

ERIC C. BREDAHL

Phone: (402) 280-3471 | **Email:** ericbredahl@creighton.edu

EDUCATION

University of Northern Colorado, Greeley, CO
Ph.D., Sport & Exercise Science (Expected 2015)
Exercise Science Emphasis
Minor, Applied Statistics & Research Methods

College of St. Scholastica, Duluth, MN
M.S., Sport & Exercise Science (2011)
Exercise Physiology Emphasis

Colorado State University-Pueblo, Pueblo, CO
B.S., Sport & Exercise Science (2009)
Exercise Science Emphasis

PROFESSIONAL EXPERIENCE

2015-Present
Assistant Professor
Creighton University
Omaha, NE

2011-2015
Graduate Research Assistant
Rocky Mountain Cancer Rehabilitation Institute
University of Northern Colorado
Greeley, CO

2011- 2013
Graduate Teaching Assistant
School of Sport & Exercise Science
University of Northern Colorado
Greeley, CO

2010 - 2011
Graduate Teaching Assistant
College of St. Scholastica
Duluth, MN

2008-2010
Lead Trainer
YMCA of Pueblo
Pueblo, CO

2007-2010
Rehabilitation Technician
Physical Therapy Department
Parkview Medical Center
Pueblo, CO

AREA OF SPECIALIZATION

- ◆ Strength and conditioning
- ◆ Exercise physiology
- ◆ Muscle physiology
- ◆ Cancer rehabilitation

RESEARCH INTERESTS

- ◆ Minimizing chemotherapy-induced muscle dysfunction with exercise
- ◆ Rehabilitation techniques capable of preserving functional capacity during and following chemotherapy
- ◆ Effects of nutritional interventions to minimize cancer related fatigue
- ◆ Muscle mass recovery after exercise

COURSES TAUGHT

Fall 2013

Exercise Assessment and Programming, SES 490
(Undergraduate)
School of Sport and Exercise Science
University of Northern Colorado

Spring 2013

Exercise Assessment and Programming Lab, SES 490
(Undergraduate)
School of Sport and Exercise Science
University of Northern Colorado

Spring 2012

Exercise Physiology II Lab, SES 324
(Undergraduate)
School of Sport and Exercise Science
University of Northern Colorado

Fall 2010 & Spring 2011

Applied Exercise Physiology Lab, EXP 6531
(Graduate)
School of Health Sciences
College of St. Scholastica

CERTIFICATIONS

- ◆ Certified Strength and Conditioning Specialist (National Strength and Conditioning Association)

PUBLICATIONS

In Preparation

Bredahl E, Quinn C, Hayward R, Hydock D. Effects of endurance training and resistance training on doxorubicin-induced muscle dysfunction.

Bredahl C, Hydock D. The effects of creatine incubation on doxorubicin-induced muscle dysfunction.

Quinn C, **Bredahl E**, Hayward R, Hydock D. Effects of chronic exercise on doxorubicin-induced thymic damage.

Refereed

Hayward R, Hydock D, Gibson N, Greufe S, **Bredahl E**, Parry T. Tissue retention of doxorubicin and its effects on cardiac, smooth, and skeletal muscle function. Journal of Physiology and Biochemistry. 69:177-187, 2013.

Abstracts

Hydock D, **Bredahl E**, Gibson N, Quinn C, Hayward R. Correlations between skeletal muscle and cardiac function in exercised and sedentary rats receiving doxorubicin. Medicine & Science in Sports & Exercise. 46: S152, 2014.

Quinn C, Elzaidi N, Gibson N, **Bredahl E**, Hayward R, Hydock DS. Skeletal muscle SERCA expression following doxorubicin treatment: effects of exercise. Medicine & Science in Sports & Exercise. 46: S273, 2014.

Bredahl E, Hydock D. The effects of creatine incubation on doxorubicin-induced muscle dysfunction. Medicine & Science in Sports & Exercise. 46: S370, 2014.

Hydock D, **Bredahl E**, Gibson, N, Quinn, C, Hayward R. Differential effects of endurance training and resistance training on doxorubicin-induced skeletal muscle dysfunction. The Journal of the Federation of American Societies for Experimental Biology 28: 884.5, 2014.

Quinn C, Gibson N, Bashore A, **Bredahl E**, Hayward R, Hydock D. Protective effect of chronic exercise against doxorubicin exposure in the rat thymus. The Journal of the Federation of American Societies for Experimental Biology 28: 884.4, 2014.

Bredahl E, Pfannenstiel K, Greufe S, Gibson N, Quinn C, Schneider C, Hayward R, Hydock D. Effects of a resistance training model on doxorubicin-induced muscle dysfunction in the rat. Medicine & Science in Sports & Exercise. 45: S150, 2013.

Hydock D, **Bredahl E**, Gibson N, Quinn C, Schneider C, Hayward R. Endurance exercise and doxorubicin-induced skeletal muscle dysfunction. The Journal of the Federation of American Societies for Experimental Biology 27: 712.27, 2013.

Quinn C, Gibson N, **Bredahl E**, Schneider C, Hayward R, Hydock D. Intramuscular doxorubicin accumulation and skeletal muscle fatigue: effects of prior exercise. The Journal of the Federation of American Societies for Experimental Biology 27: 712.28, 2013.

Bredahl E, Hydock D, Iwaniec U, Turner R, Parry T, Schneider C, Hayward H. Effects of treadmill training on doxorubicin and goserelin acetate-induced bone degeneration. American Physiological Society Intersociety Meeting: The Integrative Biology of Exercise VI Meeting Program, 2012.

PRESENTATIONS

Hydock D, **Bredahl E**, Gibson N, Quinn C, Hayward R. Correlations between skeletal muscle and cardiac function in exercised and sedentary rats receiving doxorubicin. Poster Presentation, American College of Sports Medicine National Meeting, Orlando, FL, 2014.

Quinn C, Elzaidi N, Gibson N, **Bredahl E**, Hayward R, Hydock D. Skeletal muscle SERCA expression following doxorubicin treatment: effects of exercise. Poster Presentation, American College of Sports Medicine National Meeting, Orlando, FL, 2014.

Bredahl E, Hydock D. The effects of creatine incubation on doxorubicin-induced muscle dysfunction. Poster Presentation, American College of Sports Medicine National Meeting, Orlando, FL, 2014.

Hydock D, **Bredahl E**, Gibson, N, Quinn, C, Hayward R. Differential effects of endurance training and resistance training on doxorubicin-induced skeletal muscle dysfunction. Poster Presentation, Experimental Biology Meeting, San Diego, 2014.

Quinn C, Gibson N, Bashore A, **Bredahl E**, Hayward R, Hydock D. Protective effect of chronic exercise against doxorubicin exposure in the rat thymus. Poster Presentation, Experimental Biology Meeting, San Diego, 2014.

Bredahl E, Hydock D. The effects of creatine incubation on doxorubicin-induced muscle dysfunction. Poster Presentation, Rocky Mountain American College of Sports Medicine Annual Meeting, Denver, CO, 2014.

Bredahl E, Pfannenstiel K, Greufe S, Gibson N, Quinn C, Schneider C, Hayward R, Hydock D. Effects of a resistance training model on doxorubicin-induced muscle dysfunction in the rat. Poster Presentation, American College of Sports Medicine National Meeting, Indianapolis, IN, 2013.

Hydock D, **Bredahl E**, Gibson N, Quinn C, Schneider C, Hayward R. Endurance exercise and doxorubicin-induced skeletal muscle dysfunction. Poster Presentation, Experimental Biology Meeting, Boston, MA, 2013.

Quinn C, Gibson N, **Bredahl E**, Schneider C, Hayward R, Hydock D. Intramuscular doxorubicin accumulation and skeletal muscle fatigue: effects of prior exercise. Poster Presentation, Experimental Biology Meeting, Boston, MA, 2013.

Bredahl E, Pfannenstiel K, Greufe S, Gibson N, Quinn C, Schneider C, Hayward R, Hydock D. Effects of a resistance training model on doxorubicin-induced muscle dysfunction in the rat. Poster Presentation, Rocky Mountain American College of Sports Medicine Annual Meeting, Denver, CO, 2013.

Bredahl E, Gibson N, Greufe S, Pfannenstiel K, Parry T, Schneider C, Hayward R, and Hydock D. Intramuscular Doxorubicin Accumulation and Skeletal Muscle Function. American College of Sports Medicine National Meeting, San Francisco, CA, 2012.

Bredahl E, Hydock D, Iwaniec U, Turner R, Parry T, Schneider C, Hayward H. Effects of treadmill training on doxorubicin and goserelin acetate-induced bone degeneration. Poster Presentation, American Physiological Society Intersociety Meeting: The Integrative Biology of Exercise, Westminster, CO, 2012.

Kenefick K, Smith J, **Bredahl E**, Hydock D. Rat metabolic responses during treadmill running following doxorubicin injections in sedentary and exercise trained rats. Poster Presentation, American Physiological Society Intersociety Meeting: The Integrative Biology of Exercise, Westminster, CO, 2012.

Bredahl E, Gibson N, Greufe S, Pfannenstiel K, Parry T, Schneider C, Hayward R, Hydock D. Intramuscular doxorubicin accumulation and skeletal muscle dysfunction. Poster Presentation, American College of Sports Medicine National Meeting, San Francisco, CA, 2012.

Bredahl E, Gibson N, Greufe S, Pfannenstiel K, Parry T, Schneider C, Hayward R, Hydock D. Intramuscular doxorubicin accumulation and skeletal muscle dysfunction. Poster Presentation, Rocky Mountain American College of Sports Medicine Annual Meeting, Colorado Springs, CO, 2012.

Invited

Bredahl E. Minimizing the Side Effects of Chemotherapy with Exercise. University of Colorado-Colorado Springs. Fall Colloquium Series. Colorado Springs, CO, 2014.

FUNDING

2014

Sport and Exercise Science Travel Grant
University of Northern Colorado

The effects of creatine incubation on doxorubicin-induced muscle dysfunction.
\$500

2013

Sport and Exercise Science Travel Grant
University of Northern Colorado

Effects of a resistance training model on doxorubicin-induced muscle dysfunction in the rat.
\$500

2012

Graduate Student Association Research Grant
University of Northern Colorado

Effects of treadmill training on doxorubicin and goserelin acetate-induced bone degeneration
\$256

UNIVERSITY SERVICE

2013 & 2014

Research Mentor
University of Northern Colorado Frontiers of Science
Greeley, CO

COMMUNITY SERVICE

Race Against Cancer – Volunteer (2011, 2012, and 2013)

YMCA Corporate Cup – Volunteer (2009)

HONORS & AWARDS

2014

Outstanding Student presentation 4th place
American College of Sports Medicine Rocky Mountain Chapter
Regional meeting

2014

Nomination for excellence in research
Natural Health Sciences, Student Research Celebration
University of Northern Colorado

2013

Nomination for excellence in research
Natural Health Sciences, Student Research Celebration
University of Northern Colorado

2013

Research Excellence Award Recipient for 2nd Place
Annual Research Conference
University of Northern Colorado

PROFESSIONAL AFFILIATIONS

American College of Sports Medicine (2011 – Present)

National Strength and Conditioning Association (2012, 2014-Present)