critical Torque and Mitochondrial Function”

Robby Hight (Chair; Graduated: August 2015) “Motor-Unit Activity Following a Repeated Bout of Eccentric Exercise”

Alex Gonglach (Chair; Graduated: May 2015) “The Effects of Caffeine on a Fixed Pain Intensity Time-Trial”

Jamie Huber (Chair; Graduated: May 2015) “The Relationship Between Physical Activity Levels and Activity Type and Thermal Pain Sensitivity”

Landon Reiter (Graduated: May 2015) “Effects of chemotherapy and radiation therapy on endothelial-dependent vasodilation and circulating endothelial microparticles”

Kaylin Didier (Member; Graduated: May 2015) “Effects of Chemotherapy and Radiation Exposure on Brachial Artery Blood Flow During Dynamic Handgrip Exercise”

Austin Ederer (Member; Graduated: May 2015) “Alterations in Endothelial Function and Fractional O<sub>2</sub> Extraction in Long-Term Cancer Survivors Treated with Chemotherapy and Radiation”



Grant Mouser (Member; Graduated: May 2015) “The Effects of Differing Levels of Blood Flow Restriction on Brachial Blood Flow”

Monica Barton (Member; Graduated: May 2015) “Pulmonary Oxygen Uptake Kinetics in Individuals with Multiple Sclerosis during Single Leg Cycling”

Shelby Shipman (Member; Graduated: May 2015) “Bilateral Differences in Critical Power in Individuals with Multiple Sclerosis”

Kendall Elliot (Member)

*MastersThesis Committee Membership (University of Mississippi)*

Brandon Tynes (Chair; Graduated: May 2012) “The Influence of Localized Inflammation on Pressure Pain Threshold Following Fatiguing Exercise”

*MastersThesis Committee Membership (Georgia College and State Univerisity)*

Justin Pickham (Member; Graduated: May 2013) “The Effects of Rope Diameter on Anaerobic Metabolism During Battling Ropes Training”

Andrew Hutchins (Member; Graduated: December 2012) “Excess Post-Exercise Oxygen Consumption and Peak Blood Lactate Following a Maximal Bout with the Battling Ropes Power Wave”

Elizabeth Hathaway (Member; Graduated May 2012) “Assessing Physical Activity and Fatigue Levels in Cancer Survivors”

Kori Pickowitz (Chair; Graduated: 2011) “The Reliability of Pressure Pain Threshold and Pain Tolerance in College Aged Males”

Carla Graves (Member; Graduated: 2011) “The Effects of Manual Stretching and Foam Roll Myofascial Release Techniques on Hamstring Flexibility”

Whitney Bailey (Member; Graduated: 2011) “Prevalence of Eating Disorders Among Division II Female College Athletes”

Richard Dobson (Chair; Graduated: 2010) “The Relationship Among Running Economy, Lactate Threshold and Distance Running Performance”

Clayton Kuklick (Char; Graduated: 2010) “Effects of 4 Weeks of Training with the Battling Ropes Training System on Peak Oxygen Consumption and Pitch Velocity”

Brian Sibenaller (Member; Graduated: 2010) “Relationship Between Balance and Agility in College Athletes”

Joseph Wilson (Member; Graduated: 2009) “Functional Movement Screening in College Athletes”

Christopher Bailey (Member; Graduated: 2009) “Physiological Responses to the Battling Ropes Training System”

*Supervision of Masters Research Projects*

Josh Wren (Fall 2014 - Spring 2015)  
Beau Brehm (Fall 2014 - Spring 2015)  
Ben Angle (Summer 2013)  
Kristin Casagrand (Spring 2013)  
Elizabeth Mumaw (Spring 2012)

*Supervision of Exercise Science Practicum/Independent Study Students*

Jaquelin Van Horn (Fall 2016)  
Brooke Wiederkehr (Fall 2015)  
Kristen Faucett (Fall 2015)  
Olivia Raiber (Fall 2015)  
Dallas Dixon (Spring 2013)  
Emily Peters (Spring 2013)  
Kristin Casagrand (Fall 2012; Spring 2013)  
Robert Vondy (Fall 2012; Spring 2013)  
Ben Angle (Summer 2012)  
Alex Gonglach (Summer 2012)  
Ashleigh Elkins (Spring 2012)  
Douglass Pearson (Spring 2012)  
Sam Wilson (Spring 2012)  
Jeremy Daniel (Spring 2012)  
Alex Underwood (Spring 2012)  
Alex Gonglach (Fall-Spring 2011-2012)  
Katie Rich (Spring 2011)  
Josh Dunn (Spring 2011)  
Julianna Stradely (Spring 2011)  
Jeff Salatino (Spring 2010)

*Supervision of Undergraduate Honors Projects*

Kaitlin Lutz (Fall 2016); Role: Chair  
Emily Kromann (Spring 2016); Role: Chair  
Stephanie Rehm (Spring 2015); Role: Chair  
Elaine Griffeth (Spring 2015); Role: Chair  
Clara Tang (Fall 2014); Role: Chair  
Taylor Renbarger (Fall 2014); Role: Chair  
Luke Burnett (Spring-Summer 2013); Role: Committee Chair  
Justin Hill (Spring-Summer 2013); Role: Committee Chair  
Kacie Childers (Spring 2012); Role: Committee Member  
Julia Borland (Fall-Spring 2010-2011); Role: Chair  
Jessica Sethman (Fall-Spring 2010-2011); Role: Chair  
Kristen Vick (Fall-Spring 2009-2012); Role: Chair

**Manuscripts in Preparation**

Szczygłowski, M., Schubert, D., and **Black, C.D.** “Muscular Strength, Motor-Unit Recruitment, and Contractile Properties following Fatigue are Unaffected by Carbohydrate Mouth-rinse. To be submitted to *Applied Physiology, Nutrition, and Metabolism*.

**Manuscripts Under Review**

**Black, C.D.**, Huber, J.K., Ellingson, L., Jansen, N., and Sutterfield, S. “Relationship Among Activity Levels and Activity Type on Pain Sensitivity in College-Aged Females.” *Submitted to Medicine & Science in Sports & Exercise* (Sept, 2016).

Mouser, J.G., Ade, C.J., **Black, C.D.**, Bemben, D.A., and Bemben, M.G. “Brachial Blood Flow under Relative Levels of Blood Flow Restriction is decreased in a Non-linear Fashion” *Submitted to Int J Sports Med.* (January, 2016).

Didier, K.D., Reiter, L.K., Ederer, A.K., Brown, M.G., Hardy, R., Caldwell, J.T., **Black, C.D.**, Bemben, M.G., and Ade, C.J. Reduced muscle blood flow during dynamic exercise in cancer survivors treated with adjuvant therapy,. *Submitted to Journal of Applied Physiology.* (December, 2015).

Hight, R., Beck, T.W., Bemben, D.A., and **Black, C.D.** “Prolonged Alterations in Motor-Unit Recruitment Strategy following Eccentric Exercise” *Submitted to Muscle and Nerve* (October, 2016).

**Articles in Press**

**Articles in Peer-Reviewed Journals**

Dabbs, N.C., **Black, C.D.**, Garner, J.C. “Effects of Whole Body Vibration on Muscle Contractile Properties Following Exercise-Induced Muscle Damage.” *Electromyogr Kinesiol* Oct, 30: 119-25

**Black, C.D.**, Tynes, B.K., Gonglach, A.R., and Waddell, D.E. “Local and Generalized Endogenous Pain Modulation in Healthy Men: Effects of Exercise and Exercise-Induced Muscle Damage.” *Pain Med.* 2016, Jun 27 (Epub ahead of print)

**Black, C.D.**, Gonglach, A.R. Renfroe, J.B., and Hight, R.E., “The Effects of Caffeine Ingestion on Exercise-Induced Hypoalgesia: A Pilot Study.” *Physiol Behav.* 2016 Jul 1;161:1-6.

Ederer, A.K., Didier, K.D., Reiter, L.K., Brown, M.G., Hardy, R.N., Caldwell, J., **Black, C.D.**, Larson, R.D., and Ade, C.J. “Influence of Adjuvant Therapy in Cancer Survivors on Endothelial Function and Muscle Deoxygenation.” *PLoS One.* 2016 Jan 25;11(1)

Gonglach, A.R., Ade, C.J., Bemben, M.G., Larson, R.D., **Black, C.D.** “Muscle Pain as a Regulator of Cycling Time-Trial Pacing: Effects of Caffeine Ingestion.” *Med Sci Sport Exerc. Med Sci Sports Exerc.* 2016 Feb;48(2):287-96

Dabbs, N.C., **Black, C.D.**, and Garner, J.C. “Effects of Whole Body Vibration on Muscle Pain and Pressure-Pain Threshold Following Exercise-Induced Muscle Damage. *J Athl Train.* 2015 Dec;50(12):1233-9.

**Black, C.D.**, Gonglach, A.R., Hight, R., and Renfroe, J.B. “Time-Course of Recovery of Peak Oxygen Uptake after Exercise-Induced Muscle Damage.” *Respir Physiol Neurobiol*; 2015 Sep; 216:70-7

**Black, C.D.** and Pickowitz K.P. “Reliability of Pressure Pain Threshold and Pain Tolerance in College Aged Males.” *Int J Rehabil Res.* 2015 Sep; 38(3):213-8

**Black, C.D.**, Waddell, D.E., and Gonglach, A.R. “Caffeine’s Ergogenic Effects on Cycling Neuromuscular and Perceptual Factors.” *Med Sci Sport Exerc.* 2015 Jun; 47(6):1145-58

Kuklick, C.R., Martino, M.A., and **Black, C.D.** “Throwing Velocity and Stamina in Baseball Pitchers as a Function of Training Methods.” *J of Aus Strength and Cond*; 2013 June; 21(2): 10-15.

**Black, C.D.** and Dobson, R.M. “Prior Eccentric Exercise Augments Muscle Pain and Perception of Effort During Cycling Exercise.” *Clin. J Pain*: 2013 May; 29(5):443-449

**Black, C.D.** and Dobson, R.M. “Prior Eccentric Exercise Reduces VO<sub>2</sub> Peak and Ventilatory Threshold, but Does Not Alter Movement Economy During Cycling Exercise.” *J of Strength and Cond Res* 2012 Sep; 26(9):2530–2537

Dobson, R.M., Martino, M., and **Black, C.D.** “The Relationship Among Running Economy, Lactate Threshold and Distance Running Performance” *J of Aus Strength and Cond*; 2011 Dec; 19(4):14-24

**Black, C.D.** and O’Connor, P.J. “Acute Effects of Ginger on Muscle Pain and Disability Induced by Eccentric Exercise.” *Phytother Res.* 2010 Nov;24 (11):1620-6

**Black, C.D.**, Herring M.P., Hurley D.J., and O’Connor, P.J. “Ginger Supplementation Attenuates Muscle Pain and Dysfunction Induced Eccentric Exercise.” *J Pain.* 2010 Sep;11(9):894-903

Gorgey, A., **Black, C.D.**, Elder, E.P., and Dudley, G.A. “Effects of Electrical Stimulation Parameters on Specific Torque and Muscle Fatigue” *J Orthop Sports Phys Ther.* 2009 Sep;39(9):684-92.

**Black, C.D.** and O'Connor, P.J. "Acute Effects of Dietary Ginger on Quadriceps Muscle Pain During Moderate Intensity Cycling Exercise" *Int J Sport Nutr Exerc Metab.* 2008 Dec; 18 (6): 653-664

Stoner, L., Sabatier, M.J., **Black, C.D.**, and McCully, K.K. "Occasional Cigarette Smoking Chronically Affects Arterial Function" *Ultrasound Med Bio.* 2008 Sept 15.

**Black, C.D.** and McCully, K.K. "Muscle Injury after Repeated-Bouts of Voluntary and Electrically Stimulated Exercise." *Med Sci Sports Exerc.* 2008 Sept; 40 (9): 1605-1615

**Black, C.D.** and McCully, K.K. "Force Per Active Area and Muscle Injury During Electrically Stimulated Contractions." *Med Sci Sports Exerc.* 2008 Sept; 40 (9):1596-1604

**Black, C.D.**, Elder, C.P., Gorgey, A., and Dudley, G.A. "High Specific Torque is Related to Lengthening Contraction Induced Skeletal Muscle Injury" *J. Appl Physiol.* 2008 Mar; 104(3): 639-47

Elder, C.P., Mahoney, E.T., **Black, C.D.**, Slade, J.M., and Dudley, G.A. "Oxygen cost of dynamic and isometric skeletal muscle contractions." *Dynamic Medicine.* 2006 Sept. 11: 5:9

Kendall, T., **Black, C.D.**, Elder, C.P., Gorgey, A., and Dudley, G.A. "Determining the extent of neural activation during maximal effort." *Med Sci Sports Exerc.* 2006 Aug; 38(8):1470-5.

**Black, C.D.** and McCully K.K. "Time course of exercise induced alterations in daily activity in chronic fatigue syndrome." *Dynamic Medicine.* 2005 Oct 28;4:10.

Sabatier, M.J., Stoner, L., Mahoney, E.T., **Black, C.**, Elder, C., Dudley, G.A., and McCully, K.K. "Electrically-stimulated resistance training in SCI individuals increases muscle fatigue resistance but not femoral artery size or blood flow." *Spinal Cord.* 2005 Sept 13, 1-7

Mahoney, E.T., Bickel, C.S., Elder, C., **Black, C.**, Slade, J.M., Apple, D., and Dudley, G.A. "Changes in skeletal muscle size and glucose tolerance with electrically stimulated resistance training in individuals with chronic spinal cord injury." *Archives of Physical Medicine and Rehabilitation.* 2005 Jul;86(7):1502-4.

**Black, C.D.**, O'Connor, P.J., McCully, K.K. "Increased daily physical activity and fatigue symptoms in chronic fatigue syndrome." *Dynamic Medicine.* 2005 Mar 03; 4(1):3.

Castellano, V., Olive, J.L., Stoner, L., **Black, C.**, and McCully, K.K. "Blood flow response to a postural challenge in older men and women." *Dynamic Medicine.* 2004 Jan 16;3(1):1

**Black, C.D.**, Vickerson, B., and McCully, K.K. “Noninvasive assessment of vascular function in the posterior tibial artery of healthy humans.” *Dynamic Medicine*. 2003 Feb 11;2(1):1.

### **Textbook Chapters**

“Muscle Pain During and Following Exercise.” *Oxford Handbook of Exercise Psychology*. Editor: Edmund Acevedo. 2012

### **Manuscripts in Non Peer-Reviewed Journals**

**Black, C.D.** and O’Connor, P.J. “Ginger: A Spice That Can Reign in Pain.” *Sports, Cardiovascular, and Wellness Nutrition Pulse*. Spring 2010, 29(2): 1-4

McCully, K.K. and **Black, C.D.** “Measuring an activity limit in CFS patients.” *The CFS Research Review*. Summer 2005 6:(2), 12-15

### **Invited Professional Presentations**

**Black, C.D.** (2016) “The Influence of Exercise-Induced Muscle Damage on Endurance Exercise Performance”, Central State ACSM Annual Meeting (Invited Oral Symposium)

**Black, C.D.** (2016) “Exercise-Induced Hypoalgesia in Healthy Populations”, ACSM Annual Meeting (Invited Oral Symposium)

**Black, C.D.** (2015) “The Influence of Pain and Muscle Damage on Neuromuscular Function and Exercise Performance”; Emory Rehabilitation Hospital Grand Rounds Lecture (Invited Lecture)

**Black, C.D.** (2009) “The Effects of Ginger on Muscle Pain, Inflammation and Function” ACSM Annual Meeting. (Invited Oral Symposium)

**Black, C.D.** (2008) “Overtraining: Causes, Monitoring, and Training Adaptations.” Southeast Regional National Strength and Conditioning Association Clinic (Invited Oral Tutorial).

**Black, C.D.** (2006). “Skeletal muscle, electrical stimulation, and rehabilitation from spinal cord injury.” UGA Biomedical Health Science Institute Fall Retreat (Invited Oral Presentation).

**Black, C.D.** (2006) “Electrical Stimulation and Skeletal Muscle Injury.” Shepherd Center “Cookies and Research” Day (Invited Oral Presentation).

### **Professional Abstract Presentations**

Hight, R.E., Beck, T.W., Bemben, D.A., and **Black, C.D.** (2016) "Exercise-Induced Muscle Damage and the Repeated Bout Effect: Role of the Relationship Between Motor-Unit Firing Rate and Recruitment Threshold." American College of Sports Medicine Annual Meeting (poster)

Schubert, D.J., Szczyglowski, M.K., Wren, J.D., and **Black, C.D.** (2016) "Carbohydrate Mouth Rinsing Does Not Alter Skeletal Muscle Contractile Properties Following Fatigue." American College of Sports Medicine Annual Meeting (poster)

Szczyglowski, M.K., Wren, J.D., Schubert, D.J., and **Black, C.D.** (2016) "Carbohydrate Mouth Rinsing Does Not Enhance Maximal Strength or Motor-Unit Recruitment Following Fatigue." American College of Sports Medicine Annual Meeting (poster)

Sutterfield, S.L., Huber, J.K., Janzen, N.R., and **Black, C.D.** (2016) "Activity Level and Type Does Not Influence Exercise-Induced Hypoalgesia to Pressure or Thermal Stimuli." American College of Sports Medicine Annual Meeting (poster)

Janzen, N.R., Huber, J.K., Ade, C.J., Taylor, E.L., and **Black, C.D.** (2016) "The Relationship among Physical Activity Level, Activity Type, and Thermal Pain Sensitivity." American College of Sports Medicine Annual Meeting (poster)

Janzen, N.R., Huber, J.K., Ade, C.J., Taylor, E.L., and **Black, C.D.** (2015) "The Relationship among Physical Activity Level, Activity Type, and Thermal Pain Sensitivity." Central States American College of Sports Medicine Annual Meeting (poster)

Hight, R.E., Beck, T.W., Bemben, D.A., and **Black, C.D.** (2015) "Exercise-Induced Muscle Damage and the Repeated Bout Effect: Role of the Relationship Between Motor-Unit Firing Rate and Recruitment Threshold." Central States American College of Sports Medicine Annual Meeting (poster)

Gonglach, A.R., Ade, C.J., Larson, R.D., Bemben, M.G., and **Black, C.D.** (2015) "Pain-Based Pacing and Cycling Time-Trial Performance: Effects of Caffeine Ingestion" American College of Sports Medicine Annual Meeting (poster)

Huber, J.K., Gonglach, A.R., and **Black, C.D.** (2015) "The Effects of Caffeine and Exercise on Thermal and Pressure Pain Thresholds" American College of Sports Medicine Annual Meeting (poster)

Szczygloski, M., Gonglach, A.R., Wren, J.D., and **Black, C.D.** (2015) "Consistency of the Effect of Caffeine on Strength and Motor-Unit Recruitment" American College of Sports Medicine Annual Meeting (poster)

Hight, R.E., Gonglach, A.R., and **Black, C.D.** (2015) “The Reliability of a Pain-Based Pacing Strategy during Cycle Ergometry” American College of Sports Medicine Annual Meeting (poster)

Dabbs, N.C., Chander, H., **Black, C.D.**, Loftin, M., Valliant, M., Brown, L.E., and Garner, J.C. (2015) “Effects of Whole Body Vibration on Voluntary Torque Following Exercise Induced Muscle Damage in Recreationally Trained Females” American College of Sports Medicine Annual Meeting (poster)

Wren, J.D., Gonglach, A.R., Dixon, D.J., Hill, J.T., and **Black, C.D.** (2014) “Caffeine Does Not Alter Muscle Pain and Perception of Effort During Heavy and Severe Cycling Exercise” American College of Sports Medicine Annual Meeting (poster)

Gonglach, A.R., Casagrand, K., Burnett, L., and **Black, C.D.** (2014) “Alterations in Cardiorespiratory and Perceptual Responses During Graded Submaximal Exercise Following Exercise-Induced Muscle Damage” American College of Sports Medicine Annual Meeting (poster)

Hight, R.E., Gonglach, A.R., Casagrand, K., Burnett, L., and **Black, C.D.** (2014) “Time-Course of Reduction in Peak Oxygen Consumption and Ventilatory Threshold Following Exercise-Induced Muscle Damage.” American College of Sports Medicine Annual Meeting (poster)

Dabbs NC, **Black, C.D.**, Loftin M, Valliant M, Brown LE, and Garner JC (2014). “Effects of Whole-body Vibration on Pain Sensitivity Following Exercise Induced Muscle Damage.” American College of Sports Medicine Annual Meeting (poster)

Tynes, B.K., Gonglach, A.R., Waddell, D.E., Loftin, M., and **Black, C.D.** (2013) “The effect of exercise on mechanical pressure pain threshold in the presence and absence of delayed-onset muscle soreness.” American College of Sports Medicine Annual Meeting (poster)

Gonglach, A.R., Tynes, B.K., Waddell, D.E., Loftin, M., and **Black, C.D.** (2013) “The Effect of Submaximal Isometric Exercise to Fatigue on Mechanical Pressure Pain Threshold in the Finger.” American College of Sports Medicine Annual Meeting (poster)

Tynes, B.K., Gonglach, A.R., Waddell, D.E., Loftin, M., and **Black, C.D.** (2013) “The effect of exercise on mechanical pressure pain threshold in the presence and absence of delayed-onset muscle soreness.” Southeast Regional American College of Sports Medicine Annual Meeting (poster)

Gonglach, A.R., Tynes, B.K., Waddell, D.E., Loftin, M., and **Black, C.D.** (2013) “The Effect of Submaximal Isometric Exercise to Fatigue on Mechanical Pressure Pain Threshold in the Finger.” Southeast Regional American College of Sports Medicine Annual Meeting (poster)



Sabatier, M.J. and **Black, C.D.** (2012) “Exercise-Induced Quadriceps Injury Disrupts Lower Body EMG Activity During Downslope Walking.” Society for Neuroscience Annual Meeting (poster)

**Black, C.D.** (2012). “Caffeine Enhances Time-Trial Performance and Preserves Muscle Activation During Leg, But Not Arm Cycling Exercise.” American College of Sports Medicine Annual Meeting (poster)

Sabatier, M.J., **Black, C.D.**, Luallen, M., Aylor, K., and Drew, S. (2012) “Heterogenic Effect of Exercise Induced Quadriceps Muscle Damage on Ankle Kinematics and Step Cycle Timing During Slope Walking.” American College of Sports Medicine Annual Meeting (poster)

Martino, M.A., Sibenaller, B., **Black, C.D.**, and Butler, S. (2011) “The Relationship Between Balance and Agility in Collegiate Athletes.” National Strength and Conditioning Association Annual Meeting (poster presentation)

**Black, C.D.** (2011) “The Effects of Caffeine on Muscle Pain During Arm and Leg Cycling.” American College of Sports Medicine Annual Meeting (poster)

Sethman, J, Borland, J, and **Black, C.D.** (2011) “Effects of Caffeine on Cycling Time-Trial Performance.” Georgia College and State University Student Research Conference (oral presentation)

**Black, C.D.**, Vick, K., and Salatino, J.M. (2010) “Quadriceps Muscle Injury and Delayed-Onset Pain Reduces Peak Exercise Performance.” American College of Sports Medicine Annual Meeting (poster)

Sibenaller, B., **Black, C.D.**, and Martino, M. (2010) “The Relationship Between Balance and Agility in Collegiate Athletes.” Georgia College and State University Student Research Conference (oral presentation)

Pickowitz, K.E., and **Black, C.D.** (2010) “The Effects of Caffeine on Muscle Pain During Arm and Leg Exercise.” Georgia College and State University Student Research Conference (oral presentation)

Vick, K.E., Anderson, S.M., and **Black, C.D.** (2010) “Atrophy of Muscle in Response to 4 Weeks of Unilateral Lower-Limb Suspension.” Georgia College and State University Student Research Conference (oral presentation)

Dobson, R.M. and **Black, C.D.** (2010) “The Relationship Among Running Economy, Lactate Threshold and Distance Running Performance.” Georgia College and State University Student Research Conference (oral presentation)

Kuklick, C., Martino, M., and **Black, C.D.** (2010) "Effects of 4 Weeks of Training with the Battling Ropes Training System on Peak Oxygen Consumption and Pitch Velocity" Georgia College and State University Student Research Conference (oral presentation)

**Black, C.D.** (2010) "Effects of Exercise Induced Muscle Injury on Muscle Pain, Perceived Exertion, and Physiological Responses to Submaximal Exercise." Southeast Regional American College of Sports Medicine Annual Meeting (poster)

Bailey, C., Martino, M. **Black, C.D.**, Butler, S. (2010) "Physiological and Metabolic Responses Associated with the Battling Ropes Training System." Southeast Regional American College of Sports Medicine Annual Meeting (poster)

Wilson, J.D., Armstrong, K.J., Martino, M.A., and **Black, C.D.** (2010) "Functional Movement Screen: Identifying Muscle Asymmetries through Sports Participation" Southeast Regional National Athletic Training Association Educators Conference (poster)

Armstrong, K.J., Luke, J.M., Martino, M.A., **Black, C.D.** (2010) "Exploring Admission and Attrition in Athletic Training Education" Southeast Regional National Athletic Training Association Educators Conference (poster)

Salatino, J.M., Vick, K., and **Black, C.D.** (2009) "Quadriceps Muscle Injury and Delayed-Onset Pain Reduces Maximal Oxygen Consumption." COPLAC (Council of Public Liberal Arts Colleges) Regional Student Research Conference (poster)

**Black, C.D.**, Herring, M.P., Hurley, D.J., and O'Connor, P.J. (2009) "Ginger Supplementation Attenuates Muscle Pain and Dysfunction Following Eccentric Exercise" ACSM Annual Meeting (poster)

Herring, M.P., **Black, C.D.**, Magee, L., and O'Connor, P.J. (2009) "Steamed Ginger Supplementation Reduces Pain Following Eccentric Exercise-Induced Injury" ACSM Annual Meeting (poster)

Salatino, J.M., Vick, K., and **Black, C.D.** (2009) "Quadriceps Muscle Injury and Delayed-Onset Pain Reduces Maximal Oxygen Consumption." Georgia College and State University Student Research Conference (poster)

Bailey, C., **Black, C.D.**, Martino M. (2009) "Physiological and Metabolic Characteristics Associated with the Battling Ropes Training System." Georgia College and State University Student Research Conference (oral presentation)

Wilson, J.D., Luke, J., **Black, C.D.**, Armstrong, K., and Martino, M. (2009) "Functional Movement" Georgia College and State University Student Research Conference (oral presentation)

Knight, M., Henry, D., **Black, C.D.**, O'Connor, P.J. (2008) "The Effects of Chronic Consumption of Ginger on Muscle Pain and Prostaglandin Synthesis after Eccentric Exercise" Annual Biomedical Research Conference for Minority Students (poster)

Knight, M., Henry, D., **Black, C.D.**, O'Connor, P.J. (2008) "The Effects of Chronic Consumption of Ginger on Muscle Pain and Prostaglandin Synthesis after Eccentric Exercise" UGA Summer Undergraduate Research Program (poster)

**Black, C.D.** and McCully, K.K. (2008) "Determinants of Muscle Injury Following Electrically Stimulated Contractions." ACSM Annual Meeting (poster)

**Black, C.D.** and O'Connor, P.J. (2008) "Short Term Effects of 2-grams of Dietary Ginger on Muscle Pain, Inflammation, and Disability Induced by Eccentric Exercise." American Pain Society 2008 Annual Scientific Meeting (poster).

**Black, C.D.** and McCully, K.K. (2007) "Determinants of Muscle Injury Following Electrically Stimulated Contractions." Shepherd Center Research Day (poster)

**Black, C.D.**, Elder, C., and Dudley, G.A. (2006) "The role of force production in skeletal muscle injury." UGA Biomedical Health Science Institute Fall Retreat (poster).

Elder, C.P., Mahoney, E.T., **Black, C.D.**, Slade, J.M., and Dudley, G.A. (2006) "Oxygen cost of dynamic and isometric skeletal muscle contractions." UGA Biomedical Health Science Institute Fall Retreat (poster).

**Black, C.D.**, Elder, C., and Dudley, G.A. (2006) "The role of force production in skeletal muscle injury." ACSM Annual Meeting (poster).

Kendall, T., **Black, C.D.**, Elder, C., Gorgey, A., Dudley, G.A. (2006) "Determining the extent of neural activation during maximal effort." ACSM Annual Meeting (poster).

Elder, C., **Black, C.D.**, and Dudley, G.A. FACSM. (2006) "The effect of electrical stimulation frequency on activated skeletal muscle and specific tension." ACSM Annual Meeting (poster).

**Black, C.D.**, Elder, C., and Dudley, G.A. (2005) "The in vivo role of force production in skeletal muscle injury in humans." 2005 Workshop on Investigation of Human Muscle Function In Vivo (poster)

Stoner, L., Sabatier, M., **Black, C.D.**, and McCully, K.K. (2005) "Effects of acute cigarette smoking on shear rate-arterial responsiveness in young occasional smokers." 2005 Workshop on Investigation of Human Muscle Function In Vivo (poster).

Sabatier, M., Stoner, L., Mahoney, E. T., **Black, C.D.**, Elder, C., Dudley, G.A., and McCully, K.K. (2005). "Resistance training increases fatigue resistance but not artery size or function in individuals with SCI." ACSM Annual Meeting (poster).

Mahoney, E.T., Bickel, C.S., Slade, J.M. Elder, C., **Black, C.D.**, and Dudley, G.A. FACSM (2005). "Muscle size after 24 weeks of electrically stimulated resistance training in individuals with spinal cord injury." ACSM Annual Meeting (poster)

Stoner, L., Sabatier, M., Mahoney, E., **Black, C.D.**, Elder, C., Dudley, G., and McCully, K.K. (2005) "Electrical stimulation resistance training improves lower leg arterial health in chronic SCI patients. ACSM Annual Meeting (poster).

Stoner, L., Sabatier, M., Mahoney, E., **Black, C.D.**, Elder, C., Dudley, G., and McCully, K. (2005) "Electrical stimulation resistance training improves lower leg arterial health in chronic SCI patients." UGA Biomedical and Health Sciences Institute Symposium (poster)

Mahoney, E.T., Bickel, C.S., Slade, J.M. Elder, C., **Black, C.D.**, and Dudley, G.A. (2004) "Muscle size and glucose tolerance after 12 weeks of electrically stimulated resistance training in chronic SCI patients." UGA Biomedical and Health Sciences Institute Symposium (poster)

**Black, C.D.** and McCully, K.K. (2004) "Four weeks of increased physical activity did not improve fatigue symptoms in individuals with chronic fatigue syndrome." ACSM Annual Meeting (poster)

**Black, C.D.** and McCully, K.K. (2004) "Effects of four weeks of increased physical activity in individuals with chronic fatigue syndrome." Southeast Regional ACSM Annual Meeting (poster)

Stoner, L., Sabatier, M., **Black, C.D.**, and McCully, K.K. (2004). "The acute effects of cigarette smoking of vascular reactivity and vascular tone." ACSM Annual Meeting (poster).

Sabatier, M., Stoner, L., Mahoney, E., **Black, C.D.**, Elder, C., Dudley, G.A., and McCully, K.K. (2004) "Electrically-stimulated resistance training in individuals with SCI increases muscle fatigue resistance but not artery size or blood flow." UGA Biomedical and Health Sciences Institute Symposium (poster).

Castellano, V., Olive, J., Stoner, L., **Black, C.**, and McCully, K. (2003) "The effect of physical capacity on cardiovascular control in the elderly." ACSM Annual Meeting (oral presentation)