

Lance M. Bollinger

Department of Kinesiology and Health Promotion
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Education:

- Ph.D.** **East Carolina University**, Greenville, NC 2010-Dec 2011
Bioenergetics and Exercise Science
Mentor: Jeffrey J. Brault, Ph.D.
Anticipated completion date: July 2013
Dissertation title: Mechanisms of atrophy resistance and MuRF-1 overexpression in myotubes from extremely obese women
- MA** **University of Missouri**, Columbia, MO, Aug. 2006-Dec. 2008
Exercise Physiology
Advisor: John P. Thyfault, Ph.D.
Thesis title: A proposed scoring system for quantification of metabolic syndrome severity
- BS** **Southeast Missouri State University**, Cape Girardeau, MO Aug. 2002-Aug. 2006
Health Management (Exercise Science)
Advisor: Joseph Pujol, Ed.D
Summa cum laude

Professional Experience:

- 2010-Present** **Graduate Research and Teaching Assistant**
Department of Kinesiology, East Carolina University, Greenville, NC
- 2011-Present** **Junior Editor**
International Journal of Sports Medicine, Thieme Medical Publishers
- 2006-2010** **Clinical Exercise Physiologist**
Cardiac Rehabilitation Department, Boone Hospital Center, Columbia, MO
- 2009-2010** **Personal Health and Fitness Mentor**
Optimus: The Center for Health, Columbia, MO
- 2006-2008** **Graduate Research Assistant**
Department of Nutrition and Exercise Physiology, University of Missouri, Columbia, MO
- May-Aug. 2006** **Sports Performance Enhancement Intern**
HealthPoint Fitness, Cape Girardeau, MO

Teaching Experience:

- 2011: East Carolina University, Department of Kinesiology**
- Physiology of Exercise (EXSS 3805)
 - 3 credit hour course (36 lectures)
 - Received two formal evaluations of instruction from Kinesiology department faculty

Mentoring Experience:

- 2012-Present** Jonathan Powell-Undergraduate laboratory assistant
Sanghee Park-Graduate laboratory assistant
- Jan.-May 2010** Ryan Puck-Graduate cardiac rehabilitation intern
Andy Dawson-Undergraduate cardiac rehabilitation intern
- Aug.-Dec. 2009** Tom Elder-Graduate cardiac rehabilitation intern
Brian Kastli-Undergraduate cardiac rehabilitation intern

Publications:

Primary Research:

- 1) **LM Bollinger** and JJ Brault. SMAD3 and FoxO transcription factors synergistically regulate MuRF-1 gene expression and protein degradation. Under Review.
- 2) **LM Bollinger** and JJ Brault. Mechanisms of atrophy resistance in skeletal muscle myotubes from extremely obese women. In Progress.
- 3) SR Roseno, P Davis, **LM Bollinger**, and JJ Brault. Diet-induced obesity increases myostatin expression, but does not alter the rate of muscle atrophy or protein degradation. In Progress.

Applied Columns:

- 1) **LM Bollinger**, CE Cowan, and TP LaFontaine. Parkinson's disease: epidemiology, pathophysiology, and exercise intervention. Strength and Conditioning Journal. 34: 50-54, 2012.
- 2) **LM Bollinger**, CE Cowan, and TP LaFontaine. Exercise programming for Parkinson's disease. Strength and Conditioning Journal. 34: 55-59, 2012.
- 3) **L Bollinger** and T LaFontaine. Exercise and insulin resistance. Strength and Conditioning Journal. 33: 40-43, 2011.
- 4) **L Bollinger** and T LaFontaine. Exercise programming for insulin resistance. Strength and Conditioning Journal. 33: 44-47, 2011.
- 5) P Ronai, T LaFontaine, and **L Bollinger**. Exercise guidelines for persons with multiple sclerosis. Strength and Conditioning Journal. 33: 30-33, 2011.

Abstracts:

- 1) **LM Bollinger** and JJ Brault. Skeletal muscle of extremely obese women is insensitive to atrophic stimuli. The Physiologist. Program number 23.4. December, 2012.

Posters:

- 1) **LM Bollinger** and JJ Brault. FoxO and SMAD3 coordinately regulate MuRF-1 gene transcription. Research and Creative Activities Week. East Carolina University. April 8-12, 2013.
- 2) **LM Bollinger** and JJ Brault. Skeletal muscle of extremely obese women is insensitive to atrophic stimuli. 2012 APS/ACSM Intersociety Meeting: Integrative Biology of Exercise VI. Westminster, CO. October 12, 2012.
- 3) JJ Brault and **LM Bollinger**. Skeletal muscle of obese humans has normal protein turnover but is atrophy resistant. International Biochemistry of Exercise. Stockholm, Sweden. June 17-21, 2012.
- 4) **LM Bollinger**, SO Warner, MA Linden, MA Ruebel, Y Liu, RS Rector, J Friesen, JA Potteiger, SP Sayers, JP Thyfault, and TR Thomas. A proposed scoring system for quantification of metabolic syndrome severity. American College of Sports Medicine-Central States Chapter Meeting. Kansas City, MO. October, 2008.
- 5) **L Bollinger**, JP Thyfault, RS Rector, SO Warner, PS Hinton, Y Liu, and TR Thomas. Effects of exercise on plasminogen activator inhibitor-1 during weight loss and regain. American College of Sports Medicine-Central States Chapter Meeting. Kansas City, MO. October, 2007.

Presentations:

- 1) Interdepartmental Joint Metabolism Meeting, East Carolina University. Atrophy Resistance in Obese Skeletal Muscle. March 29, 2012.

Funding and Awards:

2012-2013 American College of Sports Medicine Foundation
Doctoral Student Research Award-\$5,000
Title: Atrophy resistance in human myotubes expressing high myostatin
Lance Bollinger-Principal Investigator

East Carolina University Graduate School
Travel Award-\$500 for travel to Integrative Biology of Exercise VI (Oct. 10-13)

Service:

2011-Present International Journal of Sports Medicine
Reviewer

Jan.-April 2012 National Strength and Conditioning Association (NSCA)
Ad-hoc member: Certified Special Populations Specialist Exam Development Committee

Certifications:

2008-Present American College of Sports Medicine (ACSM)
Certified Clinical Exercise Specialist (CES)

2006-Present National Strength and Conditioning Association (NSCA)
Strength and Conditioning Specialist (CSCS)

Professional Memberships:

American College of Sports Medicine
American Physiological Society

Professional References:

Jeffrey J. Brault, Ph.D-mentor

Assistant professor: Departments of Kinesiology, Physiology, and Biochemistry and Molecular Biology East Carolina University
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John Thyfault, Ph.D-advisor for Master's degree

Associate Professor: Departments of Nutrition and Exercise Physiology, Internal Medicine-Division of Gastroenterology and Hepatology, Harry S. Truman Memorial VA Hospital-Research Division
University of Missouri
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Timothy Gavin, Ph.D-professor

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