

## CURRICULUM VITAE

**CHRISTOPHER A. DESOUZA, Ph.D.**

### **Business Address**

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web page: <http://www.colorado.edu/kines/research/vascular.html>

### **Education**

- 1995 Ph.D. University of Maryland, College Park, Maryland,  
Exercise/Applied Physiology
- 1991 M.A. The George Washington University, Washington D.C.,  
Exercise Science
- 1988 B.P.H.E. University of Toronto, Toronto, Ontario, Canada,  
Physical and Health Education

### **Research Focus**

Effects of cardiovascular and metabolic risk factors, HIV-1 infection and habitual physical activity on vascular endothelial cell function and repair.

### **Professional Experience**

- 2010-Present Professor  
Department of Integrative Physiology  
University of Colorado at Boulder
- 2010-Present Adjunct Professor  
Department of Medicine  
Division of Cardiology  
University of Colorado, Denver Health Sciences Center
- 2008-Present Co-Director  
Clinical Translational Research Center  
University of Colorado at Boulder
- 2005-2010 Adjunct Associate Professor

Department of Medicine  
Divisions of Geriatrics and Cardiology (2007)

- 2005-2010 Associate Professor  
Department of Integrative Physiology  
University of Colorado at Boulder
- 2004-2008 Assistant Program Director  
Adult, General Clinical Research Center  
University of Colorado at Boulder
- 2000-2005 Adjunct Assistant Professor  
Department of Medicine  
Division of Geriatrics  
University of Colorado Health Sciences Center
- 1999-Present Director  
Integrative Vascular Biology Laboratory  
University of Colorado at Boulder
- 1999-2005 Assistant Professor  
Department of Integrative Physiology (Formerly Kinesiology and Applied  
Physiology)  
University of Colorado at Boulder
- 1995-1999 Postdoctoral Research Fellow  
Human Cardiovascular Research Laboratory  
Department of Kinesiology  
University of Colorado at Boulder
- 1992-1995 Instructor  
Department of Kinesiology  
University of Maryland at College Park

**Memberships, Honors, Awards**

American Physiological Society  
American Heart Association Councils: Circulation, Hypertension, and Thrombosis  
Vascular Biology Working Group  
Society for Vascular Medicine and Biology

- 1990 Vincent J. DeAngelis Memorial Scholarship, The George Washington University  
1990 National Student Research Award, Association for Fitness in Business  
1993 American College of Sports Medicine Foundation Doctoral Student Research Award  
1995 Minority Postdoctoral Supplement Award, National Heart, Lung, and Blood Institute  
1996 Minority Postdoctoral Supplement Award, National Institute on Aging  
1996 Minority Travel Fellowship, APS/NIDDK

1997	Minority Travel Fellowship, APS/NIDDK
1998	Travel Fellowship, Society of Experimental Biology and Medicine
1998	Mentored Research Scientist Development Award, NIH/NHLBI
1998	Chancellor's Postdoctoral Fellowship Program for Academic Diversity, University of Colorado
1999	Clinical Research Award, American Diabetes Association
2000	Junior Faculty Development Award, University of Colorado at Boulder
2002	Clinical Research Award, American Diabetes Association
2007	Fellow, American Heart Association, Council on Hypertension
2008	Established Investigator Award, American Heart Association

**Grants Received, Active, and Pending**

<u>Title and Source</u>	<u>Period</u>	<u>Direct Costs</u>
"Effect of Acute Exercise on Fibrinolytic Variables in Older Hypertensives" ACSM Foundation Research Award (P.I.)	1994-1995	\$2,500
"Submaximal Aerobic Exercise and Fibrinolytic Activity" University of Maryland Research Committee Award (P.I.)	1994-1995	\$6,000
"Respiratory Modulation of Sympathetic Activity in Humans" NIH NHLBI Minority Postdoctoral Supplement Award (Mentor: Douglas R. Seals, Ph.D.)	1995-1999	\$162,760
"Effects of Exercise in Postmenopausal Women" NIH NIA Minority Postdoctoral Supplement Award (Mentor: Douglas R. Seals, Ph.D.)	1996-1999	\$183,557
"Aging, Exercise, and Endothelial Function" NIH NHLBI KO1 HL03840 (P.I.)	1998-2003	\$617,782
"Aging, Exercise, and Endothelial Function" NIH NIA KO1 (P.I.) (priority score 131: withdrawn due to NHLBI award)	1998-2003	\$449,899
"Endothelial Function: Aging and Physical Activity" NIH NIA RO3 AG16071 (Co-I) (P.I., D. Seals)	1998-1999	\$50,000
"Endothelial Function: Aging and Physical Activity Status" American Heart Association, Colorado Affiliate AHA Postdoctoral Fellowship (Co-Sponsor) (P.I., L. Shapiro)	1998-1999	\$34,900
"Aerobic Capacity and Strength with Age in Hispanic Women" NIH NIA RO3 AG16387 (Co-I) (P.I., D. Seals)	1998-1999	\$50,000
"Aging, Habitual Physical Activity, and Endothelial Function"	1998-1999	\$2,000

AHA Student Scholarship in Cardiovascular Disease and Stroke  
(Preceptor) (P.I., C. Clevenger)

<u>Title and Source</u>	<u>Period</u>	<u>Direct Costs</u>
“Effects of Exercise on Vascular Endothelial Health and Function in Older Obese/Insulin Resistant Adults” American Diabetes Association, Clinical Research Award (P.I.)	1999-2002	\$300,000
“Age-Related Endothelial Dysfunction” Junior Faculty Development Award, CU-Boulder (P.I.)	2000-2001	\$5,000
“Aging, Regular Physical Activity and Fibrinolytic Capacity of the Endothelium” American Heart Association 0060430Z (P.I.)	2000-2002	\$60,000
“Effects of Exercise on Endothelial Release of Tissue-Type Plasminogen Activator in Older Adults” American Heart Association Predoctoral Fellowship 0110221Z (Sponsor) (P.I. D. Smith)	2001-2003	\$36,000
“Endothelial Abnormalities in Obesity/Insulin Resistance” NIH NHLBI RO1 HL68030 (P.I.)	2002-2006	\$900,000
“Effects of Vitamin C Supplementation on Endothelial Function in Obese/Insulin Resistant Adults” American Diabetes Association Clinical Research Award (P.I.)	2002-2005	\$300,000
“Obesity/Insulin Resistance and Endothelial t-PA Release” NIH NIDDK RO3 DK62061 (P.I.)	2002-2004	\$100,000
“Hormone Replacement and Fibrinolytic Capacity of the Vascular Endothelium” American Heart Association 0255921Z (P.I.)	2002-2004	\$100,000
"Effect of Sleep Deprivation on Inflammatory Markers" NIH/NHLBI HL73196 (Co-I) (P.I., K. Wright)	2003-2005	\$200,000
“Obesity/Insulin Resistance, Vitamin C and Endothelin-1” NIH/NHLBI RO1 HL076434 (P.I.)	2004-2010	\$1,125,000
“Aging, Exercise and Endothelin-1 Vasoconstrictor Tone” NIH/NHLBI HL077450 (P.I.)	2004-2008	\$1,000,000
“Human Aging and Endothelin-1 Vasoconstrictor Activity” NIH/NIA RO3 AG023857 (P.I) (withdrawn due to NHLBI award)	2004-2006	\$100,000

“Latinos Using Cardio Health Actions to Reduce Risk” NIH/NHLBI UO1 HL079160 (Co-I) (P.I., D. Steiner)	2004-2009	\$2,268,808
“Aging, Exercise and Endothelial Progenitor Cells” American Heart Association 0555678Z (P.I.)	2005-2008	\$180,000
“HIV-1 and Endothelial Progenitor Cells” Colorado Center for AIDS Research NIH/CFAR (P.I.)	2006-2007	\$30,000
<i><u>Title and Source</u></i>	<i><u>Period</u></i>	<i><u>Direct Costs</u></i>
“HIV-1 and Endothelial t-PA Release” NIH/NHLBI R21 HL088911 (P.I.)	2007-2010	\$275,000
“HIV-1 and Vascular Endothelial Function” American Heart Association 0840167N (P.I.)	2008-2012	\$500,000
“Vitamin C Supplementation and Endothelial Progenitor Cells in Older Adults” American Heart Association, Predoctoral Fellowship 0810100Z (Sponsor) (P.I. O. MacEneaney)	2008-2010	\$48,000
“Proteomic Approach to Obesity-Related Endothelial Dysfunction” Innovative Seed Grant Program University of Colorado, Boulder	2009-2010	\$21,000
“HIV-1 Infection and Endothelial Progenitor Cell Function” American Heart Association, Predoctoral Fellowship 09PRE2230382 (Sponsor) (P.I. E. Kushner)	2009-2011	\$48,000
“Nebivolol and the Endothelin (ET-1) System (NETS Study)” Forest Laboratories Inc. BYS-MD-57 (P.I.)	2011-2014	\$300,000
“HIV-1, Exercise and Endothelial Function” NIH/NHLBI R01 HL98052 (M.P.I.)	2011-2015	\$1,086,611
“Prehypertension and Endothelial Fibrinolytic Function ” American Heart Association, Predoctoral Fellowship 12PRE9280026 (Sponsor) (P.I. K. Diehl)	2011-2013	\$50,000
“Nebivolol and Endothelial Fibrinolytic Regulation (NERF Study)” Forest Laboratories Inc. BYS-MD-72 (P.I.)	2012-2015	\$300,000

**Teaching**

**Graduate Courses/Seminars**

1997-2001      IPHY 5100: Colloquium in Integrative Physiology  
2010, 2012      Department of Integrative Physiology,  
University of Colorado at Boulder

**Undergraduate Courses/Seminars**

2011-Present    IPHY 3470: Human Physiology 1 (165 students)  
Department of Integrative Physiology  
University of Colorado at Boulder

2002-2007      IPHY 4650: Exercise Physiology (75 students)  
Department of Integrative Physiology,  
University of Colorado at Boulder

1999-2010      IPHY 4680: Special Topics: Vascular Function (24 students)  
Department of Integrative Physiology,  
University of Colorado at Boulder

1994            KNES 289M Topical Investigations Introduction to Kinesiology  
(40 students)  
Department of Kinesiology, University of Maryland at College Park

**Service**

**Intramural**

1990            Faculty Search Committee Department of Exercise Science,  
The George Washington University

1992-1995      Undergraduate Academic Advisor, Department of Kinesiology, University of Maryland

1992-1995      Undergraduate Academic Advisor, Division of Letters and Science, University of Maryland

1994-1995      Human Subjects Review Board, College of Health and Human Performance,  
University of Maryland

1998-present   Faculty Mentor, Undergraduate Research Assistantship Program, University of  
Colorado at Boulder

2000-2001      Faculty Mentor, Ronald E. McNair Postbaccalaureate Achievement Program  
University of Colorado at Boulder

2000-2008      Member, Scientific Advisory Committee, Adult General Clinical Research Center,  
University of Colorado Health Sciences Center

2001-present   Faculty Mentor, Undergraduate Research Opportunity Program, University  
of Colorado at Boulder

2005-present	Chair, Department of Integrative Physiology Diversity Committee, University of Colorado at Boulder
2007-present	Board of Governors, University of Colorado Cardiovascular Institute
2008-present	Member, Scientific Advisory research Committee, Clinical and Translational Research Center
2010-2013	Colorado Initiative in Molecular Biotechnology Task force

Extramural

1996-1999	Committee Member Strategic Health Initiative for Women, Sport and Physical Activity, American College of Sports Medicine
1996-Present	Journal Referee
1999-2000	External Reviewer, Department of Veterans Affairs, Aging and Clinical Geriatrics Review Subcommittee
1999	Abstract Reviewer, Clinical Medicine Section, Gerontological Society of America
1999	Faculty Mentor, APS/NIDDK Minority Travel Fellowship Program
2000	Subject Matter Expert, Harcourt Higher Education, Biological Aspects of Aging Course
2000	External Grant Reviewer, Canadian Foundation for Innovation
2001	Ad hoc Grant Reviewer, National Institute of General Medical Sciences, National Institutes of Health
2001-2004	American Heart Association, Behavioral Science, Epidemiology and Prevention Study Section
2003	Conflict Study Section Review Panel, National Institutes of Health
2003	Grant Reviewer, Canadian Institute of Health Research
2003	Ad hoc, Respiratory Physiology Study Section, National Institutes of Health
2003-2005	Assistant Editor, <i>Exercise and Sport Sciences Reviews</i>
2004-2009	Member, Center for Scientific Review, Clinical and Integrative Cardiovascular Sciences (CICS) Study Section, National Institutes of Health
2006	NIH/NHLBI, Special Emphasis Panel for RFA-HL-06-007 "Weight Loss in Obese Adults with Cardiovascular Risk Factors: Clinical Interventions" (UO1)
2007	NIH/NIDDK, Special Emphasis Panel for Program Project Grant Review
2008	NIH/NHLBI, Special Emphasis Panel Review for CARDIA
2008-Present	Associate Editor, <i>Journal of Applied Physiology</i>
2010	NIH, Member, Special Emphasis Panel ZRG1 EMNR-K (90) S
2010	NIH, Member, Special Emphasis Panel Clinical Hematology ZRG1 VH-F (80) S
2010	NIH, Member, Special Emphasis Panel ZHL1 CSR-S (F2) 1
2011-Present	American Heart Association, Member, Vascular Biology & Blood Pressure/Regulation Basic Science 2 Review Panel
2012-Present	Ad Hoc Member, Center for Scientific Review, Clinical and Integrative Cardiovascular Sciences (CICS) Study Section, National Institutes of Health
2012	NIH, Member, Special Emphasis Panel. NHLBI-CSB-WH-13-01-ST: Scientific Return on the WHI Biological Resource

List of Publications

Papers published or in press:

Hallmark MA, TH Reynolds, **CA DeSouza**, CO Dotson, RA Anderson and MA Rogers. Effects of chromium supplementation and resistance training on muscle strength and lean body mass in untrained men. *Medicine and Science in Sports and Exercise* 28:139-144, 1996.

**DeSouza CA**, DR Dengel, MA Rogers, K Cox, RF Macko. The fibrinolytic system is not impaired in older men with hypertension. *Hypertension* 27:1053-1058, 1996.

Macko RF, **CA DeSouza**, LD Tretter, KH Silver, GV Smith, PA Anderson, N Tomoyasi, P Gorman, DR Dengel. Treadmill aerobic exercise training reduces the energy expenditure and cardiovascular demands of hemiparetic gait in chronic stroke patients: A preliminary report. *Stroke*, 28:326-330, 1997.

Stevenson ET, KP Davy, PP Jones, **CA DeSouza**, DR Seals. Blood Pressure risk factors in postmenopausal women: Physical activity and hormone replacement. *Journal of Applied Physiology*, 82:652-660, 1997.

Macko RF, LI Katzel, A Yataco, LD Tretter, **CA DeSouza**, DR Dengel, GV Smith, KH Silver. Low velocity graded treadmill stress testing in hemiparetic stroke patients. *Stroke*, 28:988-993, 1997.

**DeSouza CA**, DR Dengel, MA Rogers, K Cox, RF Macko. Fibrinolytic response to acute physical activity in hypertensive men. *Journal of Applied Physiology*, 82:1765-1770, 1997.

Jones PP, KP Davy, **CA DeSouza**, RE Van Pelt, DR Seals. Absence of age-related decline in total blood volume in physically active females. *American Journal of Physiology: Heart and Circulatory Physiology*, 41:H2534-H2540, 1997.

Hunt BE, KP Davy, PP Jones, **CA DeSouza**, RE Van Pelt, H Tanaka, DR Seals. Systemic hemodynamic determinants of blood pressure in women: age, physical activity, and hormone replacement. *American Journal of Physiology: Heart and Circulatory Physiology*, 42:H777-785, 1997.

**DeSouza CA**, ET Stevenson, KP Davy, PP Jones, DR Seals. Plasma fibrinogen levels in healthy postmenopausal women: physical activity and hormone replacement status. *Journal of Gerontology: Medical Sciences* , 52A:M294-M298, 1997.

Van Pelt RE, PP Jones, KP Davy, **CA DeSouza**, H Tanaka, B Davy, DR Seals. Absence of age-related decline in resting metabolic rate in physically active women. *Journal of Clinical Endocrinology and Metabolism.*, 82:3208-3212, 1997.

Stevenson ET, **CA DeSouza**, PP Jones, RE Van Pelt, DR Seals. Less adverse age-related changes in plasma lipids and lipoproteins in physically active women. *American Journal of Cardiology*, 80:1360-1364, 1997.

**DeSouza CA**, DR Dengel, RF Macko, K Cox, DR Seals. Elevated levels of circulating cell adhesion molecules in uncomplicated essential hypertension. *American Journal of Hypertension*, 10:1335-1341, 1997.



Tanaka H, **CA DeSouza**, PP Jones, ET Stevenson, KP Davy, DR Seals. Greater rate of decline in maximal aerobic capacity with age in physically active compared to sedentary healthy women. *Journal of Applied Physiology*, 83:1947-1953, 1997.

Tanaka H, **CA DeSouza**, DR Seals. Absence of age-related increase in central arterial stiffness in physically active women. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 18:127-132, 1998.

**DeSouza CA**, PP Jones, DR Seals. Physical activity status and adverse age-related differences in coagulation and fibrinolytic factors in women. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 18:362-368, 1998.

Davy KP, **CA DeSouza**, PP Jones, DR Seals. Physical activity status does not affect the age-related decline in heart rate variability in women. *Clinical Science*, 94(6):579-584, 1998.

Tanaka H, CM Clevenger, PP Jones, DR Seals, **CA DeSouza**. Influence of body fatness on the coronary risk profile of physically-active postmenopausal women. *Metabolism*, 47:1112-1120, 1998.

Tanaka H, **CA DeSouza**, DR Seals. Arterial stiffness and hormone replacement use in healthy postmenopausal women. *Journal of Gerontology: Medical Sciences*, 53A: M344-M346, 1998.

Hunt BE, KP Davy, PP Jones, **CA DeSouza**, RE Van Pelt, H Tanaka, DR Seals. Role of central circulatory factors in the fat-free mass-maximal aerobic capacity relation across age in humans. *American Journal of Physiology: Heart and Circulatory*, 275:1178-1182, 1998.

Van Pelt RE, KP Davy, ET Stevenson, TM Wilson, PP Jones, **CA DeSouza**, DR Seals. Smaller differences in total and regional adiposity with age in regularly exercising compared with sedentary women. *American Journal of Physiology: Endocrinology and Metabolism*, 275:E626-E634, 1998.

Tanaka H, FA Dinunno, BE Hunt, PP Jones, **CA DeSouza**, DR Seals. Hemodynamic sequelae of age-related increases in arterial stiffness in healthy women. *American Journal of Cardiology*, 82:1152-1155, 1998.

Seals DR, ET Stevenson, PP Jones, **CA DeSouza**, H Tanaka. Lack of age-associated elevations in 24-hour systolic and pulse pressures in women who exercise regularly. *American Journal of Physiology*, 977:947-955, 1999.

Jones PP, KP Davy, **CA DeSouza**, DR Seals, H Tanaka. Total blood volume in endurance-trained postmenopausal females: relation to exercise mode and maximal aerobic capacity. *Acta Physiologica Scandinavica*, 166:327-333, 1999.

Tanaka H, FA Dinunno, KD Monahan, CM Clevenger, **CA DeSouza**, DR Seals. Aging, habitual exercise and dynamic arterial compliance. *Circulation*, 102:1270-1275, 2000.

**DeSouza CA**, LF Shapiro, CM Clevenger, FA Dinunno, KD Monahan, H Tanaka, DR Seals. Regular aerobic exercise prevents/restores the age-related decline in endothelium-dependent vasodilation in healthy men. *Circulation*, 102:1351-1357, 2000.

Monahan KD, FA Dinunno, H Tanaka, CM Clevenger, **CA DeSouza**, DR Seals. Regular aerobic exercise modulates age-associated declines in cardiovagal baroreflex sensitivity in healthy men. *Journal of Physiology (London)*, 529:263-271, 2000.

Schiller, BC, YG Casas, BL Tracy, **CA DeSouza**, DR Seals. Age-related declines in knee extensor strength and performance in sedentary Caucasian and Hispanic women. *Journal of Gerontology: Biological Sciences*, 55A: B563-B569, 2000.

Tanaka H, FA Dinunno, KD Monahan, **CA DeSouza**, DR Seals. Carotid artery wall hypertrophy with age is related to local systolic blood pressure in healthy humans. *Arteriosclerosis, Thrombosis and Vascular Biology*, 21 82-87, 2001.

Casa YG, BC Schiller, **CA DeSouza**, DR Seals. Total and regional body composition across age in healthy hispanic and caucasian women. *American Journal of Clinical Nutrition*, 73:13-18, 2001.

Dinunno FA, DR Seals, **CA DeSouza**, H Tanaka. Age-related decreases in limb blood flow in humans: time course, determinants, and habitual exercise effects. *Journal of Physiology (London)*, 531: 573-579, 2001.

Monahan KD, FA Dinunno, DR Seals, CM Clevenger, **CA DeSouza**, H Tanaka. Age-associated changes in cardiovagal baroreflex sensitivity are consistently related to arterial compliance. *American Journal of Physiology: Heart and Circulatory*, 281:284-289, 2001.

Dinunno, FA, H Tanaka, KD Monahan, CM Clevenger, I Eskurza, **CA DeSouza**, DR Seals. Regular endurance training induces expansive arterial remodeling in the trained limbs of healthy men. *Journal of Physiology (London)*, 534: 287-295, 2001.

Seals DR, H Tanaka, CM Clevenger, KD Monahan, MJ Reiling, WR Hiatt, KP Davy, **CA DeSouza**. Blood pressure reductions with exercise and sodium restriction: Role of arterial stiffness. *Journal of the American College of Cardiology*, 38: 506-513, 2001.

Schiller BC, Casa YG, **CA DeSouza**, DR Seals. Maximal aerobic capacity across age in healthy Hispanic and Caucasian women. *Journal of Applied Physiology*, 91:1048-1054, 2001.

Monahan, KD, FA Dinunno, DR Seals, CM Clevenger, **CA DeSouza**, H Tanaka. Age-associated changes in cardiovagal baroreflex sensitivity are related to central arterial compliance. *American Journal of Physiology: Heart and Circulatory*, 281:H284-289, 2001.

Eskurza I, DR Seals, **CA DeSouza**, H Tanaka. Pharmacological vs. flow mediated assessments of peripheral vascular endothelial vasodilatory function in humans. *American Journal of Cardiology*, 88:1067-1069, 2001.

Tanaka H, DR Seals, KD Monahan, CM Clevenger, **CA DeSouza**, FA Dinunno. Lack of influence of regular aerobic exercise on age-related increase in carotid artery intima-media thickness. *Journal of Applied Physiology*, 92:1458-1464, 2002.

Sugawara J, M Miyachi, KL Moreau, FA Dinunno, **CA DeSouza**, H Tanaka. Age-related reductions in appendicular skeletal muscle mass: association with habitual aerobic exercise status. *Clinical Physiology and Medical Imaging*, 22:169-172, 2002.

**DeSouza CA**, CM Clevenger, JJ Greiner, DT Smith, GL Hoetzer, LF Shapiro, BL Stauffer. Evidence for agonist specific endothelial vasodilator dysfunction with ageing in healthy humans. *Journal of Physiology (London)*, 542:255-262, 2002.

Moreau KL, AJ Donato, DR Seals, FA Dinunno, SD Blackett, GL Hoetzer, **CA DeSouza**, H Tanaka. Arterial intima-media thickness: site-specific associations with HRT and habitual exercise. *American Journal of Physiology: Heart and Circulatory Physiology* 283:H1409-H1417, 2002.

Clevenger CM, PP Jones, H Tanaka, DR Seals, **CA DeSouza**. Decline in insulin action with age in endurance-trained humans. *Journal of Applied Physiology*, 93:2105-2111, 2002.

Hoetzer, GL, BL Stauffer, JJ Greiner, Y Casas, DT Smith, **CA DeSouza**. Influence of oral contraceptive use on endothelial t-PA release in healthy premenopausal women. *American Journal of Physiology: Endocrinology and Metabolism*, 284:E90-E95, 2003.

Smith DT, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Effects of ageing and regular aerobic exercise on endothelial fibrinolytic capacity. *Journal of Physiology (London)*, 546:289-298, 2003.

Capell, WH, **CA DeSouza**, P Poirier, ML Bell, BL Stauffer, KM Weil, TL Hernandez, RH Eckel. Short-term triglyceride lowering with fenofibrate improves vasodilator function in subjects with hypertriglyceridemia. *Arteriosclerosis Thrombosis and Vascular Biology*, 23:307-313, 2003.

Moreau, KL, AJ Donato, DR Seals, **CA DeSouza**, Hirofumi Tanaka. Regular exercise, hormone replacement therapy and the age-related decline in carotid arterial compliance in healthy women. *Cardiovascular Research*, 57:861-868, 2003.

Smith DT, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Endothelial release of tissue-type plasminogen activator in the human forearm: role of nitric oxide. *Journal of Cardiovascular Pharmacology*, 42:311-314, 2003.

Hoetzer GL, BL Stauffer, H Irmiger, M Ng, DT Smith, **CA DeSouza**. Acute and chronic effects of estrogen on endothelial tissue-type plasminogen activator release in postmenopausal women. *Journal of Physiology (London)*, 551:721-728, 2003.

Stauffer BL, GL Hoetzer, DT Smith, **CA DeSouza**. Plasma C-reactive protein is not elevated in physically active postmenopausal women taking hormone replacement therapy. *Journal of Applied Physiology*, 96:143-148, 2004.

Christou DD, CL Gentile, **CA DeSouza**, DR Seals, PE Gates. Fatness is a better predictor of cardiovascular disease risk factor profile than aerobic fitness in healthy men. *Circulation*, 11:1904-1914, 2005.

Stauffer BL, GL Hoetzer, GP Van Guilder, DT Smith, **CA DeSouza**. Gender-differences in endothelial tissue-type plasminogen activator release in middle-aged adults. *Journal of American College of Cardiology*, 45:1547-1549, 2005.

Hoetzer GL, HM Irmiger, BL Stauffer, **CA DeSouza**. Estrogen receptor- $\alpha$  TA-repeat polymorphism and endothelial fibrinolytic regulation in postmenopausal women. *American Journal of Obstetrics and Gynecology*, 193:366-370, 2005.

Hoetzer GL, HM Irmiger, R Keith, K Westbrook, **CA DeSouza**. Endothelial nitric oxide synthase inhibition does not alter endothelial progenitor cell colony forming capacity or migratory activity. *Journal of Cardiovascular Pharmacology*, 46:387-389, 2005.

**DeSouza CA**, GP Van Guilder, JJ Greiner, DT Smith, GL Hoetzer, BL Stauffer. Basal endothelial nitric oxide release is preserved in overweight and obese adults. *Obesity Research*, 13:1303-1306, 2005.

Van Guilder GP, GL Hoetzer, DT Smith, HM Irmiger, JJ Greiner, BL Stauffer, **CA DeSouza**. Endothelial t-PA Release is Impaired in Overweight and Obese Adults But Can Be Improved with Regular Aerobic Exercise. *American Journal of Physiology: Endocrinology and Metabolism*, 289:E807-E813, 2005.

Van Guilder GP, GL Hoetzer, DR Dengel, BL Stauffer, **CA DeSouza**. Impaired endothelium-dependent vasodilation in normotensive and normoglycemic obese adult humans. *Journal of Cardiovascular Pharmacology*, 47:310-313, 2006.

Van Guilder GP, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Influence of metabolic syndrome on biomarkers of oxidative stress and inflammation in obese adults. *Obesity Research*, 14:2127-2131, 2006.

Hoetzer GL, OJ MacEneaney, HM Irmiger, RS Keith, GP Van Guilder, BL Stauffer, **CA DeSouza**. Gender-Differences in circulating endothelial progenitor cell colony-forming capacity and migratory activity in middle-aged adults. *American Journal of Cardiology*, 99:46-48, 2007.

Hoetzer GL, GP Van Guilder, HM Irmiger, RS Keith, BL Stauffer, **CA DeSouza**. Aging, exercise and endothelial progenitor cell clonogenic and migratory capacity in men. *Journal of Applied Physiology*, 102:847-852, 2007.

Van Guilder GP, CM Westby, JJ Greiner, BL Stauffer, **CA DeSouza**. Endothelin-1 vasoconstrictor tone increases with age in healthy men but can be reduced by regular aerobic exercise. *Hypertension*, 50:403-409, 2007.

Van Guilder GP, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Metabolic Syndrome and Endothelial Fibrinolytic Capacity in Obese Adults. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 34:R39-R44, 2008.

Van Guilder GP, BL Stauffer, JJ Greiner, **CA DeSouza**. Impaired endothelium-dependent vasodilation in overweight and obese adult humans is not limited to muscarinic receptor agonists. *American Journal of Physiology: Heart and Circulatory Physiology*, 294:1685-1692, 2008.

Van Guilder GP, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Acute and chronic effects of vitamin C on endothelial fibrinolytic function in overweight and obese adult humans. *Journal of Physiology (London)*, 586:3525-3535, 2008.

Stauffer BL, CM Westby, **CA DeSouza**. Endothelin-1, aging and hypertension. *Current Opinion in Cardiology*, 23:350-355, 2008.

Seals DR, **CA DeSouza**, AJ Donato, H Tanaka. Habitual exercise and arterial aging. *Journal of Applied Physiology*, 105:1323-1332, 2008.

Stauffer BL, OJ MacEaney, EJ Kushner, JN Cech, JJ Greiner, CM Westby, **CA DeSouza**. Gender and endothelial progenitor cell number in middle-aged adults. *Artery Research*, 4:156-160, 2008.

Kushner EP, GP Van Guilder, OJ MacEaney, JN Cech, BL Stauffer, **CA DeSouza**. Aging and endothelial progenitor cell telomere length in healthy men. *Clinical Chemistry and Laboratory Medicine* 47:47-50, 2009.

MacEaney OJ, EJ Kushner, GP Van Guilder, JJ Greiner, BL Stauffer, **CA DeSouza**. Endothelial progenitor cell number and colony forming capacity in overweight and obese adults. *International Journal of Obesity*, 33:219-225, 2009.

Kushner EP, GP Van Guilder, OJ MacEaney, JJ Greiner, JN Cech, BL Stauffer, **CA DeSouza**. Aging and endothelial progenitor cell release of proangiogenic cytokines. *Age and Ageing*, 39:268-273, 2010.

Kushner EJ, OJ MacEaney, RG Morgan, AM Van Engelenburg, GP Van Guilder, **CA DeSouza**. CD31<sup>+</sup>T cells represent a functional distinct vascular T cell phenotype. *Blood Cells, Molecules, and Diseases*, 44:74-78, 2010.

Stauffer BL, CM Westby, JJ Greiner, GP VanGuilder, **CA DeSouza**. Sex-differences in endothelin-1 mediated vasoconstrictor tone in middle-aged and older adults. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 298:R261-R265, 2010.

Mestek ML, GP Van Guilder, JJ Greiner, BL Stauffer, **CA DeSouza**. Regular aerobic exercise without weight loss improves endothelium-dependent vasodilation in overweight and obese adults. *Obesity*, 18:1667-1669, 2010.

Stauffer BL, **CA DeSouza**. Epigenetics: An emerging player in health and disease. *Journal of Applied Physiology* (invited editorial), 109:230-231, 2010.

Weil BR, ML Mestek, CM Westby, GP Van Guilder, JJ Greiner, BL Stauffer, **CA DeSouza**. Short sleep duration is associated with enhanced endothelin-1 vasoconstrictor tone. *Canadian Journal of Physiology and Pharmacology* 88:777-781, 2010.

Mestek ML, BR Weil, JJ Greiner, CM Westby, **CA DeSouza**, BL Stauffer. Osteopenia and endothelin-1-mediated vasoconstrictor tone in postmenopausal women. *Bone*, 47:542-545, 2010.

MacEaney OJ, CM Westby, EJ Kushner, JN Cech, BL Stauffer, **CA DeSouza**. Endothelial progenitor cell function, apoptosis and telomere length in overweight/obese humans. *Obesity*, 18:1677-1682, 2010.

Kushner EJ, BR Weil, OJ MacEaney, RG Morgan, ML Mestek, GP Van Guilder, KJ Diehl, BL Stauffer, **CA DeSouza**. Human aging and CD31<sup>+</sup> T cell number, migration, apoptotic susceptibility and telomere length. *Journal of Applied Physiology*, 109:1756-1761, 2010.

MacEaney OJ, **CA DeSouza**, BR Weil, EJ Kushner, GP Van Guilder, ML Mestek, JJ Greiner, BL Stauffer. Prehypertension and endothelial progenitor cell function. *Journal of Human Hypertension*, 25:57-62, 2011.

MacEaney OJ, E Connick, **CA DeSouza**. Effects of HIV-1 gp120 and protease inhibitors on apoptotic susceptibility of CD34<sup>+</sup> hematopoietic progenitor cells. *Journal of Acquired Immune Deficiency Syndromes*, 56:e49-50, 2011.

Westby CM, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Endothelin-1 vasoconstriction and the age-related decline in endothelium-dependent vasodilation in men. *Clinical Science*, 120:485-91, 2011.

Kushner EJ, OJ MacEaney, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Aging is associated with a proapoptotic endothelial progenitor cell phenotype. *Journal of Vascular Research*, 48:408-414, 2011.

Weil BR, OJ MacEaney, BL Stauffer, **CA DeSouza**. Habitual short sleep duration and circulating endothelial progenitor cells. *Journal of Cardiovascular Disease Research*, 2:110-114, 2011.

Weil BR, BL Stauffer, JJ Greiner, **CA DeSouza**. Prehypertension is associated with impaired nitric oxide-mediated endothelium-dependent vasodilation in sedentary adults. *American Journal of Hypertension*, 24:976-981, 2011.

Weil BR, BL Stauffer, ML Mestek, **CA DeSouza**. Influence of Abdominal Obesity on Vascular Endothelial Function in Overweight/Obese Adult Men. *Obesity*, 19:1742-1746, 2011.

Weil BR, CM Westby, GP Van Guilder, JJ Greiner, BL Stauffer, **CA DeSouza**. Enhanced endothelin-1 system activity with overweight and obesity. *American Journal of Physiology: Heart and Circulatory Physiology*, 301:H689-H695, 2011.

Weil BR, EJ Kushner, KJ Diehl, JJ Greiner, BL Stauffer, **CA DeSouza**. CD31<sup>+</sup> T cells, endothelial function and cardiovascular risk. *Heart, Lung and Circulation*, 20:659-662, 2011.

Weil BR, JJ Greiner, **CA DeSouza**, Stauffer BL. Relation of C-Reactive Protein to Endothelial Fibrinolytic Function in Healthy Adults. *American Journal of Cardiology*, 108:1675-1679, 2011.

Diehl KJ, BL Stauffer, JJ Greiner, BR Weil, **CA DeSouza**. Nitric oxide-mediated endothelium-dependent vasodilation is impaired with borderline high LDL-cholesterol. *Clinical and Translational Science*, 5:21-26, 2012.

Weil BR, CM Westby, JJ Greiner, BL Stauffer, **CA DeSouza**. Elevated endothelin-1 vasoconstrictor tone in prehypertensive adults. *Canadian Journal of Cardiology*, 28:347-353, 2012.

Diehl KJ, BR Weil, CM Westby, OJ MacEneaney, EJ Kushner, JJ Greiner, **CA DeSouza**. Effects of endothelin-1 on endothelial progenitor cell function. *Journal of Clinical Chemistry and Laboratory Medicine*, 50:1121-1124, 2012.

Diehl KJ, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. White blood cell count and endothelin-1 vasoconstrictor tone in middle-aged and older adults. *Artery Research*, 6:65-70, 2012.

Weil BR, JJ Greiner, BL Stauffer, **CA DeSouza**. Self-reported habitual sleep duration is associated with endothelial fibrinolytic dysfunction: A preliminary report. *Sleep*, 36:183-188, 2013.

Diehl KJ, DL Templeton, J Ma, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Impaired fasting blood glucose is associated with increased endothelin-1 vasoconstrictor tone. *Atherosclerosis*, 229:130-133, 2013.

Rocha NG, DL Templeton, JJ Greiner, BL Stauffer, **CA DeSouza**. Metabolic syndrome and endothelin-1 mediated vasoconstrictor tone in overweight/obese adults. *Metabolism*, 63:951-956, 2014.

Fasing KA, BJ Nissen, JJ Greiner, BL Stauffer, **CA DeSouza**. Influence of elevated levels of C-reactive protein on circulating endothelial progenitor cell function. *Clinical and Translational Science*, 7:137-140, 2014.

Diehl KJ, BL Stauffer, JJ Greiner and **CA DeSouza**. Endothelin-1 system activity in adults with borderline high LDL-cholesterol. *Artery Research*, 8:115-118, 2014.

Dow CA, BL Stauffer, JJ Greiner, **CA DeSouza**. Influence of dietary saturated fat intake on endothelial fibrinolytic capacity in adults. *American Journal of Cardiology*, 114:783-788, 2014.

Diehl KJ, BR Weil, JJ Greiner, K Wright, Jr, BL Stauffer and **CA DeSouza**. Impaired endogenous fibrinolytic capacity in prehypertensive men. *Journal of Human Hypertension*, In Press.

### **Book Chapters**

**DeSouza CA**. Cardiovascular Benefits of Exercise. In C Lewis and K Knortz (Eds.) *Orthopedic Assessment and Treatment of the Geriatric Patient*. Chicago: Mosby Year Book, pp. 3-16, 1993.

Tanaka H, **CA DeSouza**, DR Seals. Exercise and Hypertension in Older Adults. In H Tanaka and M Shindo (Eds.) *Exercise for Preventing Common Diseases*. Tokyo: Springer-Verlag, pp. 45-50, 2000.

**DeSouza CA**. Physical Activity and Endothelial Dysfunction in Obesity. In C Bouchard and PT Katzmarzyk (Eds) *Advances in Physical Activity and Obesity, 2<sup>nd</sup> edition*. Human Kinetics, pp. 287-290, 2010.

### **Invited Seminars**

*“The Importance of Establishing and Maintaining a Physically Active Lifestyle.”* Presented to the Department of Health and Fitness, The American University, Washington D.C. October, 1990.

*“Patient Evaluations of The George Washington University Cardiac Rehabilitation Program.”* Presented at the annual meeting of the Association for Fitness in Business, “Issues, Strategies, & Solutions for the Year 2000”. Phoenix, AR, 1991.

*“Cardiovascular Benefits of Cardiac Rehabilitation.”* Region 2 annual meeting of the Association of Fitness in Business, Washington, D.C., October, 1992.

*“The Effect of Acute Exercise on Fibrinolytic Variables in Older Normotensive and Hypertensive Men.”* Presented to the GRECC, Division of Gerontology, University of Maryland School of Medicine. Baltimore, MD, August, 1994.

*“Exercise and Fibrinolysis.”* Colloquium in Kinesiology series speaker, Department of Kinesiology, University of Colorado. Boulder, CO., October, 1995.

*“Hypertension, Exercise and Fibrinolysis.”* Presented to the Division of Geriatric Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan, July, 1996.

*“Physical Activity Status and Adverse Age-Related Changes in Coagulation and Fibrinolytic Factors in Women.”* Presented at the National Institute on Aging Technical Assistance Workshop in Cincinnati, OH, 1997.

*“Aging, Exercise and Endothelial Function.”* Colloquium in Kinesiology Series Speaker, Department of Kinesiology, University of Colorado, Boulder, CO., March, 1998.

*“Aging, Nitric Oxide and Vascular Function.”* Colloquium in Kinesiology Series Speaker, Department of Kinesiology and Applied Physiology, University of Colorado, Boulder, CO., April, 1999.

*“Aging, Exercise and Endothelial Function.”* Presenting Protocol as part of the NIH/NCRR site visit for the UC-Boulder Satellite-GCRC application. University of Colorado, Boulder, CO., November 1999.

*“Fighting Dogma: The Age-Related Decline in Insulin Sensitivity.”* Colloquium in Kinesiology Series Speaker, Department of Kinesiology and Applied Physiology, University of Colorado, Boulder, CO, May, 2000.



*“Diet, Exercise and Endothelial Function.”* Presented at the 2001 Sports, Cardiovascular and Wellness Nutritionists annual meeting in Washington D.C. April, 2001.

*“Age-Related Endothelial Vasodilatory Dysfunction.”* Colloquium in Kinesiology Series Speaker, Department of Kinesiology and Applied Physiology, University of Colorado, Boulder, CO, May, 2001.

*“Aging, Exercise and Endothelial Function.”* Presenting Protocol as part of the NIH/NCRR site visit for the UCHSC-GCRC competitive renewal application. University of Colorado Health Sciences Center, Denver, CO., June 2001.

*“Age-Related Endothelial Vasodilator Dysfunction: An Agonist Specific Defect?”* General Clinical Research Center Spring Scientific Symposium, University of Colorado Health Sciences Center, Denver, CO., March 2002.

*“Exercise and Age-Related Endothelial Dysfunction.”* School of Kinesiology and Leisure Studies, College of Education and Human Development, University of Minnesota, MN. March 2002.

*“Hormone Replacement Therapy and Vascular Function: Good News or Bad News?”* Colloquium in Kinesiology Series Speaker, Department of Kinesiology and Applied Physiology, University of Colorado, Boulder, CO, May, 2002.

*“Aging, Habitual Exercise and Vascular Function”.* Presented as part of a symposium entitled “Aging and Cardiovascular Responses to Exercise” at the American College of Sports Medicine annual meeting, San Francisco, CA, May, 2003.

*“Obesity-Related Endothelial Dysfunction: Role of Exercise”.* Stanford Center for Research in Disease Prevention, Division of Medicine, Stanford University Medical School, Stanford, CA, June 2003.

*“Obesity-Related Endothelial Dysfunction: Effects of Exercise”.* Department of Kinesiology and Health, Texas A&M University, College Station, TX, December, 2003.

*“Vascular Endothelial Function: Yet Another Thing Women are Better at?”* Colloquium in Integrative Physiology Series Speaker, Department of Integrative Physiology, University of Colorado, Boulder, CO, April, 2004.

*“Obesity-Related Endothelial Dysfunction: Effects of Exercise”.* Department of Kinesiology and Health, Virginia Tech University, Blacksburg, VA, April 2005.

*“Obesity-Related Endothelial Dysfunction: Effects of Lifestyle Interventions”.* Center for Human Nutrition, University of Colorado Health Sciences Center, Denver, CO, October, 2005.

*“Improving Endothelial t-PA Release in Overweight and Obese Adults”.* Global Chapter Meeting, Vascular Biology Working Group, Dallas, TX, November, 2005.

*“Obesity-Related Endothelial Dysfunction: Effects of Lifestyle Interventions”.* Department of Exercise and Sport Sciences, Colorado State University, Fort Collins, CO, November, 2005.

*“Age-Related Endothelial Dysfunction: A Repair Problem?”* Department of Kinesiology, University of Maryland, College Park, MD, June, 2007.

*“HIV-1 and Endothelial Progenitor Cell Dysfunction”*. Colorado Center for AIDS Research, University of Colorado at Denver, Denver, CO, September 2007.

*“The Problems Start with Being Overweight”*. Colloquium in Integrative Physiology Series Speaker, Department of Integrative Physiology, University of Colorado, Boulder, CO, April, 2008.

*“Obesity and Endothelial Vasomotor Regulation”*. Presented as part of a symposium entitled, “Skeletal Muscle and Vascular Function-Benefits of Exercise” at the American Diabetes Association annual national meeting, San Francisco, CA, June 2008.

*“HIV-1 and Vascular Endothelial Function”*. Presentation to The Community Advisory Board of the AIDS Clinical Trials Group. University of Colorado at Denver, School of Medicine, Denver, CO, August 2008.

*“Aging, Endothelial Function and Vascular Progenitor Cells”*. Presented to the Department of Health, Nutrition and Exercise Sciences, University of Delaware, Newark, DE, September 2008.

*“HIV-1 Infection: A Model of Accelerated Vascular Aging and Cardiovascular Risk”*. Presented at the Center for Clinical Movement Science, University of Minnesota, April, 2009.

*“Aging and Vascular Progenitor Cells”*. Presented as part of a symposium entitled, Vascular and Cardiac Aging at the Experimental Biology annual meeting, New Orleans, LA, April 2009.

*“Exercise and Age-Related ET-1 Vasoconstrictor Tone”*. Presented as part of a symposium entitled, Endothelin in Development and Aging, at the ET-11: APS International Conference on Endothelin, Montreal, Canada, September 2009.

*“Aging, Telomeres and Epigenetic Events”*. Colloquium in Integrative Physiology Series Speaker, Department of Integrative Physiology, University of Colorado, Boulder, CO. October, 2009.

*“Aging, Habitual Exercise and Fibrinolytic Function”*. Presented as part of a symposium entitled, Habitual Exercise and Arterial Aging, at the annual Experimental Biology Meeting, Anaheim, CA, April 2010.

*“Vascular Consequences of Adiposity”*. Presented to School of Biological Sciences, University of Northern Colorado, Greeley CO, August 2010.

*“Vascular Consequences of Overweight and Obesity”*. Presented to the John B. Pierce Laboratory, Yale University, School of Medicine, New Haven CT, October 2010.

*“Prehypertension: Not a Benign Condition”*. Cardiology Grand Rounds, Division of Cardiology, Department of Medicine, University of Colorado at Denver, Denver CO, October 20, 2010.

“Prehypertension: Not a Benign Vascular Condition”. Presented at the International Academy of Cardiology 17<sup>th</sup> World Congress on Heart Disease annual Scientific Sessions, Toronto, Canada, July 2012.

“HIV-1 and vascular Dysfunction: Benefits of Aerobic Exercise”. Presented at the Rocky Mountain Region, American College of Sports Medicine annual meeting, Denver, CO, April 2013.

“Cardiovascular Disease Risk Factors: Time to Rethink Clinical Thresholds?”. Colloquium in Integrative Physiology Series Speaker, Department of Integrative Physiology, University of Colorado, Boulder, CO. March, 2013.

“*Prediabetes and Endothelial Dysfunction*”. Presented at the Translational Cardiovascular Biology Conference, University of Colorado Health Sciences Center, Denver CO, April 2014.

“*Insufficient Sleep and Endothelial Function*”. Presented at the Colorado Sleep and Circadian Research Symposia, University of Colorado, Boulder CO, June 2014.

### **Abstracts/Presentations**

Hallmark MA, TH Reynolds, **CA DeSouza**, CO Dotson, RA Anderson MA Rogers. Effects of chromium supplementation and resistance training on muscle strength and lean body mass in untrained men. *Medicine and Science and Sports and Exercise* 25:S104, 1993. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1993.

Macko RF, Katzel LI, **CA DeSouza**, B MacDonald, KH Silver. Graded treadmill exercise performance in hemiparetic stroke patients. *Archives of Physical Medicine and Rehabilitation* 75:1033, 1995. Presented at the annual meeting of the American Academy of Physical Medicine and Rehabilitation, Orlando, FL. 1995.

Macko RF, DR Dengel, **CA DeSouza**, B MacDonald, KH Silver. Diminished physiological reserve in hemiparetic stroke patients. *Archives of Physical Medicine and Rehabilitation* 75:1033, 1995. Presented at the annual meeting of the American Academy of Physical Medicine and Rehabilitation, Orlando, FL. 1995.

Macko RF, **CA DeSouza**, DR Dengel, B MacDonald, LI Katzel, KH Silver, R Keyser, P Gorman, AP Goldberg. Functional aerobic impairment in the elderly stroke population. *The Gerontologist* 35:164, 1995. Presented at the annual meeting of the Gerontological Society of America, Los Angeles, CA. 1995.

**DeSouza CA**, DR Dengel, MA Rogers, K Cox, RF Macko. The fibrinolytic system is not impaired in older hypertensive men. *The FASEB Journal* 10:A41, 1996. Presented at the annual Experimental Biology meeting, Washington, D.C. 1996.

**DeSouza CA**, DR Dengel, MA Rogers, K Cox, RF Macko. Impaired fibrinolysis is not a trigger for activity related thrombotic events in older hypertensive men. *Medicine and Science in Sports and Exercise* 28:S83, 1996. Presented at the annual meeting of the American College of Sports Medicine, Cincinnati, OH. 1996.

Tanaka H, **CA DeSouza**, PP Jones, RE Van Pelt, ET Stevenson, KP Davy, DR Seals. Rate of decline in maximal oxygen consumption with age in physically active vs sedentary healthy women. *The Physiologist* 39:38.20, 1996. Presented at the Integrative Biology of Exercise meeting, Vancouver, Canada, 1996.

Stevenson ET, KP Davy, PP Jones, **CA DeSouza**, DR Seals. Additive effects of physical activity and hormone replacement therapy on risk factors for coronary heart disease in healthy postmenopausal women. *The Physiologist* 39:38.17, 1996. Presented at the Integrative Biology of Exercise meeting, Vancouver, Canada, 1996.

Hunt BE, KP Davy, RE Van Pelt, PP Jones, **CA DeSouza**, DR Seals. Influence of active vs sedentary aging on systemic cardiovascular function at rest in healthy women. *The Physiologist* 39:38.18, 1996. Presented at the Integrative Biology of Exercise meeting, Vancouver, Canada, 1996.

Van Pelt RE, KP Davy, ET Stevenson, PP Jones, **CA DeSouza**, DR Seals. Physical activity/aerobic fitness and age-related increase in abdominal and total body fat in women. *The Physiologist* 39:38.19, 1996. Presented at the Integrative Biology of Exercise meeting, Vancouver, Canada, 1996.

**DeSouza CA**, PP Jones, DR Seals. Influence of age and physical activity on the fibrinolytic system in women. *The Physiologist* 39:38.22, 1996. Presented at the Integrative Biology of Exercise meeting, Vancouver, Canada, 1996.

Macko RF, **CA DeSouza**, KH Silver, GV Smith, PA Anderson, DR Dengel. Treadmill endurance training reduces energy requirements of hemiparetic stroke patients. *The Gerontologist* 36:222, 1996. Presented as part of a symposium entitled, "Exercise Rehabilitation in Older Patients with Chronic Vascular Disease: Claudication and Hemiparetic Stroke" at the annual meeting of The Gerontological Society of America, Washington, D.C. 1996.

Jones PP, H Tanaka, KP Davy, **CA DeSouza**, DR Seals. Total blood volume in endurance-trained postmenopausal females: relation to exercise mode and maximal aerobic capacity. *Medicine and Science in Sports and Exercise* 29:S110, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

Stevenson ET, PP Jones, **CA DeSouza**, KP Davy, DR Seals. Less adverse age-related changes in plasma lipid profiles in physically active vs sedentary women. *Medicine and Science in Sports and Exercise* 29:S91, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

Davy, KP, **CA DeSouza**, PP Jones, SK Craig, MJ Reiling, DR Seals. Physical activity status does not affect age-related changes in heart-rate variability in women. *Medicine and Science in Sports and Exercise* 29:S148, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

Tanaka, H, ET Stevenson, **CA DeSouza**, PP Jones, DR Seals. Body fatness influences coronary risk factors in endurance-trained postmenopausal women. *Medicine and Science in Sports and Exercise*

29:S88, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

Van Pelt RE, H Tanaka, PP Jones, **CA DeSouza**, KP Davy, DR Seals. Resting metabolic rate is similarly elevated in endurance trained postmenopausal women matched for exercise volume. *Medicine and Science in Sports and Exercise* 29:S255, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

**DeSouza CA**, ET Stevenson, KP Davy, PP Jones, DR Seals. Influence of regular physical activity on plasma fibrinogen levels in healthy postmenopausal women. *Medicine and Science in Sports and Exercise* 29:S189, 1997. Presented at the annual meeting of the American College of Sports Medicine, Denver, CO. 1997.

**DeSouza CA**, DR Dengel, RF Macko, K Cox, DR Seals. Elevated levels of circulating cell adhesion molecules in uncomplicated essential hypertension. *The FASEB Journal* 11:A466, 1997. Presented at the annual Experimental Biology meeting, New Orleans, LA. 1997.

**DeSouza CA**, PP Jones, DR Seals. Absence of adverse age-related changes in coagulation and fibrinolytic factors in physically active women. Presented at the 4th International Symposium on Multiple Risk Factors in Cardiovascular Disease: Strategies of Prevention of Coronary Heart Disease, Cardiac Failure, and Stroke, Washington D.C., 1997.

Tanaka H, **CA DeSouza**, DR Seals. Lack of age-related increase in arterial stiffness in physically active women. *The FASEB Journal* 11:A489, 1997. Presented at the annual Experimental Biology meeting, New Orleans, LA. 1997.

Clevenger CM, PP Jones, CS Long, DR Seals, **CA DeSouza**. Physical activity status does not affect age-related differences in insulin sensitivity in women. *The FASEB Journal* 11:A365, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

Reiling MJ, KP Davy, CM Clevenger, CS Long, J Tanaka, DR Seals, **CA DeSouza**. Relative efficacy of dietary sodium restriction and aerobic exercise for lowering arterial blood pressure at rest in postmenopausal women. *The FASEB Journal* 12:A1038, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

**DeSouza CA**, DR Seals, H Tanaka. Age-related increases in central arterial stiffness in adult females are associated with elevations in fibrinogen and fibrin D-dimer. *The FASEB Journal* 12:A192, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

Stevenson ET, **CA DeSouza**, PP Jones, MJ Reiling, CS Long, DR Seals. 24-Hour systolic arterial blood pressure is not higher with age in healthy women who exercise regularly. *The FASEB Journal* 11:A1039, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

Shapiro LF, H Tanaka, **CA DeSouza**, PP Jones, KP Davy, ET Stevenson, J Tanaka, DR Seals. Arterial blood pressure reactivity to acute exercise is not related to habitual exercise status *per se* in healthy

postmenopausal women. *The FASEB Journal* 12:A1038, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

Hunt BE, KP Davy, PP Jones, **CA DeSouza**, RE Van Pelt, H Tanaka, DR Seals. Central circulatory function is related to fat-free mass in adult humans: possible relevance for sarcopenia and aging. *The FASEB Journal* 11:A6460, 1998. Presented at the annual Experimental Biology meeting, San Francisco, CA. 1998.

**DeSouza CA**, CM Clevenger, LF Shapiro, H Tanaka, DR Seals. Tonic endothelial release of NO: influence of age and habitual physical activity. *The FASEB Journal* 13:A415.7, 1999. Presented at the annual Experimental Biology meeting, Washington D.C. 1999.

Monohan K, FA Dinunno, H Tanaka, **CA DeSouza**, DR Seals. Correlates of arterial baroreflex-heart-rate sensitivity among healthy adult males. *The FASEB Journal* 13:A789.4, 1999. Presented at the annual Experimental Biology meeting, Washington D.C. 1999.

Casas YG, BC Schiller, **CA DeSouza**, DR Seals. Adiposity across age in healthy Hispanic and Caucasian women of similar socio-economic status. *The FASEB Journal* 13:A223.13, 1999. Presented at the annual Experimental Biology meeting, Washington D.C. 1999.

**DeSouza CA**, LF Shapiro, CM Clevenger, CH Butler, H Tanaka, DR Seals. Greater endothelium-dependent vasodilation in physically active versus sedentary men. *Medicine and Science in Sports and Exercise* 31:S227, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

Clevenger CM, MJ Reiling, CS Long, JA Tanaka, DR Seals, **CA DeSouza**. Exercise lowers soluble cell adhesion molecules in postmenopausal women with elevated blood pressure. *Medicine and Science in Sports and Exercise* 31:S56, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

Casas YG, BC Schiller, BL Tracy, **CA DeSouza**, DR Seals. Age-related declines in leg strength and performance in sedentary hispanic and caucasian women. *Medicine and Science in Sports and Exercise* 31:S255, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

Reiling MJ, CM Clevenger, CS Long, JA Tanaka, DR Seals, **CA DeSouza**. Lowering arterial blood pressure in postmenopausal women: daily exercise less effective than sodium restriction? *Medicine and Science in Sports and Exercise* 31:S209, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

Schiller BC, YG Casas, **CA DeSouza**, DR Seals. Similar age-related declines in maximal aerobic capacity in sedentary hispanic and caucasian women. *Medicine and Science in Sports and Exercise* 31:S288, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

Tanaka H, FA Dinunno, **CA DeSouza**, DR Seals. Habitual exercise and age-related increase in arterial wall intima-media thickness. *Medicine and Science in Sports and Exercise* 31:S239, 1999. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA. 1999.

**DeSouza CA**, LF Shapiro, CM Clevenger, H Tanaka, DR Seals. Regular aerobic exercise prevents and restores the age-related decline in endothelium-dependent vasodilation. *Circulation (Suppl.)* 100:I-796, 1999. Presented at the annual meeting of the American Heart Association, Atlanta, GA. 1999.

Clevenger CM\*, LF Shapiro, H Tanaka, DR Seals, **CA DeSouza**. Daily aerobic exercise improves tonic nitric oxide bioavailability in sedentary older men. *Circulation (Suppl.)* 100:I-829, 1999. Presented at the annual meeting of the American Heart Association, Atlanta, GA. 1999.

Tanaka H, PM Anton, FA Dinunno, **CA DeSouza**, DR Seals. Moderate physical activity does not prevent age-related increases in arterial stiffness. *Circulation (Suppl.)* 100:I-523, 1999. Presented at the annual meeting of the American Heart Association, Atlanta, GA. 1999.

Monahan KD, FA Dinunno, H Tanaka, **CA DeSouza**, DR Seals. Age, regular physical activity and vagal baroreflex sensitivity in healthy men. *The FASEB Journal* 14:293.8, 2000. Presented at the annual Experimental Biology meeting in San Diego, CA. 2000.

Eskurza I, **CA DeSouza**, LF Shapiro, DR Seals, H Tanaka. Reliability and validity of ultrasound-derived reactive hyperemia as a measure of endothelial function. *The FASEB Journal* 14:302.22, 2000. Presented at the annual Experimental Biology meeting in San Diego, CA. 2000.

Dinunno FA, **CA DeSouza**, DR Seals, H Tanaka. Regular physical activity does not prevent or restore the age-related decline in limb blood flow. *The FASEB Journal* 14:454.2, 2000. Presented at the annual Experimental Biology meeting in San Diego, CA. 2000.

Tanaka H, PM Anton, FA Dinunno, **CA DeSouza**, DR Seals. Age, habitual exercise, and dynamic arterial compliance in healthy humans. *Medicine and Science in Sports and Exercise* 32:1028, 2000. Presented at the meeting of the American College of Sports Medicine, Indianapolis, IN. 2000.

Blackett SD, DT Smith, JJ Greiner, YG Casas, H Tanaka, DR Seals, **CA DeSouza**. Greater endothelium-dependent vasodilation in endurance-trained vs sedentary postmenopausal women. *The Physiologist* 43:349, 2000. Presented at the Integrative Biology of Exercise meeting, Portland, ME. 2000.

Smith DT, JJ Greiner, YG Casas, H Tanaka, **CA DeSouza**. Lower circulating levels of interleukin (IL)-1Ra and IL-6 in endurance-trained postmenopausal women. *The Physiologist* 43:322, 2000. Presented at the Integrative Biology of Exercise meeting, Portland, ME. 2000.

Tanaka H, FA Dinunno, KD Monahan, **CA DeSouza**, D.R. Seals. Carotid artery wall hypertrophy with age is related to local systolic blood pressure in healthy adult humans. *Circulation (Suppl.)* 102(18):II-495, 2000. Presented at the annual meeting of the American Heart Association, New Orleans, LA. 2000.

Smith DT, JJ Greiner, GL Hoetzer, Y Casas, BL Stauffer, **CA DeSouza**. Impaired endothelial t-PA release in obese/insulin resistant men. Presented at the 2001 American Diabetes Association Symposium: Understanding the Metabolic Syndrome: Effect on Diabetes and Cardiovascular Disease, Tempe, AZ.

Hoetzer GL, BL Stauffer, JJ Greiner, YG Casas, DT Smith, **CA DeSouza**. Impaired endothelial vasodilator response to muscarinic but not  $\beta$ -adrenoceptor stimulation in older men. *The FASEB Journal* 15:886.8, 2001. Presented at the annual Experimental Biology meeting, Orlando, FL. 2001.

**DeSouza CA**, CM Clevenger, H Tanaka, M Fleshner. Lower pro/anti-inflammatory cytokines in endurance-trained older men. *The FASEB Journal* 15:643.12, 2001. Presented at the annual Experimental Biology meeting, Orlando, FL. 2001.

Moreau KL, AJ Donato, DR Seals, FA Dinunno, SD Blackett, GL Hoetzer, **CA DeSouza**, H Tanaka. Femoral artery intima-media thickness: Influence of regular aerobic exercise and hormone replacement therapy. *The FASEB Journal* 15:642.2, 2001. Presented at the annual Experimental Biology meeting, Orlando, FL. 2001.

Tanaka H, **CA DeSouza**, MJ Reiling, JA Tanaka, CM Clevenger, DR Seals. Hypotensive effects of lifestyle interventions are associated with the corresponding changes in arterial stiffness. *The FASEB Journal* 15:643.1, 2001. Presented at the annual Experimental Biology meeting, Orlando, FL. 2001.

Smith DT, JJ Greiner, GL Hoetzer, SD Blackett, YG Casas, BL Stauffer, **CA DeSouza**. Greater endothelial release of tissue plasminogen activator in endurance-trained vs sedentary middle-aged and older men. *Medicine and Science in Sports and Exercise* 33:S270, 2001. Presented at the annual meeting of the American College of Sports Medicine, Baltimore, MD. 2001.

Greiner JJ, CM Clevenger, H Tanaka, **CA DeSouza**. Lack of age-associated elevations in plasma tumor necrosis factor- $\alpha$  concentrations in men who exercise regularly. *Medicine and Science in Sports and Exercise* 33:S78, 2001. Presented at the annual meeting of the American College of Sports Medicine, Baltimore, MD. 2001.

Moreau KL, AJ Donato, DR Seals, SD Blackett, GL Hoetzer, **CA DeSouza**, H Tanaka. Influence of habitual exercise and hormone replacement therapy on carotid artery intima-media thickness. *Medicine and Science in Sports and Exercise* 33:S90, 2001. Presented at the annual meeting of the American College of Sports Medicine, Baltimore, MD. 2001.

Smith DT, JJ Greiner, GL Hoetzer, Y Casas, BL Stauffer, **CA DeSouza**. Capacity of the vascular endothelium to release tissue-type plasminogen activator declines with age in healthy adult humans. *The FASEB Journal* 16:381.19, 2002. Presented at the annual Experimental Biology meeting, New Orleans, LA. 2002.

**DeSouza CA**, CM Clevenger, JJ Greiner, DT Smith, LF Shapiro, BL Stauffer. Impaired forearm endothelium-dependent vasodilation with age: evidence for an agonist-specific defect and not a more general endothelial vasomotor abnormality. *The FASEB Journal* 16:381.15, 2002. Presented at the annual Experimental Biology meeting, New Orleans, LA. 2002.

Hoetzer GL, DT Smith, JJ Greiner, M Ng, Y Casas, BL Stauffer, **CA DeSouza**. Influence of oral contraception on endothelial release of tissue-type plasminogen activator in vivo. *The FASEB Journal* 16:181.2, 2002. Presented at the annual Experimental Biology meeting, New Orleans, LA. 2002.



Greiner JJ, SD Blackett, Y Casas, GL Hoetzer, DT Smith, KL Moreau, BL Stauffer, **CA DeSouza**. Nitric oxide bioavailability and hormone replacement therapy in postmenopausal women. *The FASEB Journal* 16:182.4, 2002. Presented at the annual Experimental Biology meeting, New Orleans, LA. 2002.

Moreau KL, AJ Donato, DR Seals, MH Whitford, J Robinson, SD Blackett, GH Hoetzer, **CA DeSouza**, H Tanaka. Regular aerobic exercise restores the age-related reduction in central arterial compliance in postmenopausal women. *The FASEB Journal* 16:383.4, 2002. Presented at the annual Experimental Biology meeting, New Orleans, LA. 2002.

Smith DT, JJ Greiner, GL Hoetzer, BL Stauffer, **CA DeSouza**. Regular aerobic exercise prevents and reverses the age-related decline in endothelial t-PA release. *Circulation* 106: II615, 2002. Presented at the annual meeting of the American Heart Association, Chicago, IL. 2002.

Ng M, DT Smith, GL Hoetzer, HM Irmiger, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Lack of an age-related increase in plasma C-reactive protein in endurance-trained men. To be presented at the annual meeting of the American College of Sports Medicine, San Francisco, CA. 2003.

Vance J, DT Smith, GL Hoetzer, JJ Greiner, BL Stauffer, CA DeSouza. Capacity of the vascular endothelium to release t-PA: effect of gender. *The FASEB Journal*, 17:A123, 99.22, 2003. Presented at the annual Experimental Biology meeting, San Diego, CA. 2003.

Irmiger HM, GL Hoetzer, DT Smith, M Ng, Y Casas, JJ Greiner, BL Stauffer, **CA DeSouza**. Regular exercise improves endothelium-dependent vasodilation in obese adults. *The FASEB Journal*, 17:A1271, 813.12, 2003. Presented at the annual Experimental Biology meeting, San Diego, CA. 2003.

Hoetzer GL, DT Smith, HM Irmiger, M Ng, BL Stauffer, **CA DeSouza**. Plasma C-reactive protein is elevated in premenopausal women taking oral contraceptives. *The FASEB Journal*, 17:A449, 322.4, 2003. Presented at the annual Experimental Biology meeting, San Diego, CA. 2003.

Stauffer BL, DT Smith, GL Hoetzer, JJ Greiner, **CA DeSouza**. Plasma C-reactive protein is not elevated in physically active postmenopausal women taking hormone replacement therapy. *Journal of American college of Cardiology*, 41 (Suppl. A): 840-5, 2003. Presented at the annual meeting of the American College of Cardiology, Chicago, IL. 2003.

Smith DT, GP Van Guilder, GL Hoetzer, M. Ng, HM Irmiger, BL Stauffer, **C.A. DeSouza**. Obesity-related impairment in endothelial t-PA release is reversed with exercise. *Arteriosclerosis, Thrombosis and Vascular Biology*, 23: 44, 2003. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Washington, D.C. 2003.

Hoetzer GL, BL Stauffer, HM Irmiger, DT Smith, **CA DeSouza**. Postmenopausal hormone replacement therapy and endothelial fibrinolytic capacity. *Arteriosclerosis, Thrombosis and Vascular Biology*, 23: 124, 2003. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Washington, D.C. 2003.

Stauffer BL, GL Hoetzer, DT Smith, J Greiner, Y Casas, **CA DeSouza**. Influence of Age and Sex on the Capacity of the Endothelium to Release Tissue-Type Plasminogen Activator. *Circulation* 08(Suppl. IV): 190, 2003. Presented at the annual meeting of the American Heart Association, Orlando, FL. 2003.

Van Guilder GP, DT Smith, GL Hoetzer, HM Irmiger, BL Stauffer, **CA DeSouza**. Exercise without weight loss does not lower plasma C-Reactive Protein in obese adults. *FASEB Journal*, 18, 381, 2004. Presented at the annual Experimental Biology meeting, Washington, D.C. 2004.

Van Guilder GP, GL Hoetzer, DT Smith, JJ Greiner, YG Casas, HM Irmiger, BL Stauffer, **CA DeSouza**. Impaired endothelial fibrinolytic capacity with obesity is associated with oxidative stress. *Arteriosclerosis, Thrombosis and Vascular Biology*, 24:231, 2004. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, San Francisco, CA. 2004.

Hoetzer, GL, GP Van Guilder, JJ Greiner, YG Casas, RS Keith, BL Stauffer, **CA DeSouza**. Impaired acetylcholine-mediated vasodilation in obesity is not due to reduced responsiveness or increased cholinesterase activity. *Arteriosclerosis, Thrombosis and Vascular Biology*, 24:87, 2004. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, San Francisco, CA. 2004.

Keith RS, K Westbrook, GP Van Guilder, GL Hoetzer, JJ Greiner, HM Irmiger, BL Stauffer, **CA DeSouza**. Effects of vitamin C supplementation on inflammatory markers in obese men. Presented at the American Diabetes Association Symposium: [Inflammation, Diabetes and Cardiovascular Disease: Emerging Science and Clinical Implications](#), Chicago, IL, 2004.

Stauffer BL, GP Van Guilder, JJ Greiner, GL Hoetzer, **CA DeSouza**. Endothelial dysfunction and markers of systemic inflammation in obese adults. Presented at the American Diabetes Association Symposium: [Inflammation, Diabetes and Cardiovascular Disease: Emerging Science and Clinical Implications](#), Chicago, IL, 2004.

Hoetzer GL, HM Irmiger, Y Casas, JJ Greiner, BL Stauffer, **CA DeSouza**. Estrogen Receptor- $\alpha$  polymorphism and endothelial fibrinolytic regulation in postmenopausal women. *Circulation*, 111: e51, 2004. Presented at the Second International Conference on Women, Heart Disease, and Stroke, Orlando FL, 2004.

Hoetzer GL, HM Irmiger, GP Van Guilder, RS Keith, JJ Greiner, BL Stauffer, **CA DeSouza**. Effects of exercise on age-related reductions in endothelial progenitor cell number and migratory activity. *Arteriosclerosis, Thrombosis and Vascular Biology*, 25: e43(42), 2005. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Washington DC, 2005.

Hoetzer GL, HM Irmiger, RS Keith, KM Westbrook, **CA DeSouza**. Endothelial nitric oxide synthase inhibition does not alter endothelial colony forming capacity or migratory activity. *Arteriosclerosis, Thrombosis and Vascular Biology*, 25: e85(189), 2005. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Washington DC, 2005.

Van Guilder GP, GL Hoetzer, JJ Greiner, YG Casas, BL Stauffer, **CA DeSouza**. Impaired endothelium-dependent vasodilation with obesity is not limited to muscarinic receptor agonists. *Obesity Research*, 13 (Suppl): A5, 2005. Presented at the annual North American Association for the Study of

Obesity meeting, Vancouver, B.C., 2005.

Van Guilder GP, GL Hoetzer, JJ Greiner, HM Irmiger, BL Stauffer, **CA DeSouza**. Influence of the metabolic syndrome on endothelial t-PA release in obese adults. *Obesity Research*, 13 (Suppl): A125, 2005. Presented at the annual North American Association for the Study of Obesity meeting, Vancouver, B.C., 2005.

Van Guilder GP, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Greater oxidative stress and inflammatory burden in obese adults with the metabolic syndrome. *Arteriosclerosis, Thrombosis and Vascular Biology*, 26:e84, 2006. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Denver, CO, 2006.

Hoetzer GL, OJ MacEneaney, HM Irmiger, RS Keith, GP Van Guilder, **CA DeSouza**. Sex differences in circulating endothelial progenitor cell colony forming capacity and migratory activity in middle-aged adult humans. *Arteriosclerosis, Thrombosis and Vascular Biology*, 26:e89, 2006. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Denver, CO, 2006.

Van Guilder GP, CM Westby, GL Hoetzer, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Regular aerobic exercise alleviates the age-related increase in endothelin-1 mediated vasoconstrictor tone. *Arteriosclerosis, Thrombosis and Vascular Biology*, 26:e99, 2006. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Denver, CO, 2006.

Van Guilder GP, GL Hoetzer, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Vitamin C supplementation improves endothelial t-PA release in obese adults. *Arteriosclerosis, Thrombosis and Vascular Biology*, 26:e103, 2006. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Denver, CO, 2006.

Van Guilder GP, GL Hoetzer, JJ Greiner, BL Stauffer, **CA DeSouza**. Influence of the metabolic syndrome on endothelium-dependent vasodilation in obese adults. Presented at the Metabolic Syndrome/Metabolic Risks: Implications for Diabetes and Cardiovascular Risk Reduction Symposia. San Francisco, CA, 2006.

Westby CM, GP Van Guilder, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Endothelin receptor blockade improves endothelium-dependent vasodilation in older men. *Vascular Medicine*. 2006;11:S11. Presented at the annual meeting of the Society for Vascular Medicine and Biology, Philadelphia, PA, 2006.

Van Guilder GP, GL Hoetzer, CM Westby, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Effects of vitamin C supplementation on endogenous endothelin-1 vasoconstrictor activity in overweight/obese adults. *Vascular Medicine*, 11:S12, 2006. Presented at the annual meeting of the Society for Vascular Medicine and Biology, Philadelphia, PA, 2006.

MacEneaney OJ, GL Hoetzer, HM Irmiger, J Stoner, C Westby, JJ Greiner, BL Stauffer, **CA DeSouza**. Aging, Exercise and Endothelial Progenitor Cell Apoptosis. *Circulation*, 115, e257:P137, 2007. Presented at the American Heart Association 47th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, Orlando FL, 2007.

Westby C, GP Van Guilder, JJ Greiner, Y Casas, BL Stauffer, **CA DeSouza**. Endothelin-1 vasoconstrictor activity contributes to impaired acetylcholine-mediated vasodilation in obesity. *Circulation*, 115, e242:091, 2007. Presented at the American Heart Association 47th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, Orlando FL, 2007.

Stauffer BL, OJ MacEneaney, GL Hoetzer, E Kushner, J Cech, CM Westby, **CA DeSouza**. Gender and Circulating Endothelial Progenitor Cell Number and Apoptosis. *The Physiologist*, 6, 2007. Presented at the American Physiological Society meeting, Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology, Austin, TX, 2007.

Stauffer BL, R Sobus, E Kushner, C Westby, S Lajud, T Zeller, T Wulfman, **CA DeSouza**. Feasibility of Molecular Analysis of Percutaneously Collected Peripheral Atheroma. *The American Journal of Cardiology*. 100: 83L, 2007.

Kushner EJ, GL Hoetzer, OJ MacEneaney, JJ Greiner, JN Cech, BL Stauffer, **CA DeSouza**. Aging and EPC release of proangiogenic factors. *FASEB Journal*. 22: 746.11. Presented at the annual Experimental Biology meeting, San Diego, CA 2008.

Kushner EJ, RG Morgan, JN Cech, CM Westby, JJ Greiner, **CA DeSouza**. Aging is associated with a proapoptotic endothelial progenitor cell phenotype. *Arteriosclerosis, Thrombosis and Vascular Biology*, 28:e140, 2008. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Atlanta, GA, 2008.

Kushner EJ, GP Van Guilder, OJ MacEneaney, JN Cech, AJ Zaug, BL Stauffer, **CA DeSouza**. Shortened telomere length in endothelial progenitor cells with age. *Arteriosclerosis, Thrombosis and Vascular Biology*, 28:e105, 2008. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Atlanta, GA, 2008.

MacEneaney OJ, EJ Kushner, CM Westby, JJ Greiner, JN Cech, BL Stauffer, **CA DeSouza**. Influence of adiposity on endothelial progenitor cell number and clonogenic capacity. *Arteriosclerosis, Thrombosis and Vascular Biology*, 28:e145, 2008. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Atlanta, GA, 2008.

Van Guilder GP, OJ MacEneaney, CM Westby, EJ Kushner, JJ Greiner, BL Stauffer, **CA DeSouza**. Prehypertension and circulating endothelial progenitor cell function. *Arteriosclerosis, Thrombosis and Vascular Biology*, 28:e146, 2008. Presented at the annual Arteriosclerosis, Thrombosis and Vascular Biology meeting, Atlanta, GA, 2008.

Van Guilder GP, CM Westby, JJ Greiner, BL Stauffer, **CA DeSouza**. Prehypertension and endothelium-dependent vasodilation. *Vascular Medicine*, 13:26, 2008. Presented at the annual meeting of the Society for Vascular Medicine, Minneapolis, MN, 2008.

Westby CM, GP Van Guilder, JJ Greiner, BL Stauffer, **CA DeSouza**. ET-1 mediated vasoconstrictor tone is equally elevated in overweight and obese adults. *Vascular Medicine*, 13:31, 2008. Presented at the annual meeting of the Society for Vascular Medicine, Minneapolis, MN, 2008.

Stauffer BL, GP Van Guilder, JJ Greiner, **CA DeSouza**. Metabolic Syndrome and Endothelial Tissue-type Plasminogen Activator (t-PA) Release in Older Adults. Presented as part of the Williams Symposium at the American Geriatrics Society Annual meeting, Washington DC, May 2008.

Mestek ML, BL Stauffer, CM Westby, BR Weil, GP Van Guilder, JJ Greiner, E Connick and **CA DeSouza**. Endothelial fibrinolytic capacity is impaired in HIV-1 infected men and is associated with oxidative stress. Presented at the 16<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Montreal, Canada, February 2009.

Van Guilder GP, BL Stauffer, ML Mestek, CM Westby, JJ Greiner, E Connick and **CA DeSouza**. HIV-1 infection is associated with accelerated vascular aging. Presented at the 16<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Montreal, Canada, February 2009.

Mestek ML, GP Van Guilder, CM Westby, JJ Greiner, YG Casas, BL Stauffer, **CA DeSouza**. Influence of abdominal adiposity on endothelium-dependent vasodilation in overweight and obese adults. *Vascular Medicine*, 14:174, 2009. Presented at the annual meeting of the Society for Vascular Medicine, Denver, CO, 2009.

MacEneaney OJ, CM Westby, EJ Kushner, JN Cech, BL Stauffer, **CA DeSouza**. Influence of adiposity on endothelial progenitor cell function, apoptosis and telomere length in humans. *Vascular Medicine*. 2009;14:181. Presented at the annual meeting of the Society for Vascular Medicine, Denver, CO, 2009.

Kushner, EJ, RG Morgan, AM Van Engelenburg, OJ MacEneaney, GP Van Guilder, **CA DeSouza**. CD 31+ T cells represent a functionally distinct vascular T cell phenotype. *FASEB Journal*. 23: 625.16. Presented at the annual Experimental Biology meeting, New Orleans, LA 2009.

Diehl KJ, CM Westby, BR Weil, OJ MacEneaney, RG Morgan, ML Mestek, EJ Kushner, AM Van Engelenburg, **CA DeSouza**. Effects of endothelin-1 on endothelial progenitor cell function. *FASEB Journal* 23: 965.13. Presented at the annual Experimental Biology meeting, New Orleans, LA 2009.

Mestek ML, GP Van Guilder, CM Westby, JJ Greiner, BL Stauffer, **CA DeSouza**. Influence of abdominal adiposity on endothelial fibrinolytic capacity in overweight and obese adults. *Diabetes*, 58 (Suppl. 1): A449, 2009. Presented at the annual American Diabetes Association Scientific Sessions, New Orleans, LA 2009.

Kushner EJ, OJ MacEneaney, BR Weil, RG Morgan, ML Mestek, GP Van Guilder, JJ Greiner, KJ Diehl, BL Stauffer and **CA DeSouza**. Influence of Aging on Angiogenic T Cells. *FASEB Journal*. 24: 774.18. Presented at the annual Experimental Biology meeting, Anaheim, CA 2010.

Morgan RG, BR Weil, OJ MacEneaney, EJ Kushner, JJ Greiner, BL Stauffer and **CA DeSouza**. Short Sleep Duration and Endothelial Progenitor Cell Function. *FASEB Journal*. 24: 1058.13. Presented at the 2010 Experimental Biology Meeting, Anaheim, CA 2010.

Weil BR, KJ Diehl, JJ Greiner, BL Stauffer, **CA DeSouza**. C-Reactive Protein and Endothelial Fibrinolytic Dysfunction. *The Physiologist*, 53:3.6, 2010. Presented at the American Physiological

Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

Weil BR, BL Stauffer, ML Mestek, JJ Greiner, E Connick, **CA DeSouza**. Impaired endothelium-dependent vasodilation with HIV-1 infection is due to oxidative stress. *The Physiologist*, 53:3.7, 2010. Presented at the American Physiological Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

Diehl KJ, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Higher white blood cell count is associated with enhanced endothelin-1 system activity in adult humans. *The Physiologist*, 53:3.13, 2010. Presented at the American Physiological Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

Kushner EJ, RG Morgan, OJ MacEneaney, BR Weil, BL Stauffer, **CA DeSouza**. CD31+ T cells, endothelial function and cardiovascular disease risk. *The Physiologist*, 53:3.10, 2010. Presented at the American Physiological Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

MacEneaney OJ, EJ Kushner, JN Cech, RG Morgan, ML Mestek, BR Weil, JJ Greiner, BL Stauffer, E Connick, **CA DeSouza**. *The Physiologist*, 53:3.8, 2010. Influence of HIV-1 and HAART therapy on endothelial progenitor cell number and function. Presented at the American Physiological Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

MacEneaney OJ, EJ Kushner, J Stoner, BL Stauffer, E Connick, **CA DeSouza**. HIV-1 viral proteins gp120 and Tat impair endothelial progenitor cell function. *The Physiologist*, 53:3.9, 2010. Presented at the American Physiological Society meeting: Inflammation, Immunity and Cardiovascular Disease, Westminster, CO, 2010.

Templeton DL, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. C-reactive protein-related endothelial vasodilator dysfunction in healthy adults. *FASEB Journal*. 2011; 25: 821.34. Presented at the 2011 Experimental Biology Meeting, Washington DC, 2011.

Diehl KJ, Weil BR, Greiner JJ, Stauffer BL, DeSouza CA. Impaired nitric oxide-mediated endothelium-dependent vasodilation with suboptimal LDL cholesterol. *FASEB Journal*, 25: 1103.5, 2011. Presented at the 2011 Experimental Biology Meeting, Washington DC, 2011.

MacEneaney OJ, Connick E, DeSouza CA. Effects of HIV-1 gp120 and Protease Inhibitors on Apoptotic Susceptibility of CD34+ Hematopoietic Progenitor Cells. *FASEB Journal*, 23: 658.1, 2011. Presented at the 2011 Experimental Biology Meeting, Washington DC, 2011.

Weil BR, ML Mestek, JJ Greiner, BL Stauffer, **CA DeSouza**. Increased endothelin-1 vasoconstrictor tone with prehypertension. *Journal of Clinical Hypertension*, 13: A33, 2011. Presented at the annual American Society for Hypertension meeting, New York, NY, 2011.

Diehl KJ, E Connick, BL Stauffer, **CA DeSouza**. Accelerated vascular aging with HIV-1 infection regardless of ART status. Presented at the 16<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Boston, MA, February 2011.

Ma J, KJ Diehl, DL Templeton, JJ Greiner, BL Stauffer, **CA DeSouza**. Impaired fasting glucose and enhanced endothelin-1 vasoconstrictor tone. *FASEB Journal*. 26; 869.17, 2012. Presented at the annual Experimental Biology meeting, San Diego, CA, April, 2012.

Nissen BJ, KA Fasing, JJ Greiner, BL Stauffer, **CA DeSouza**. Effects of circulating C-reactive protein levels on EPC function. *FASEB Journal*. 26; 680.1, 2012. Presented at the annual Experimental Biology meeting, San Diego, CA, April, 2012.

Templeton DL, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Regular aerobic exercise reduces endothelin-1 vasoconstrictor activity in overweight/obese adults. *Journal of Clinical Hypertension*, 14(Suppl 1): A52, 2012. Presented at the annual American Society for Hypertension meeting, New York, NY, May 2012.

Diehl KJ, OJ MacEneaney, JJ Greiner, BL Stauffer, E Connick, **CA DeSouza**. HIV-1 infection is associated with impaired endothelial progenitor cell function. *Journal of Heart Disease*, 9:2, 2012. Presented at the 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada, July 2012.

Diehl KJ, BR Weil, DL Templeton, JJ Greiner, BL Stauffer, **CA DeSouza**. Diminished endothelial fibrinolytic capacity in adults with impaired glucose tolerance. *Journal of Heart Disease*, 9:8, 2012. Presented at the 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada, July 2012.

Weil BR, KJ Diehl, JJ Greiner, BL Stauffer, **CA DeSouza**. Habitual short sleep is associated with endothelial fibrinolytic dysfunction. *Journal of Heart Disease*, 9:334, 2012. Presented at the 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada, July 2012.

**DeSouza CA**. Prehypertension: not a benign vascular condition. *Journal of Heart Disease*, 9:342, 2012. Presented at the 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada, July 2012.

Diehl KJ, JJ Greiner, BL Stauffer, **CA DeSouza**. Borderline high LDL-C and endothelial vasoconstrictor tone. *Journal of Heart Disease*, 9:443, 2012. Presented at the 17<sup>th</sup> World Congress on Heart Disease, Toronto, Canada, July 2012.

Bammert TD, CA Beckstrom, JJ Greiner, BL Stauffer, **CA DeSouza**. Short sleep duration and endothelial t-PA release in overweight/obese adults. *FASEB Journal*, 27: 686.12, 2013. Presented at the annual Experimental Biology meeting, Boston, MA, April, 2013.

Greiner JJ, BL Stauffer, **CA DeSouza**. High dietary fat does not influence endothelial fibrinolytic function in older adults. *FASEB Journal*, 27: 686.8, 2013. Presented at the annual Experimental Biology meeting, Boston, MA, April, 2013.

Rocha NG, DL Templeton, JJ Greiner, BL Stauffer, **CA DeSouza**. Metabolic syndrome and endothelin-1 mediated vasoconstrictor tone in overweight/obese adults. *FASEB Journal*, 27: 901.4, 2013. Presented at

the annual Experimental Biology meeting, Boston, MA, April, 2013.

Fassing K, BR Weil, KJ Diehl, JJ Greiner, BL Stauffer, L Connick, **CA DeSouza**. Influence of HIV-1 infection and antiviral therapy on the coagulation system. *Arteriosclerosis Thrombosis and Vascular Biology*, 2013; 33:A350. Presentation at the annual Arteriosclerosis, Thrombosis, and Vascular Biology 2013 Scientific Sessions, Lake Buena Vista, FL, May, 2013.

Diehl KJ, BR Weil, JJ Greiner, BL Stauffer, **CA DeSouza**. Diminished Endothelial Fibrinolytic Function With Prehypertension. *Hypertension*. 2013;62:A54. Presented at the annual American Heart Association High Blood Pressure Research meeting, New Orleans, LA 2013.

Bammert TD, CA Beckstrom, KJ Diehl, P Kavlich, JJ Greiner, BL Stauffer, **CA DeSouza**. Impaired fasting blood glucose and circulating endothelial progenitor cell function. *FASEB Journal*, 28: 1072.4, 2014. Presented at the annual Experimental Biology meeting, San Diego, CA, April, 2014.

Beckstrom CA, TD Bammert, CA Dow, GM Lincenberg, KJ Diehl, JJ Greiner, BL Stauffer, **CA DeSouza**. Influence of abdominal obesity on circulating oxidative and inflammatory markers in overweight/obese adult men. *FASEB Journal*, 28: 1107.7, 2014. Presented at the annual Experimental Biology meeting, San Diego, CA, April, 2014.

Rocha NG, TD Bammert, CA Beckstrom, P Kavlich, GM Lincenberg, JJ Greiner, **CA DeSouza**. Phenotypic differences in putative EPCs based on in vitro cultivation. *FASEB Journal*, 28: 855.8, 2014. Presented at the annual Experimental Biology meeting San Diego, CA, April, 2014.

Stauffer BL, KJ Diehl, CA Dow, DL Templeton, JJ Greiner, CA DeSouza. Chronic nebivolol treatment suppresses endothelin-1-mediated vasoconstrictor tone in adults with elevated blood pressure. *Circulation*, 130:A15536, 2014. Presented at the annual American Heart Association's Scientific Sessions and Resuscitation Science Symposium, Chicago IL, November, 2014.

Rev. 11/14/14