

David Edwards, Ph.D.

Associate Professor, Department of Kinesiology
Curry School of Education
University of Virginia
210 Emmet St South,
Charlottesville, VA
dae7c@virginia.edu
434-243-8840

EDUCATION

- Ph.D. Exercise Physiology, 2011**
University of Miami
- M.S. Exercise Physiology, 2007**
University of Miami
- B.S. Psychology, 2003**
Florida International University – Cum Laude

TEACHING and ADMINISTRATIVE EXPERIENCE

- Faculty, at University of Virginia. May 2012 – present.
 - Courses:
 - Contemporary health issues – undergraduate
 - Exercise Physiology - undergraduate
 - Exercise principles for health, fitness, and chronic disease – graduate
 - Exercise testing, evaluation, and prescription - graduate
 - Exercise intervention in disease - graduate
 - Administrative:
 - Undergraduate coordinator for prospective students in the program of Kinesiology
 - Co-coordinator of the Undergraduate Kinesiology Program
 - Faculty liaison for the Undergraduate Kinesiology Club
- Adjunct Faculty at James Madison University. Spring 12, two sections of Wellness GKIN 100
 - Topics covered include:
 - Introduction to health and wellness
 - Basic nutrition
 - Introduction to cardiovascular exercise
 - Introduction to resistance exercise
- Adjunct Faculty at Bridgewater College. Fall 11, four sections of Wellness ES-105.

- Topics covered include:
 - Theories of behavior change
 - Health literacy
 - Self-selected wellness behavior modification
 - Introduction to wellness
- Instructor for undergraduate Cardiorespiratory Lab at the University of Miami for four semesters: Spring 07, Fall 08, Fall 09, Spring 09.
- Topics covered include:
 - VO₂ max and sub-max testing
 - ECG preparation and basic interpretation
 - Spirometry: collection of lung volumes using the metabolic cart
 - Methods of assessing body composition
 - Hydrostatic weighing
 - DEXA
 - Bioelectric impedance
 - Skinfold calipers
 - Anaerobic threshold testing
- Instructor for undergraduate Neuromuscular Lab at the University of Miami for four semesters: Spring 06, Fall 07, Spring 08, Fall 10.
- Topics covered include:
 - Maximal and sub-max strength testing
 - Anaerobic power assessment
 - Agility assessment
 - Balance assessment
 - Electromyography preparation and analysis
 - Flexibility Assessment
 - Whole body vibration research and training
- Adjunct Faculty for Total Wellness and Aerobic Wellness courses at Broward College for four semesters: Summer I 08, Summer II 08, Fall 08, Spring 09.
- Topics covered include:
 - Introduction to health and wellness
 - Basic nutrition
 - Introduction to cardiovascular exercise
 - Introduction to resistance exercise

FIELD EXPERIENCE

- Fitness Specialist at Rockingham Memorial Wellness Center, September 2011 – 2012.

- Responsibilities include:
 - Submaximal VO₂ estimation
 - Body composition assessment
 - Cardiovascular exercise prescription
 - Strength assessment
 - Resistance exercise prescription
 - Flexibility and balance assessment
- Clinical Exercise Physiologist at Canyon Ranch Hotel and Spa, Miami Beach, April 2010 – June 2011.
- Responsibilities include:
 - VO₂ max assessment and interpretation
 - Submaximal VO₂ estimation
 - Body composition assessment
 - Cardiovascular exercise prescription
 - Strength assessment
 - Resistance exercise prescription
 - Flexibility and balance assessment
- 3 years experience working as a personal trainer at the University of Miami Herbert Wellness Center, 2005 – 2007.

Grants / Awards

- 4 VA Scale-Up Award Recipient, Fall 2017. Does acute and/or chronic exercise protect older adults from high fat meal induced lipemia, glycemia, and inflammation?
 - \$10,000

RESEARCH EXPERIENCE

- Study Coordinator: Exercise Dosing Trial for Individuals with Parkinson's Disease, 2015 – Current
 - Responsible for coordinating subject assessments pre-and post-intervention, coordinating subjects 16-week exercise training, and data management.
- Graduate Research Coordinator for the Laboratory of Neuromuscular Research and Active Aging, August 2010 – May 2011
 - Responsible for coordinating all research studies in the Laboratory of Neuromuscular Research and Active Aging, including coordinating lab availability, recruiting and training personnel to perform studies, subject recruitment, and maintenance of equipment.
- Primary Research Coordinator for studies in aging, August 2010 – May 2011
 - Study investigating the effect of a chronic stretching program on muscular power performance, activities of daily living performance, and range of motion. Responsibilities

include literature review and writing proposal for our internal review board, subject recruitment and data collection.

- Study validating a questionnaire capable of assessing performance of activities of daily living in an aging population. Responsibilities include subject recruitment, data collection, supervising undergraduate researchers, and constructing and obtaining equipment needed for testing of ADL function.
- Study developing a field test capable of assessing hip flexion, as well as ankle plantar and dorsi flexion. Responsibilities include data collection.
- Primary Research Coordinator for studies involving power and oxygen consumption, August 2010 – May 2011
 - Study investigating changes in oxygen consumption at various riding positions during a spinning exercise. Responsibilities include data collection, training of undergraduate and graduate researchers on use of metabolic cart and EMG equipment.
- Research Assistant and Group Leader for Healthy Start Summer Program, Summer 2009, 2010, 2011.
 - Research project examining the effect of an intensive summer camp program on physical function, anthropometrics, and psychosocial variables in high school students from low socio-economic areas of Miami-Dade County. Responsibilities included data collection, daily lectures to the participants in the program, and leading daily exercise sessions. Challenges included teaching physiological concepts to diverse student body in terms of education, cultural, and physical abilities.
- Past Research Experience
 - Researching the effects of whole body vibration on flexibility in young and elderly populations, 2009 - 2010.
 - Worked with Dr. Joseph Signorile at the Veterans' Affairs Hospital on studies involving whole body vibration, flexibility, oxygen consumption and power in the elderly, Summer 2007.
 - Performed data collection with Dr. Jessica Adams for her dissertation research involving whole body vibration and acute power changes, Fall 2007.

PUBLICATIONS

Published Manuscripts

- Serravite DH, **Edwards DA**, Edwards ES, Gallo SE, Signorile JF. Loading and concurrent synchronous whole-body vibration interaction increases oxygen consumption during resistance exercise. *Journal of Sports Science and Medicine*. 2013 12, 475 – 480.
- Bedient AM, Adams JB, **Edwards DA**, Serravite DH, Huntsman E, Mow SE, Roos BA, Signorile JF. Displacement and frequency for maximizing power output resulting from a bout of whole-body vibration. *J Strength Cond. Res*. 2009 Sep;23(6):1683-7.

- Adams JB, **Edwards D**, Serravite DH, Bedient AM, Huntsman E, Jacobs KA, Del Rossi G, Roos BA, Signorile JF. Optimal frequency, displacement, duration, and recovery patterns to maximize power output following acute whole-body vibration. *J Strength Cond. Res.* 2009 Jan;23(1):237-45.

Free Communications / Poster Abstracts

- **Edwards, David A.**; Jeffreys, Renee.; Jackson, William.; Nicholas, Drake.; Rees, Erika, A. Exercise is Medicine on Campus: Programs and Learnings from SEACSM Institutions. Symposium, Southeast ACSM Annual Meeting, 2016.
- **Edwards, David A.**; Edwards, Elizabeth S.; Raeburn, Jennifer M.; Roos, Bernard A.; Signorile, Joseph F. The Effect of Two Aquatic Exercise Programs on Activities of Daily Living in Older Persons. *Medicine & Science in Sports & Exercise.* 43(5) Supplement: S351, May 2011.
- Raeburn, Jennifer M.; **Edwards, David A.**; Edwards, Elizabeth S.; Roos, Bernard A.; Signorile, Joseph F. Aquatic Exercise Programs Improve Upper and Lower Body Strength and Power in the Elderly. *Medicine & Science in Sports & Exercise.* 43(5) Supplement: S351, May 2011.
- Edwards, Elizabeth S.; Stoutenberg, Mark; **Edwards, David A.**; Perry, Arlette C. A Summer Program May Not Be Enough to Improve Psychosocial Effects Related to Exercise. *Medicine & Science in Sports & Exercise.* 43(5) Supplement: S422, May 2011.
- **Edwards, David A.**; Serravite, Daniel; Vitali, Gined; Signorile, Joseph. Surface EMG Median Power Frequency Shifts as an Indicator of Quadriceps Synchronization Following Whole Body Vibration. *Medicine & Science in Sports & Exercise.* 42(5): 583, May 2010.
- Serravite, Daniel, H; **Edwards, David**; Vitali-Gamen, Ginned; Signorile, Joseph. Increased Postactivation Potentiation With Whole Body Vibration. *Medicine & Science in Sports & Exercise.* 42(5): 317, May 2010.
- **Edwards, David A.**; Skidmore, Elizabeth C.; Signorile, Joseph F. The Acute Effects Of Whole Body Vibration On Hamstring Flexibility. *Medicine & Science in Sports & Exercise.* 41(5) Supplement 1:80, May 2009.
- Skidmore, Elizabeth C.; **Edwards, David A.**; Pyatok, Toni L.; Serravite, Daniel H.; Signorile, Joseph F. No Significant Difference In Oxygen Consumption Between Circuit And Hypertrophy Training At Different Speeds. *Medicine & Science in Sports & Exercise.* 41(5) Supplement 1:138, May 2009.
- **Edwards DA**, Smith W, Signorile JF. 30s Chair Stand Power is Significantly Lower in Senior Walking Aid Users Versus Non-Users. *Medicine & Science in Sports & Exercise.* 40(5) Supplement 1:S374, May 2008.
- Serravite, Daniel; **Edwards, David**; Skidmore, Elizabeth; Signorile, Joseph. Acute Effect of Frequency, Amplitude and Load Changes on Oxygen Consumption during Whole Body Vibration. *Medicine & Science in Sports & Exercise.* 40(5) Supplement 1:S161, May 2008.

- **Edwards, David A.**; Huntsman, Emy; Marmesh, Liz; Signorile, Joseph F. The Effect of Selective Stretching of the Agonist and Antagonist Muscles on Power Output. *Medicine and Science in Sports and Exercise* (Supplement) 39(5): S302, 2007.

PROFESSIONAL AFFILIATIONS & CERTIFICATIONS

- Current Member of American College of Sports Medicine,
 - Student member, 2007 – 2011
 - Professional member, 2012 – Current
- National Strength and Conditioning Association – Certified Personal Trainer, 2005 – 2015.

PROFESSIONAL SERVICE

- Invited Reviewer for Journal of Strength and Conditioning Research, 2014 – current.

AWARDS AND HONORS

- Thomas S. Miller Award for Outstanding Doctoral Student in The Department of Kinesiology and Sports Sciences, May 9, 2011.
- Second place in the Research and Creativity Forum for Graduate Research in Education and Public Health – University of Miami, April 2007.
 - *The Effect of Selective Stretching of the Agonist and Antagonist Muscles on Power Output.*