

## **Devon A. Dobrosielski, Ph.D.**

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### **EDUCATION**

- Ph.D. 2007      **Louisiana State University-** Baton Rouge, LA  
Concentration: Exercise Physiology  
Major Advisor: Michael A. Welsch
- M.S. 2001      **Wake Forest University-** Winston-Salem, NC  
Concentration: Health & Exercise Science  
Major Advisor: Peter H. Brubaker
- B.S. 1999      **The Pennsylvania State University-** State College, PA  
Major: Kinesiology

### **PROFESSIONAL EXPERIENCE**

- Aug 2009-presnt      **Johns Hopkins University School of Medicine-** Baltimore, MD  
*Instructor*
- Aug 2007-Jul 2009      **Wake Forest University-** Winston-Salem, NC  
*Visiting Assistant Professor*
- Aug 2005-May 2007      **Our Lady of the Lake College-** Baton Rouge, LA  
*Adjunct Instructor*
- Aug 2005-Aug 2007      **Pennington Biomedical Research Center & Louisiana State University-** Baton Rouge, LA  
*Research Fellow for “The Louisiana Healthy Aging Study,”  
National Institutes of Health*
- Aug 2003-May 2007      **Louisiana State University-** Baton Rouge, LA  
*Graduate Student Teaching Assistant*
- Jun 2001-Aug 2003      **Johns Hopkins Bayview Medical Center-** Baltimore, MD  
*Exercise Physiologist/Research Assistant for the General Clinical  
Research Center, National Institutes of Health*

- Aug 2000-Jun 2001 **Wake Forest University Baptist Medical Center-**  
Winston-Salem, NC  
*Cardiac Rehabilitation Patient Recruiter*
- Apr 2000-Jun 2001 **Wake Forest University, Dept. of Health & Exercise Science-**  
Winston-Salem, NC  
*Research Exercise Physiologist for the “Cardiovascular Health and Maintenance Program,” National Institutes of Health*
- Aug 1999-Jun 2001 **Wake Forest University Cardiac Rehabilitation Program-**  
Winston-Salem, NC  
*Clinical Exercise Physiologist*
- Aug 1999-Jun 2001 **Wake Forest University, Dept. of Health & Exercise Science-**  
Winston-Salem, NC  
*Graduate Student Teaching Assistant*
- Jan 1999-Jun 1999 **The Duke Center for Living-** Durham, NC  
*Clinical Exercise Physiologist & Exercise Leader*

## **TEACHING**

- Courses Taught at: **Wake Forest University-** Winston-Salem, NC
- HES 354- Assessment Techniques in HES (3 semesters)  
HES 350- Human Physiology (1 semester)  
HES 353- Physiology of Exercise (2 semester)
- Our Lady of the Lake College-** Baton Rouge, LA
- Aug 2005-May 2007 GERO 350- The Physiology of Aging (1 semester)  
GERO 200- Fundamentals of Movement Science (2 semesters)
- Louisiana State University-** Baton Rouge, LA
- Aug 2003-May 2007 KIN 3534- Scientific Basis for Exercise Prescription (3 semesters)  
KIN 2504- Principles of Conditioning (6 semesters)  
KIN 1999- Principles of Conditioning Lab (4 semesters)  
KIN 1155- Beginner Jogging (1 semester)
- Wake Forest University-** Winston-Salem, NC
- Aug 1999-May 2001 HES 101- Exercise for Health (4 semesters)

## GRANTS

**1 RO1 HL086026-01A2 (Stewart-PI)**

**07/01/2009-06/30/2011**

NIH/NHLBI

**Weight Loss Diet With and Without Exercise in Type 2 Diabetes and Prediabetes**

This randomized trial will compare the effects of weight loss diet with and without a supervised exercise program in persons with diabetes and prediabetes for their effects on body composition parameters of cardiovascular structure and function.

Role: Investigator

**NIDDK R0162368 (Stewart-PI)**

**02/02/04-12/31/09**

NIH

**Exercise Training in Type 2 Diabetes and Hypertension**

This randomized trial will test the effects of exercise training in persons with both Type 2 diabetes and mild forms of hypertension. The outcomes are BP and related parameters of CV structure and function.

Role: Investigator

**5R01HL089474-02 (Becker)**

**08/01/08-07/31/13**

NIH/NHLBI

**Community Exercise and Metabolic Syndrome in Black Families**

This study will examine the effects of exercise training on metabolic syndrome in family members of patients with premature heart disease.

Role: Investigator

**R21 HK095157-01A (Clark)**

**01/01/2009-12/31/2011**

NIH/NHLBI

**Cardiovascular and hepatic effects of exercise in hypertensive adults**

A data analysis of effects of exercise in subjects with hypertension with and without diabetes on parameters of cardiovascular structure and function in relation to changes in body composition with a special focus on hepatic fat.

Role: Investigator

**NHLBI 1R01HL092280 (Stewart)**

**09/30/09-09/29/11**

NIH

**Two Diets With Exercise in Abdominal Obesity: Cardiovascular Effects**

This 6-month study will examine if a low-carbohydrate diet plus exercise compared with a low-calorie, low-fat diet plus exercise improves cardiovascular parameters that are early markers of heart disease in persons with abdominal obesity, and positive findings would recognize more choices for weight loss and reducing cardiovascular disease risk.

Role: Investigator

**1R21NS055999-01A2 NIH: Howard (PI)**

**9/15/2007-7/31/2009**

**Genetic evaluation of nitric oxide regulating genes in ischemic stroke**

The overall goal of this project is to evaluate variations in genes in the NO pathway and their relationship to ischemic stroke and subclinical endothelial dysfunction

Role: Co-investigator

**WFU Science Research Fund: Brubaker, Rosenbaum, Dobrosielski (PI)**

**4/7/2008-4/6/2009**

**Assessing Cardiovascular Risk in Athletes (ACRA)**

The main goal of this project is to determine whether college football players exhibit cardiovascular structural and functional abnormalities that are indicative of sub-clinical CVD and to determine their association with traditional risk factors and markers of chronic inflammation.

Role: Co-PI

**PUBLICATIONS**

Createur DP, **Dobrosielski DA**, Arce-Esquivel AA, Welsch MA. Brachial artery retrograde flow increases with age: relationship to physical function. *Eur j Appl Physiol.* 2009 Sep;107(2):219-25.

**Dobrosielski DA**, Greenway F, Welsh DA, Jazwinski SM, Welsch MA. Modification of vascular function after handgrip exercise training in 73- to 90-yr-old men. *Med Sci Sports Exerc.* 2009 Jul;41(7):1429-35.

Welsch MA, **Dobrosielski DA**, Arce AA, Wood RH, Ravussin E, Jazwinski SM. The association between brachial artery flow-mediated dilation and physical function in older men. *Med Sci Sports Exerc.* 2008 Jul;40(7):1237-1243.

Ayabe M, Brubaker PH, **Dobrosielski D**, Miller HS, Kiyonaga A, Shindo M, Tanaka H. Target step count for the secondary prevention of cardiovascular disease. *Circ J.* 2008 Feb;72(2):299-303.

Bahadir Z, Tisdell E, Arce AA, **Dobrosielski DA**, Welsch MA. Influence of venous emptying on the reactive hyperemic blood flow response. *Dyn Med.* 2007 Mar; 14; 6(1):3.

**Dobrosielski DA**, Arce AA, Allen JD, Wood RH, Welsch MA. Biphasic responses of the brachial artery diameter following forearm occlusion: a blunted response in the elderly. *Dyn Med.* 2006 Apr; 5; 5:4.

Stewart KJ, Sung J, Silber HA, Fleg JL, Kelemen MD, Turner KL, Bacher AC, **Dobrosielski DA**, DeRegis JR, Shapiro EP, Ouyang P. Exaggerated exercise blood pressure is related to impaired endothelial vasodilator function. *Am J Hypertens*. 2004 Apr; 17 (4): 314-20.

Ayabe M, Brubaker PH, **Dobrosielski D**, Miller HS, Ishi K, Yahiro T, Kiyonaga A, Shindo M, Tanaka H. The physical activity patterns of cardiac rehabilitation program participants. *J Cardiopulm Rehabil*. 2004 Mar-Apr; 24 (2): 80-6.

Mihalko SL, **Dobrosielski DA**, Brubaker PH, Rejeski WJ. Do Changes in Functional Capacity Influence Quality of Life? *AJMS*. 2003 Nov-Dec; 5 (6): 357-362.

**Dobrosielski DA**, Brubaker PH, Berry MJ, Ayabe M, Miller HS. The metabolic demand of golf in patients with heart disease and in healthy adults. *J Cardiopulm Rehabil*. 2002 Mar-Apr; 22(2):96-104.

## PRESENTATIONS

**Dobrosielski DA**, Marsh AP, Presley TD, Perlegas AS, Kim-Shapiro DB, Rejeski WJ. (May 2009) *Change in plasma nitrite following an acute bout of exercise in older women*. Presented at the annual meeting of the American College of Sports Medicine. Seattle, WA.

### Symposium:

Michael A. Welsch, Louisiana State University; Arturo A. Esquivel, University of Missouri; **Devon A. Dobrosielski**, Wake Forest University; Jason D. Allen, Duke University (February 2008). *Vascular Health and Performance: Linking Biochemistry and Physiology with Physical Function*. Presented at the annual meeting of the Southeast Chapter of the American College of Sports Medicine, Birmingham, AL.

**Dobrosielski, DA**. (February 2008) *Linking Vascular Physiology to Physical Function: Findings from the Louisiana Healthy Aging Project*. Presented at the Sticht Center Conference on Aging. Winston-Salem, NC.

**Dobrosielski, DA**, Greenway F, Welsch MA. (May 2008) *Time Course for Vascular Improvements with Localized Exercise Training in Elderly Men*. Presented at the annual meeting of the American College of Sports Medicine, Indianapolis, IN.

**Dobrosielski DA**, Arce-Esquivel AA, Welsch MA, Ravussin E. (May 2007) *The Influence of Muscle Mass on Shear Rate and Brachial Artery Flow-mediated Dilation in the Elderly*. Presented at the annual meeting of the American College of Sports Medicine, New Orleans, LA.

Arce AA, **Dobrosielski DA**, Fabre J, Wood RH, Welsch MA, Jazwinski SM.

(May 2006) *Influence of Carotid Dimensions and Brachial Artery Flow-Mediated Dilation on the 6-minute Maximum Walking Distance*. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO.

**Dobrosielski DA**, Welsch MA, Arce AA, Frisard M, Hegde V, Deutsch A, Wood RH, Jazwinski SM. (May 2005). *Oxidative DNA Damage, and Vascular and Physical Function in Healthy Aging*. Presented at the annual meeting of the American College of Sports Medicine, Nashville, TN.

**Dobrosielski DA**, Arce AA, Li L, Allen JD, Welsch MA. (May 2004) *Comparison of Temporal Responses of the Brachial Artery Following Forearm Occlusion In Younger Vs. Older Adults*. Presented at the annual meeting of the American College of Sports Medicine, Indianapolis, IN.

**Dobrosielski DA**, Arce AA, Li L, Allen JD, Welsch MA. (January 2004). *Comparison of Temporal Responses of the Brachial Artery Following Forearm Occlusion in Younger vs. Older Adults*. Presented at the annual meeting of the Southeast Chapter of the American College of Sports Medicine, Atlanta, GA.

**Dobrosielski DA**, Turner KL, Sung J, Kelemen MD, DeRegis JR, Bacher AC, Fleg JL, Stewart KJ. (May 2003). *Impaired Endothelial Vasodilator Function But Not Arterial Stiffness is Associated With Maximal Exercise Blood Pressure*. Presented at the annual meeting of the American College of Sports Medicine, St. Louis, MO.

**Dobrosielski DA**, Franckowiak SC, Walston J, Andersen RE. (May 2002). *Changes in Aerobic Fitness Parameters Associated With Diet and Exercise Programs in Overweight Adults*. Presented at the annual meeting of the American College of Sports Medicine, San Francisco, CA.

**Dobrosielski DA**, Franckowiak SC, Walston J, Andersen RE. (November 2001). *Changes in Aerobic Fitness Parameters Associated With Diet and Exercise Programs in Overweight Adults*. Presented at the annual meeting of the Mid-Atlantic Chapter of the American College of Sports Medicine, Bushkill, PA.

**Dobrosielski DA**, Ayabe M, Brubaker PH. (May 2001). *The Metabolic Costs of Golf in Normal Individuals and Cardiac Patients*. Presented at the annual meeting of the American College of Sports Medicine, Baltimore, MD.

Mihalko SL, **Dobrosielski DA**, Brubaker PH, Rejeski WJ. (September 2000). *Do Changes in Functional Capacity Influence Quality of Life?* Presented at the annual meeting of the American Association of Cardiovascular and Pulmonary Rehabilitation, Tampa, FL.

#### **PUBLISHED ABSTRACTS**

Assessment of Cardiac Structure/Function and Risk Factors in collegiat Football Players: Does Body Size Matter? *Medicine Science in Sports and Exercise* 41(5) 2009. Wooster, Ben, Brubaker, Peter H.; Moore, J; **Dobrosielski Devon A**; Rosenbaum Daryl R.

Change in plasma nitrite following and acute bout of exercise in older women

Changes in vascular and physical function with exercise training in the aged

Examination of vascular structure and function in collegiate football players

Changes in plasma nitrite response and arterial endothelial function in peripheral arterial disease subjects following 3 months of exercise training. *Nitric Oxide*. 19(1), 2008. Allen, Jason D.; Lacoste, Katherine; **Dobrosielski Devon A.**; Robbins Jennifer L.; Duscha, Brian D.; Annex, Brian H.

Time Course for Vascular Improvements with Localized Exercise Training in Elderly Men. *Medicine & Science in Sports & Exercise*. 40(5), May 2008. **Dobrosielski, Devon A.**; Greenway F.; Welsch, Michael A.

Lower Leg Blood flow Responses to Vasodilatory and Vasoconstrictor Stimuli. *Medicine & Science in Sports & Exercise*. 39(5) Supplement: S428, May 2007. Lestage, Robert B.; Arce Esquivel, Arturo A.; **Dobrosielski, Devon A.**; Welsch, Michael A.

The Influence of Muscle Mass on Shear Rate and Brachial Artery Flow Mediated Dilation in the Elderly: *Medicine & Science in Sports & Exercise*. 39(5) Supplement: S428, May 2007. **Dobrosielski, Devon A.**; Arce Esquivel, Arturo A.; Landry, Kim; Ravussin, Eric; Welsch, Michael A.

Linking Vascular Function and Functional Ability in Individuals with Peripheral Neuropathy: *Medicine & Science in Sports & Exercise*. 39(5) Supplement:S333, May 2007. Arce Esquivel, Arturo A.; **Dobrosielski, Devon A.**; Manor, Brad; Li, Li; Doherty, Alison; Nester, Renee; Welsch, Michael A.

Influence of Brachial Artery Flow-Mediated Dilation on Estimated  $VO_{2peak}$  and CS-PFP Scores in Elderly Men. *Medicine & Science in Sports & Exercise*. 38(5) Supplement: S431, May 2006. Welsch, Michael A.; **Dobrosielski, Devon A.**; Arce, Arturo A.; Fabre, Jennifer; Wood, Robert H.; Jazwinski, S Michal; Nelson, Arnold.

Influence of Carotid Dimensions and Brachial Artery Flow-Mediated Dilation on the 6-minute Maximum Walking Distance. *Medicine & Science in Sports & Exercise*. 38(5) Supplement: S185, May 2006. Arce, Arturo A.; **Dobrosielski, Devon A.**; Fabre, Jennifer; Wood, Robert H.; Welsch, Michael A.; Jazwinski, S Michal; Nelson, Arnold.

Exercise Therapy in Patients with Peripheral Neuropathy. *Medicine & Science in Sports & Exercise*. 37(5) Supplement:S364, May 2005. Welsch, Michael A.; Arce, Arturo A.; **Dobrosielski, Devon A.**; Wood, Robert H.; Li, Li.

Brachial Artery Dimensions, Reactivity and Distensibility with Advancing Age: *Medicine & Science in Sports & Exercise*. 37(5) Supplement:S360, May 2005. Arce, Arturo A.; Welsch, Michael A.; **Dobrosielski, Devon A.**; Wood, Robert H.; Jazwinski, S Michal.

Oxidative DNA Damage, and Vascular and Physical Function in Healthy Aging. *Medicine & Science in Sports & Exercise*. 37(5) Supplement:S359, May 2005. **Dobrosielski, Devon A.**; Welsch, Michael A.; Arce, Arturo A.; Frisard, Madlyn; Hegde, Vijay; Deutsch, Andy; Wood, Robert H.; Jazwinski, S Michal.

Comparison of Temporal Responses of the Brachial Artery Following Forearm Occlusion In Younger Vs. Older Adults. *Medicine & Science in Sports & Exercise*. 36(5) Supplement:S291, May 2004. **Dobrosielski, Devon A.**; Arce, Arturo A.; Li, Li; Allen, Jason D.; Welsch, Michael A.

Temporal Responses of the Brachial Artery Following Forearm Occlusion in Healthy Adults vs. those with or at Elevated Risk for Coronary Artery Disease. *Medicine & Science in Sports & Exercise*. 36(5) Supplement:S240-S241, May 2004. Miller, Elizabeth.; **Dobrosielski, Devon A.**; Arce, Arturo; Allen, Jason D.; Welsch, Michael A.

Temporal Responses of the Brachial Artery Following Forearm Occlusion. *Medicine & Science in Sports & Exercise*. 36(5) Supplement:S60-S61, May 2004. Arce, Arturo A.; **Dobrosielski, Devon A.**; Li, Li; Allen, Jason D.; Welsch, Michael A.

Influence of Venous Emptying on Reactive Hyperemic Blood Flow and Exercise Performance. *Medicine & Science in Sports & Exercise*. 36(5) Supplement:S25, May 2004. Bahadir, Zeki; Tisdell, Eric; Arce, Arturo A.; **Dobrosielski, Devon A.**; Welsch, Michael A.

Impaired Endothelial Vasodilator Function but Not Arterial Stiffness is Associated with Maximal Exercise Blood Pressure. *Medicine & Science in Sports & Exercise*. 35(5) Supplement 1:S41, May 2003. **Dobrosielski, Devon A.**; Turner, Katherine L.; Sung, J.; Kelemen, Mark D.; DeRegis, James R.; Bacher, Anita C.; Fleg, Jerome L.; Stewart, Kerry J.

Weight Change and Gender: Effects on Central Adiposity. *Medicine & Science in Sports & Exercise*. 35(5) Supplement 1:S32, May 2003. Franckowiak, Shawn C.; **Dobrosielski, Devon A.**; Walston, Jeremy D.; Beamer, Brock A.; Andersen, Ross E.

Changes in Aerobic Fitness Parameters Associated With Diet and Exercise Programs in Overweight Adults. *Medicine & Science in Sports & Exercise*. 34(5) Supplement 1:S91,



2001-Present

**American Heart Association-** Advanced Cardiac Life Support  
Provider

2001-Present

**American Heart Association-** Basic Life Support Provider